



# Banyule Bicycle Route Review

## Bicycle Facilities Investigations

Client:

Banyule City Council

Project No. 170596

Draft Report – 11/05/18

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# 1 INTRODUCTION

Trafficworks has been engaged by Banyule City Council to undertake a study of the existing bicycle routes within the municipality.

This study includes:

- investigation into the Local Bicycle Network (LBN) in terms of its current fit for cyclists, including the safety of the routes for cyclists and the links to key destinations, off-road trails and the Principal Bicycle Network
- investigation on routes within the municipality that contain bicycle marking but do not currently form part of the LBN
- recommendations on any current LBN routes that should be modified, rerouted or abandoned
- recommendations on infrastructure improvements for each of the routes that are currently part of the LBN and additional/alternate routes that are recommended to be developed.

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## 2 BACKGROUND

To compliment the off-road trails, Principal Bicycle Network (PBN) and Strategic Cycling Corridors (SCC), 12 local on-road bicycle advisory routes have been developed as part of the Banyule Bicycle Strategy (2010), providing an alternative to the more direct but highly trafficked arterial roads. The planning of the local bicycle routes is to provide connection to facilities such as shopping centres, community facilities, schools and links to off road trails. Each of the routes connect with the PBN at some point. Additionally, the majority of the routes connect with each other to form a continual cycling network within the municipality.

### 2.1 Off-road trail network

Banyule has an off-road bicycle network consisting of approximately 38 km of shared trails. There are four main off-road trails within Banyule:

ORT 1 - Darebin Creek Trail

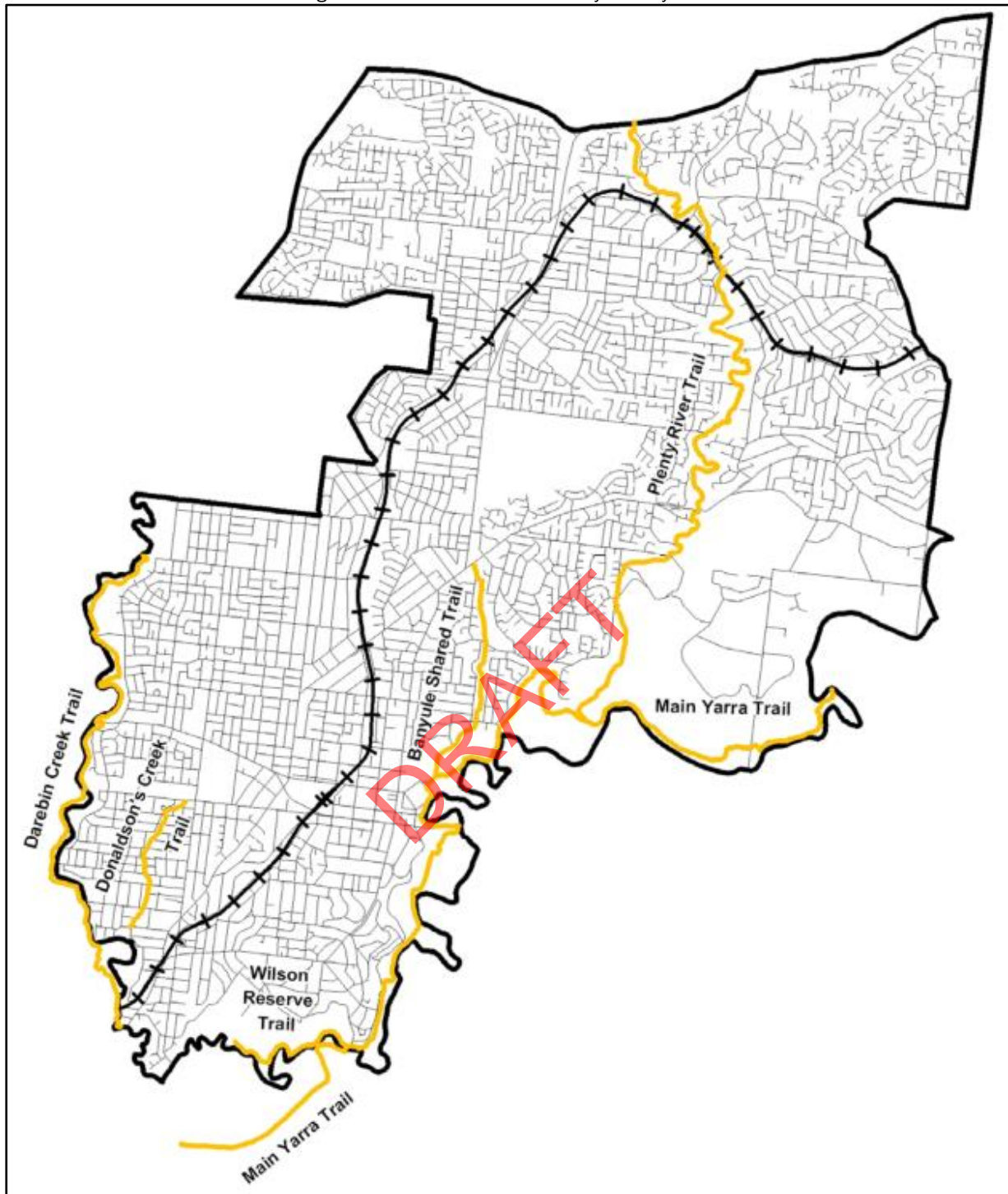
ORT 2 - Main Yarra Trail

ORT 3 - Plenty River Trail

ORT 4 - Banyule Shared Trail.

Each of these trails are shared trails accommodating pedestrians and cyclists. Figure 2.1 shows the off-road trails within the municipality (represented by the yellow lines).

Figure 2.1: Off-road Trails within City of Banyule



## 2.2 Principal Bicycle Network

The Principal Bicycle Network (PBN) is a planned network of bicycle routes throughout Melbourne, developed as part of the Victorian Bicycle Strategy. The PBN is generally aligned along the arterial road network and major collector roads within the City of Banyule, focussed on connecting to significant and relevant destinations across metropolitan Melbourne. These destinations include the Central Activity Districts as well as a selection of relevant Principal Activity Centres and Specialist Activity Centres.

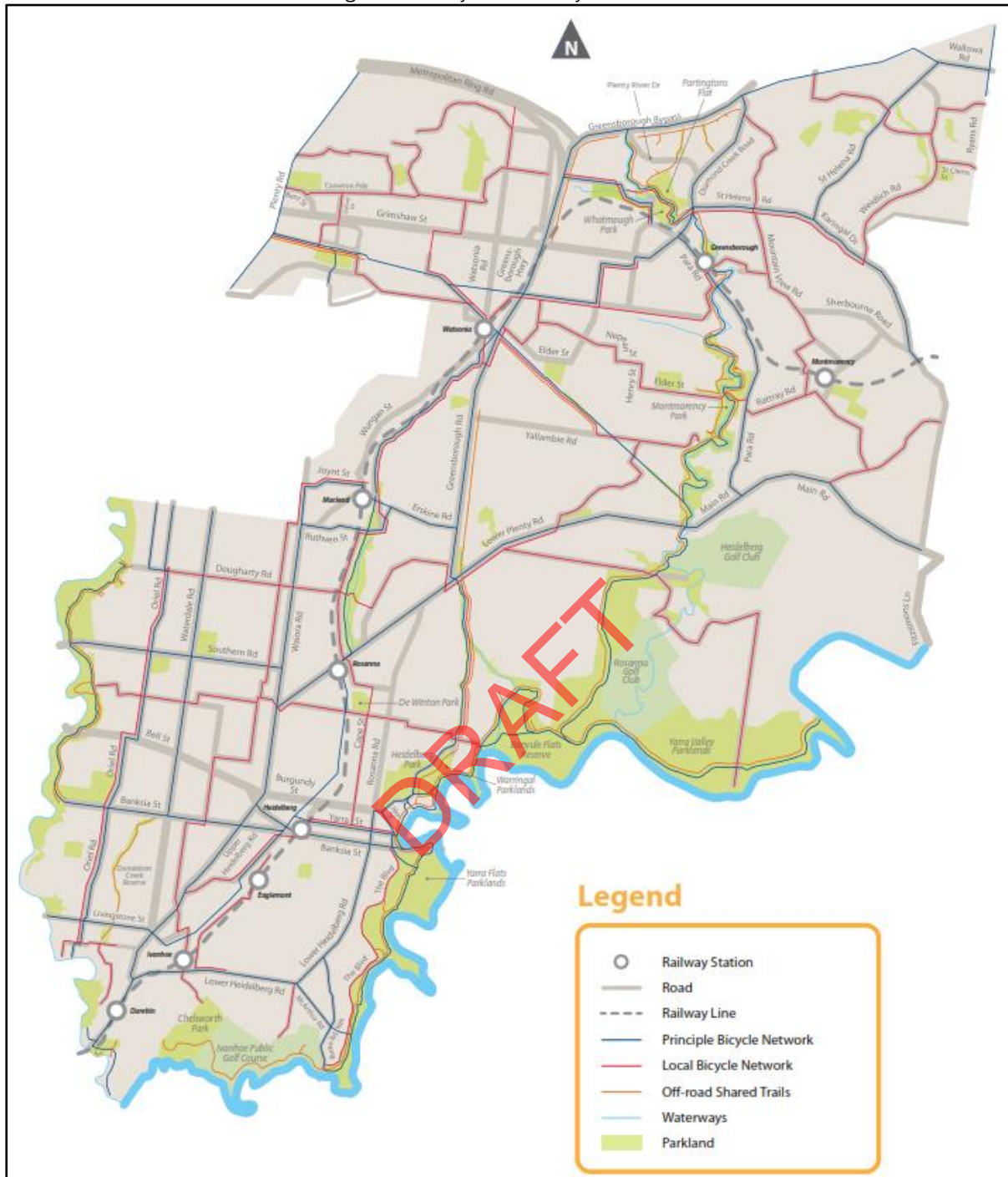
## 2.3 Local Bicycle Network

The 12 current local bicycle routes within Banyule are listed below.

- LBN 1 – Watsonia to East Ivanhoe Local Bicycle Route
- LBN 2 – Macleod to Ivanhoe Local Bicycle Route
- LBN 3 – Heidelberg West to Fairfield Local Bicycle Route
- LBN 4 – Heidelberg West to Viewbank Local Bicycle Route
- LBN 5 – Heidelberg West to Banyule Local Bicycle Route
- LBN 6 – Yallambie to Heidelberg Local Bicycle Route
- LBN 7 – Bundoora to Yallambie Local Bicycle Route
- LBN 8 – Montmorency to Watsonia Local Bicycle Route
- LBN 9 – Greensborough to Diamond Creek Local Bicycle Route
- LBN 10 – Greensborough to Bundoora Local Bicycle Route
- LBN 11 – Plenty River Trail to Main Yarra Trail Local Bicycle Route
- LBN 12 – Watsonia to Greensborough Local Bicycle Route.

Figure 2.2 shows the local bicycle network and the Principal Bicycle Network within the City of Banyule.

Figure 2.2: Banyule Local Bicycle Network

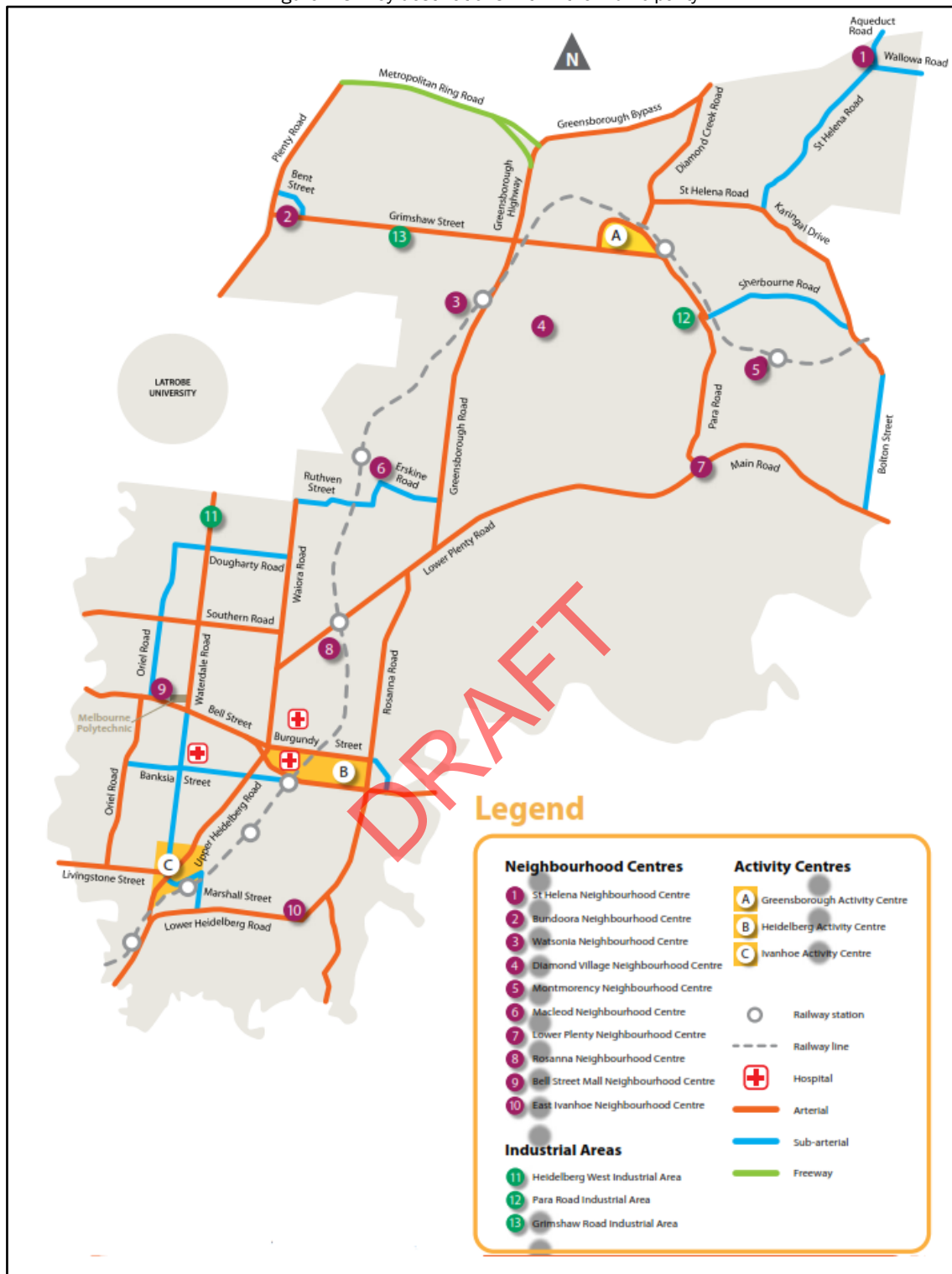


Source: Banyule Integrated Transport Plan 2015-2035

## 2.4 Key destinations

One of the major considerations in the planning of the local bicycle network is the identification of the key destinations within Banyule. The key destinations include Activity Centres, shopping malls and railway stations, and are shown in Figure 2.3 below.

Figure 2.3: Key destinations within the municipality



Source: Banyule Integrated Transport Plan 2015-2035

## 3 SUPPORTING INFORMATION

### 3.1 Strategic documents

This study considers and aims to incorporate the objectives of the following strategies into the proposed treatments and recommendations:

- *Banyule Bicycle Strategy 2010*. The Strategy aims to:
  - *Enhance cycling options so that the community, regardless of location or socioeconomic status, can choose cycling as a convenient and comfortable mode of transport*
  - *Improve and promote the safety of bicycle travel throughout the bicycle on and off-road network within Banyule*
  - *“Strengthen the links between Council’s on and off-road bicycle networks*
  - *Support a greater proportion of transport trips within and to Activity Centres to be undertaken by cycling.*
- *Northern Regional Trails Strategy (2016)*. The objective of the strategy is to:
  - *Leverage existing recreational off-road assets in the north to build a cohesive, integrated, regional trail network*
  - *Address existing gaps in the network by extending existing corridors*
  - *Implement new trail corridors in response to urban development, densification and population growth.*
- *Banyule Integrated Transport Plan 2015-2035*. The Plan aims to:
  - *Make the bicycle network usable for riders of varying ability*
  - *Apply a holistic and consistent approach to the management of bicycle facilities*
  - *Foster a cycling culture within Banyule.*

### 3.2 Traffic and cyclist volumes

To obtain an indication of the traffic volumes on the arterial road network within the City of Banyule, publicly available yearly data collected by VicRoads has been used.

Available traffic volume data supplied by the City of Banyule has been used to provide an indication of the traffic volumes along the local roads that form part of the LBN.

To gauge an indication of routes that cyclists are currently choosing to use, Strava heatmaps has been used.

### 3.3 Reference documents

The City of Banyule provided the following background information for use in this study:

- GIS data set of current specified Principle Bicycle Network and Strategic Cycling Corridor
- GIS data set of Local Bicycle Network in Banyule as specified in the Banyule Bicycle strategy
- GIS data set of the Banyule Trail network
- detailed plans for existing wayfinding signage and road markings for the LBN routes
- details of bicycle markings that have been installed as part of re-sheeting works.

In addition, the following documents have been sourced and referenced in the context of this study:

- Austroads *“Guide to Road Design Part 6A: Paths for Walking and Cycling”* (2017)
- Austroads *“Guide to Road Design Part 3: Geometric Design”* (2016)
- Austroads Technical Report AP-G88-17 *“Cycling Aspects of Austroads Guides”* (2017)
- Australian Standard AS 1742.9 *“Manual of Uniform Traffic Control Devices Part 9: Bicycle Facilities”* (2000)
- Australian Standard / New Zealand Standard AS/NZS 1158
- Austroads Technical Report AP-R287/06 *“Pedestrian – Cyclist Conflict Minimisation on Shared Paths and Footpaths”* (2006).

## 4 DESIGN GUIDELINES

A range of existing design guidelines and strategies were reviewed in order to establish the criteria for a safe and well designed bicycle route network within Banyule.

The elements detailed in this section are standard design and strategy principles that have been applied and have been used as a basis for the investigation.

### 4.1 Connectivity

Cyclists need to be able to undertake complete and meaningful trips by bicycle. For recreation, this may be from a residential area to a picnic spot, or a commute trip from home to work. Bicycle routes comprising roads and paths should combine to form an effective, convenient and safe network.

Connectivity is an important aspect for an effective bicycle route network. The purpose of each route should be clearly identified, as well as the routes which cyclists are likely to use in travelling to and from the paths, bicycle lanes and roads forming the network.

Routes should be direct, based on desire lines, have low delay through routes for commuting and avoid detours where possible. A route for cyclists which starts and ends abruptly is undesirable and may be hazardous, as it may lead inexperienced cyclists to a point where they are at risk, for example, leading cyclists to ride along or across busy roads to complete their intended trip.

### 4.2 Types of bicycle facilities required

On-road bicycle facilities may take the form of:

- dedicated unprotected bicycle lanes, including full-time or part-time operation, with or without adjacent parking
- contraflow bicycle lanes
- protected bicycle lanes, using kerbs and medians to physically separate motor vehicles and cyclists
- wide sealed road shoulders
- advisory linemarking treatments
- wide kerb side motor vehicle traffic lanes
- shared bicycle / parking lanes.

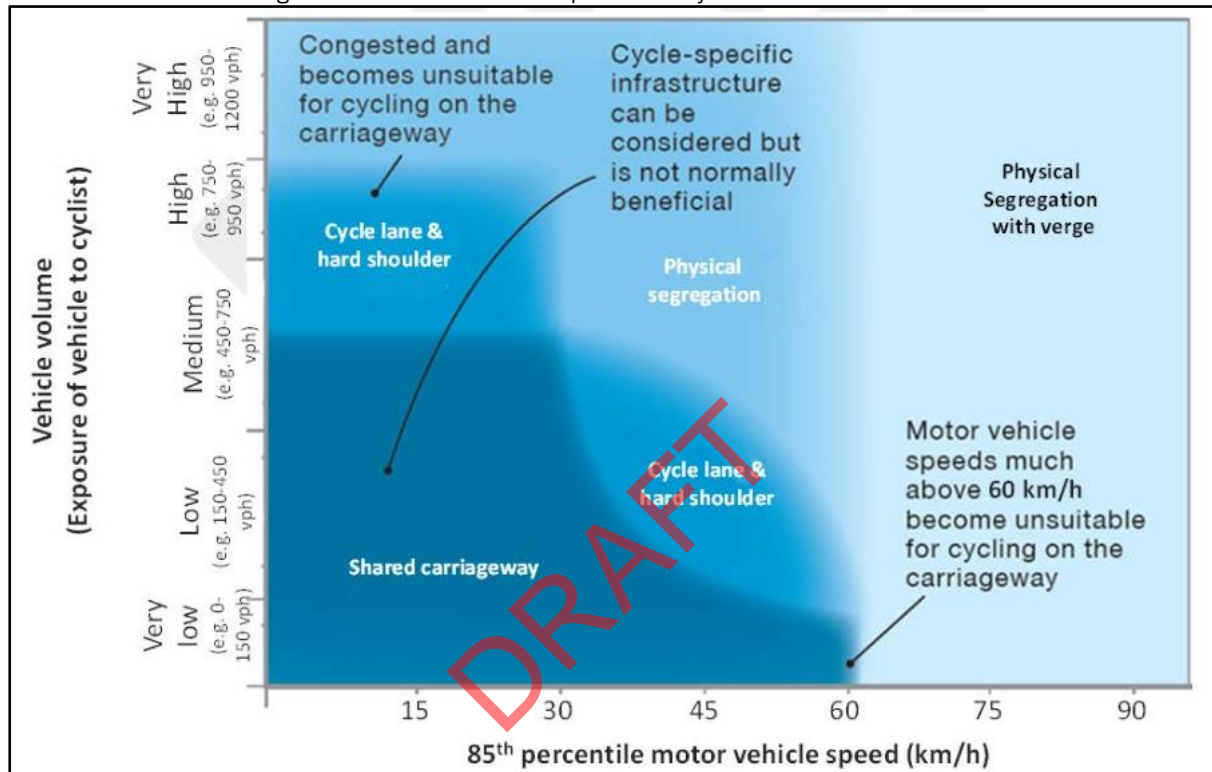
Off-road bicycle facilities may take the form of:

- bicycle paths
- separated paths – bicycle and pedestrians
- shared use paths.

When considering the type of bicycle facility, the two guiding principles are separating cyclists from motor vehicles and pedestrians and providing priority for cyclists across driveways and intersections.

Figure 4.1 below provides guidance on the separation between bicycles and motor vehicles for the on-road bicycle routes. It is based on the road's expected / actual traffic volume and the 85th percentile speed.

Figure 4.1: Guidance on the separation of cyclists and motor vehicles



Source: Cycling Aspects of Austroads Guides (2017)

Figure 4.1 above is a general guideline on the appropriate type of bicycle facility along the route, however, it will also be influenced by the road configuration (i.e. lane configuration and width of lanes), and the ability for vehicles to pass cyclists with adequate clearance.

## 4.3 Bicycle lanes

Bicycle lanes should be provided on both sides of the road where possible, so that use is in the same direction as motor vehicle traffic. The provision of a painted line between the traffic lane and the bicycle lane, together with bicycle symbols at frequent intervals is required to clearly define the road space provided for use for each mode, provide lateral separation to improve cyclist safety and to create awareness to motorists that a cyclist may be present.

The width adopted for exclusive bicycle lanes will vary depending on the number of cyclists, the speed of motor traffic, the volume of large vehicles and the ability to make space available given the needs of other road user groups. Table 4.1 below has been taken from Austroads Guide to Road Design Part 3, which shows the minimum bicycle widths for urban roads posted at various speeds. Note that depending on the site conditions, the channel may not be included as part of the bicycle lane width.

Table 4.1: Exclusive bicycle lane dimensions in urban areas

Speed limit <sup>(1)</sup> (km/h)	Lane width <sup>(2),(3)</sup> (m)		
	60	80	100 <sup>(4)</sup>
Desirable minimum	1.5	2.0	2.5
Acceptable range	1.2–2.5	1.8–2.7	2.0–3.0

Source: AGRD Part 3 Table 4.2.1

Green coloured surface treatments should be implemented only at locations where there is conflict between cyclists and motorists, to increase driver and cyclist awareness of a bicycle lane and to discourage drivers from encroaching into the bicycle lane. The green coloured surface treatment should be used sparingly to maintain its effectiveness.

## 4.4 Advisory linemarking treatments

Bicycle symbol linemarking on the road pavement is used to alert drivers to the presence of cyclists, and where they are likely to be riding along on the road. Bicycle symbols are installed in the centre of the trafficable lane, and when installed in the vicinity of intersections should be installed 10 m from the hold line.

‘Breadcrumbs’ are linemarked bicycle symbols with a dashed centreline in the centre of the road reserve. Breadcrumbs highlight the presence of cyclists to motorists, and indicate to drivers that cyclists are likely to be riding along the road. Breadcrumbs should be installed at a spacing of 80 m to 120 m along the route, and adjacent to side streets.

Shared Roadway Markings or “Sharrows” are another form of linemarked bicycle symbols that differ from ‘breadcrumbs’ in that they encourage cyclists to ‘take the lane.’ Sharrows encourage cyclists to share the road with vehicles and guide cyclists to position themselves away from parked cars to avoid the occurrence of ‘dooring’ (cyclist-vehicle door opening crashes). Sharrows are used where a change of lane or direction is required, or on approaches to roundabouts.

These forms of bicycle treatments are more suited to low speed and low traffic volume environments and should not be used in place of bicycle lanes (where they can feasibly be provided).

Photos 4.1 and 4.2 show examples of advisory linemarking treatments.

Photo 4.1 – Bicycle symbol linemarking in the vicinity of the Greensborough Road / Santon Road intersection



Photo 4.2 – Sharrow linemarking located at the roundabout intersection of Vermont Street and McDowell Street



## 4.5 Wide kerbside traffic lanes

A wide kerbside lane is a traffic lane on the left side of the carriageway of sufficient width to allow cyclists to travel beside the main traffic stream and to permit motorists to overtake cyclists without the need to change lanes. This lane sharing arrangement is appropriate for speed zones up to 70 km/h.

Wide kerbside traffic lanes may be appropriate on major traffic routes and collector streets, whether divided or undivided, on sections of road where sufficient space is not available to accommodate an exclusive bicycle lane or parking is either minimal or prohibited during peak periods.

Table 4.2, taken from Austroads Guide to Road Design Part 3, provides a guide to lane widths for wide kerbside lanes.

Table 4.2: Wide kerbside lane dimensions

Speed limit (km/h) <sup>(1)</sup>	Lane width <sup>(2,3)</sup> (m)	
	60	80 <sup>(4)</sup>
Desirable	4.2	4.5
Acceptable range	3.7–4.5	4.3–5.0

Source: AGRD Part 3 Table 4.21

## 4.6 Bicycle / Car parking lanes

The presence of parked cars places additional stress on cyclists, as they must constantly be aware of car occupants to assess whether a car door is likely to be opened in their path of travel. Therefore, bicycle / car parking lane facilities should have sufficient width to enable a cyclist to ride with adequate clearances to moving traffic in the adjacent traffic lane, and also to avoid an opening door of a parked car without having to enter the adjacent traffic lane.

Guidance on the overall facility width of a bicycle car parking lane is provided in Table 4.3 below.

Table 4.3: Bicycle / car parking lane dimensions (parallel parking)

Speed limit (km/h)	Overall facility width (m)	
	60	80
Desirable	4.2	4.5
Acceptable range	3.7–4.5	4.0–4.7

Source: AGRD Part 3 Table 4.19

Notes on the above widths:

- 4.5 m is the acceptable maximum width, as a greater width may result in moving cars attempting to utilise the bicycle lane
- 4.2 m is the desirable width in speed zones of 60 km/h, as it provides comfortable clearance to parked cars
- 4.0 m is the acceptable minimum width to enable a cyclist to travel adjacent to parked and moving cars at a reasonable speed with minimum clearances
- Where sufficient width is available within a carriageway, it is desirable to provide a safety strip between the traffic lane and bicycle lane.

## 4.7 Wayfinding

Wayfinding signage is used to direct cyclists and pedestrians to their desired destination as well as to reassure cyclists and pedestrians that they are travelling in their intended direction. As such, wayfinding signage should be strategically located to ensure that the treatment is effective. Generally, wayfinding signage is installed at intersections, particularly where the route changes direction, to guide cyclists to their intended direction.

The messages displayed on wayfinding signage typically show the destination as well as the approximate distance (metres or kilometres) to the destination and/or the approximate time (minutes) to the destination. Symbols depicting cyclists and/or pedestrians can also be included on the sign board so as to clearly define the intended audience of the message.

Photos 4.3 to 4.6 show examples of wayfinding signage treatments.

Photo 4.3 – Bicycle wayfinding sign located along Harding Street at Barrow Street, Coburg



Photo 4.4 – Bicycle wayfinding sign located along John Street at Glenyon Road, Coburg.



Photo 4.5 – Bicycle wayfinding sign located at Elder Street (LBN12)



Photo 4.6 – Bicycle wayfinding sign located on the Watsonia to Greensborough bicycle route (LBN12)



## 4.8 Traffic calming devices

There are a range of traffic calming devices that have been used along the bicycle routes within the municipality, including vertical and horizontal deflection devices. Vertical deflection devices in particular may reduce the comfort and the level of service for a cyclist, and may discourage a cyclist from using a particular route. Guidelines on vertical deflection devices, in the context of a cyclist is outlined in this section.

### Road humps

A road hump has a raised curved profile extending across the roadway. Road humps are typically 70 to 120 mm high, with a total length of 3 to 4 m. On bicycle routes, it is recommended that the hump height is less than 75 mm and a hump length of at least 3.7 m to minimise discomfort for cyclists.

### Road cushions

A road cushion is a form of road hump that occupies only a part of the roadway. It is designed to be more sympathetic to a cyclist, and is a more preferred option to be utilised on bicycle routes.

Road cushions should have minimum gaps of 750 mm between the base of the cushions and kerb, and also between adjacent cushions to adequately accommodate cyclists to permeate through. Cushions should generally be installed at 3 m long and 1.6 to 1.9 m wide with a height of 70 to 80 mm.

### Flat top road humps

A flat top road hump is a raised platform of approximately 75 – 100 mm high and typically with a 2 – 6 m long platform. The raised section is flat instead of being curved as in the case of a road hump. When used on bicycle routes, ramp gradients of 1:15 to 1:20 are generally regarded as bicycle friendly.

A wombat crossing generally takes the profile of a flat top speed hump, but provides priority to pedestrians to cross, and is generally installed with zebra linemarking.

## **4.9 Off-road paths**

### Shared path

The recommended minimum width to be applied to the shared path sections of this trail is 3.0 m. This should be widened to 4.0 m in areas where there is high pedestrian activity, or where there are cyclist groups frequently travelling along the path.

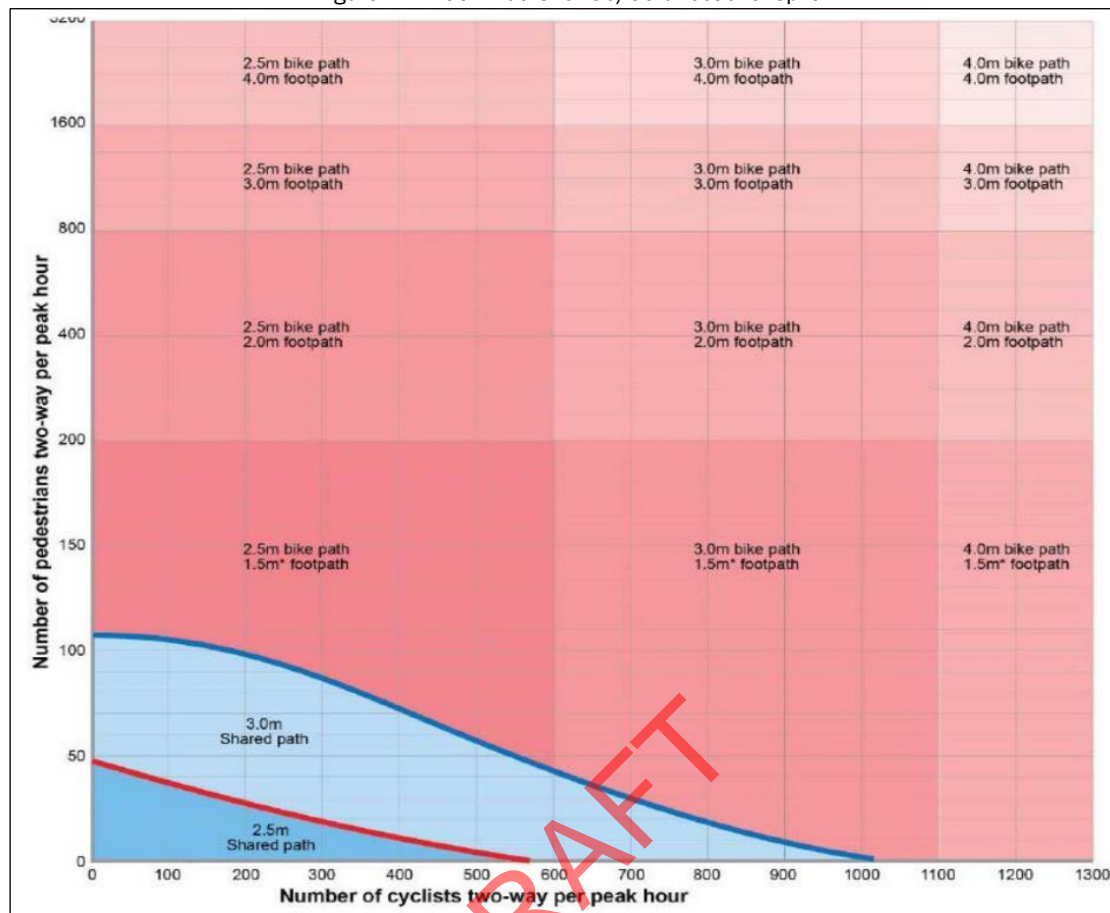
### Bicycle path

The width of a bicycle path should accommodate two-way cyclist movements with appropriate clearance between opposing path users.

The desirable path width is 3.0 m on sections of the path where high speeds are possible (i.e. on long straights or downhill sections). The acceptable minimum path width is 2.5 m, with an absolute minimum width of 2.0 m on sections of a path that experience very low use at all times or where significant constraints limit the construction of a wider path.

Bicycle path and shared path widths should be determined in accordance with Figure 5.4 of Austroads Guide to Road Design, Part 6A – Paths for Walking and Cycling (reproduced in Figure 4.1).

Figure 4.1: Path widths for 50/50 directional split



Source: AGRD Part 6A: Figure 5.4

### Horizontal clearance

Clearance to obstructions is important for cyclist safety. Ensure 1.0 m horizontal clearance is provided to adjacent obstructions including trees, signposts and fences. A minimum clearance of 0.5 m may be acceptable at existing features that are economically or environmentally prohibitive to relocate.

### Vertical clearance

Height clearance is important particularly for cyclists and a minimum of 2.5 m is to be maintained above the rider surface along the length of the path (in accordance with *Austroads Guide to Road Design Part 6A: Pedestrian and Cycle Paths*). The intrusion of tree branches and similar height obstructions limits the usable width of the route as cyclists will need to duck or manoeuvre around the obstruction.

## 5 METHODOLOGY ADOPTED

This section provides an outline of the methodology adopted in identifying and assessing the Local Bicycle Network within the City of Banyule.

### 5.1 Compilation and review of data

GIS data for the existing Local Bicycle Network and the off-road trail network in Banyule was provided by council officers. Further GIS data was gathered from publicly available sources, including the VicRoads Principal Bicycle Network and the Strategic Cycling Corridors.

A range of strategic documents, including the Banyule Bicycle Strategy (2010), Northern Regional Trails Strategy (2016) and the Banyule Integrated Transport Plan (2015) were reviewed to identify the existing routes, and any future plans proposed to the LBN.

The review of the GIS data revealed that attributes (or characteristics) of each of the routes was missing. This investigation will include an audit of the existing bicycle routes within Banyule in order to establish these characteristics along the length of each bicycle route. In consultation with Council, the following characteristics have been identified for each of the routes:

- road width and configuration
- speed limit
- traffic volumes
- pavement type
- pavement condition
- street lighting
- type of bicycle facility
- presence of parked vehicles
- presence of buses
- presence of bicycle signage and linemarking
- presence of traffic calming devices

## 5.2 Bicycle route inspections

Once a comprehensive GIS database was established, inspections of the bicycle routes were undertaken to verify the location of the existing trails and identify the characteristics along the length of each route.

Bicycles and Go-Pro camera equipment were used to gather high resolution video footage for each of the bicycle routes. The video footage was then reviewed to identify the characteristics as well as any localised issues along the route. These characteristics were then recorded within the GIS database of existing bicycle routes. The characteristics recorded for each of the bicycle routes are shown in Attachment B.

The site inspections of the bicycle routes were undertaken over several weeks, involving Trafficworks auditors driving / cycling the routes in both directions. The site inspections that were undertaken are outlined in Table 4.1 below:

Table 4.1: Site inspections

Bicycle Route	Date	Weather conditions
LBN1	13/04/18	Fine and sunny
LBN2	24/04/18	Fine and cloudy
LBN3	09/04/18	Fine and sunny
LBN4	26/04/18	Fine and cloudy
LBN5	30/04/18	Fine and sunny
LBN6	26/04/18	Fine and cloudy
LBN7	30/04/18	Fine and sunny
LBN8	03/05/18	Fine and cloudy
LBN9	01/05/18	Fine and sunny
LBN10	23/04/18	Fine and sunny
LBN11	18/04/18 19/04/18	Fine and sunny
LBN12	24/04/18	Fine and cloudy

### 5.3 Finalisation of existing bicycle route database

The location, extent and characteristics of the existing bicycle routes were updated within the GIS database, based on the inspections. The data was then reviewed by City of Banyule officers to verify its accuracy and completeness.

Final amendments were then made to the GIS database to incorporate comments from Council, which led to the finalisation of a comprehensive GIS database of the existing bicycle routes within the municipality.

### 5.4 Audit findings and recommendations

Each of the existing route characteristics were reviewed against the design guidelines to determine its current fit as a bicycle route. Strategic and localised issues were then identified for each route, and recommendations for infrastructure improvements were made, and ranked in terms of priority.

Project priorities were determined based on route usage and safety risk. Sections of routes with higher cyclist usage have been allocated a higher funding priority.

The following timeframes were identified for the funding and implementation of projects:

High Priority:	1-5 years (Short Term)
Medium Priority:	5-10 years (Medium Term)
Low Priority:	10 years+ (Long Term or when funding allows)
Maintenance:	Ongoing actions conducted as part of recurring programs.

## 6 INSPECTION FINDINGS

The existing characteristics, audit findings and recommended actions for each of the bicycle routes are presented in this section, and detail the following elements:

### 1. A brief summary of the route

This section will provide:

- total length of the route
- length of off road sections of the route
- length of sealed and unsealed sections
- key destinations in the municipality the route services
- map of route.

### 2. Strategic items

This section outlines strategic actions recommended to be implemented along the route, with priority prescribed for each of these recommendations. Some items that are included as a Strategic item are:

- missing links in the route
- unsafe crossings
- required route characteristics that are missing (e.g. advisory bicycle linemarking)
- identification of alternative routes.

### 3. Localised items

This section outlines localised issues along the route which presents a safety risk for cyclists, recommendations for improvements and prescribes a priority for each of these recommendations. Some items that are included as localised items are:

- adjacent hazards
- vegetation
- pavement surface issues.

The localised audit items for each route is presented in Attachment A of the report.

Each of the bicycle routes have been divided into sections, with each section having defining characteristics.

## 6.1 LBN 1 – Watsonia to East Ivanhoe Local Bicycle Route

Total Route length: 12.44 km

Length of off-road path: 1.44 km

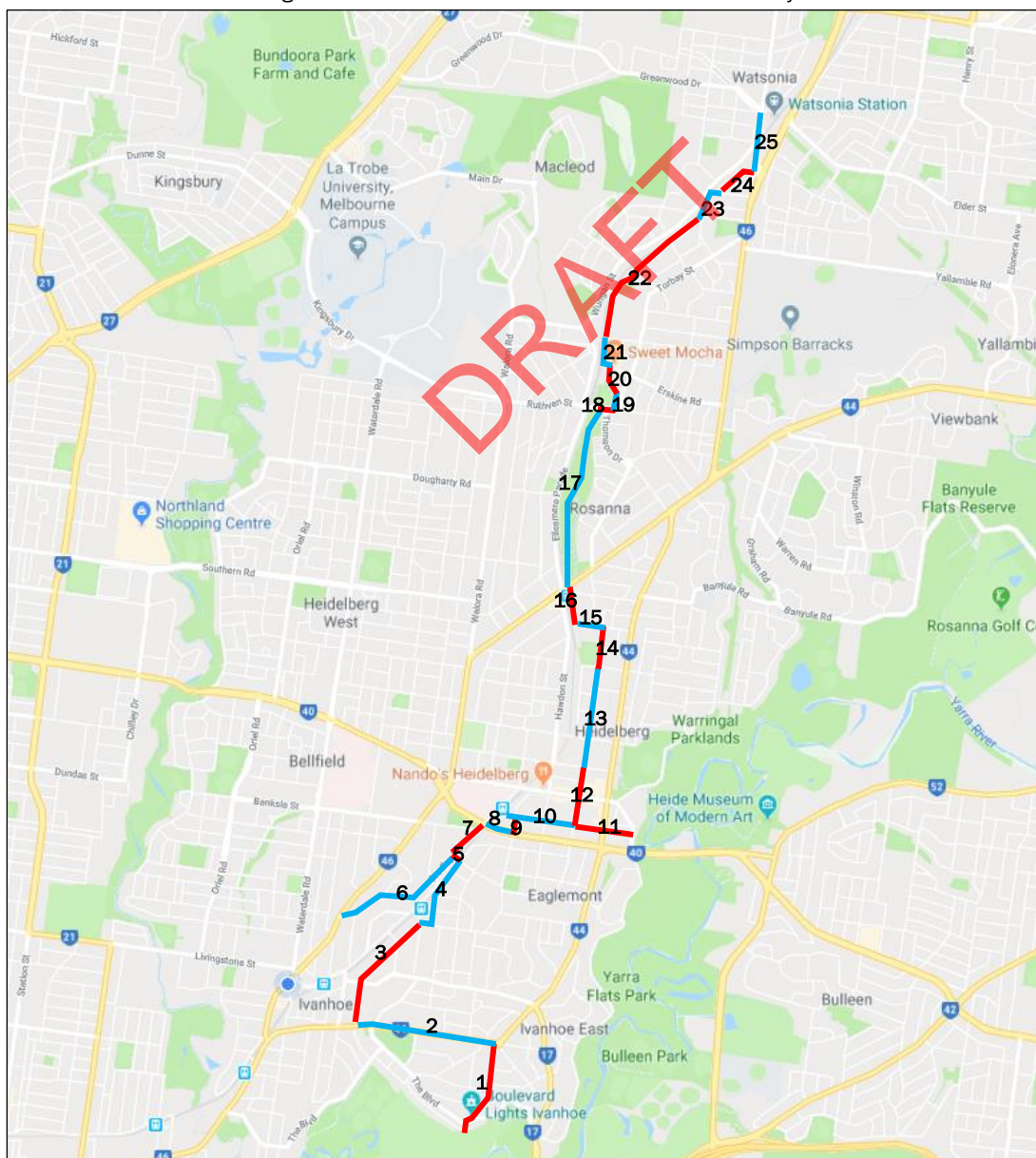
Length of unsealed road: 1.44 km

### Route summary:

This route follows the local road network linking Watsonia Railway Station, Macleod Railway Station, Rosanna Neighbourhood Centre, Heidelberg Activity Centre, Eaglemont Railway Station, East Ivanhoe Neighbourhood Centre and Ivanhoe Railway Station. Variations to the route lead to the Yarra River Trail and Ivanhoe Public Golf Course.

**Map:** This route has been divided into 25 sections, each with defining characteristics.

Figure 6.1: LBN 1 - Watsonia to East Ivanhoe Local Bicycle Route



# **Strategic Items:**

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Redivert the route to the east along The Boulevard to provide direct connection into Main Yarra Trail (via Eaglemont Tennis Club)	High
Realign the bicycle route to encourage cyclists to utilize the service road along the south of Banksia Street, gaining access from the existing path on the eastern side of Studley Road	High
Design and construct a safe cycle crossing facility at the Yarra Street / Rosanna Road and Yarra Street / Dora Street intersections. Alternatively, redivert the route onto Banksia Street between Cape Street and Dora Street, and upgrade the footpath on the northern side of Banksia Street to a shared path	Medium

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## 6.2 LBN 2 – Macleod to Ivanhoe Local Bicycle Route

Total Route length: 7.31 km

Length of off-road path: 0 km

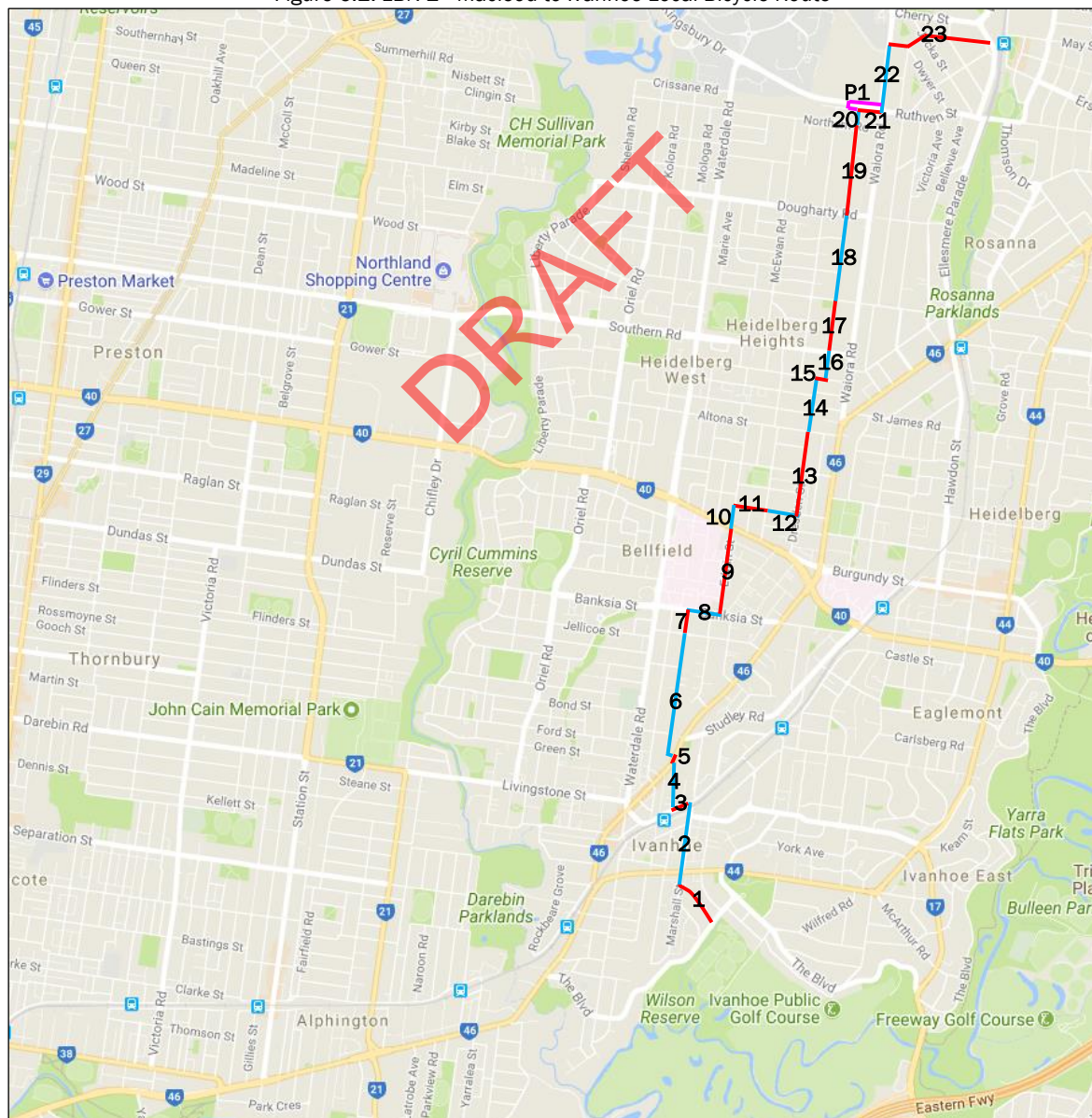
Length of unsealed road: 0 km

### Route summary:

This route follows the local road network connecting Macleod Railway Station, LaTrobe Secondary College, LaTrobe university, Austin Repatriation Medical Campus, Heidelberg Activity Centre and the Ivanhoe Activity Centre. Variations to the route lead to Darebin Creek Trail, Chelsworth Park and Wilson Reserve.

**Map:** This route has been divided into 23 sections, each with defining characteristics.

Figure 6.2: LBN 2 - Macleod to Ivanhoe Local Bicycle Route



# Strategic Items:

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Construct a refuge crossing across Southern Road to allow cyclists to stage their crossing	Medium
Construct a shared path on the west side of Upper Heidelberg Road from St Elmo Road to the existing signalised pedestrian crossing, and on the east side from the crossing to Noel Street	High
Declare the shared path from Orr Street to Waiora Road as an alternate route. Wayfinding signs should be provided to advise cyclists of the route direction.	Medium

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### 6.3 LBN 3 – Heidelberg West to Fairfield Local Bicycle Route

Total Route length: 6.29 km

Length of off-road path: 0 km

Length of unsealed road: 0 km

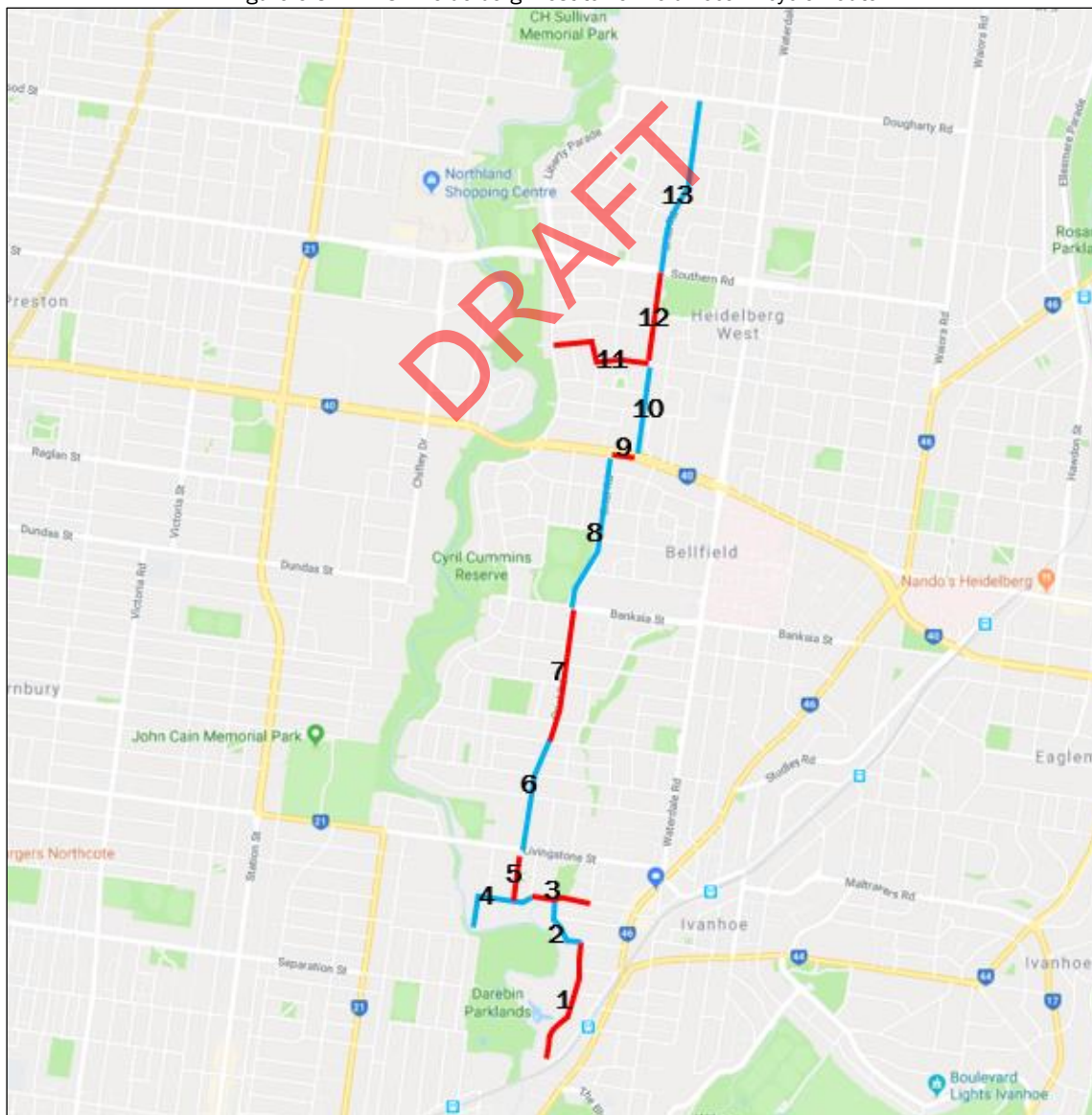
#### Route summary:

This route commences at the intersection of Dougharty Road and Oriel Road, and follows Oriel Road via a bicycle lane marked route through to Livingstone Street, providing access to The Bell Street mall, NMIT, St Pius School, Banyule Council's Operations Depot and Austin Repatriation Medical Campus. From Livingstone Street, the route follows the local road network to provide access to Fairfield, Darebin Parklands and Darebin Railway Station.

#### Map:

This route has been divided into 13 sections, each with defining characteristics.

Figure 6.3: LBN 3 - Heidelberg West to Fairfield Local Bicycle Route



### Strategic Items:

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	High
Provide standardised wayfinding signs along the route	High
Provide cyclist access to Darebin Parklands and Darebin Creek trail from Rockbeare Grove	Medium
Construct bicycle connection from Miles Street to Livingstone Street	Medium
Improve safety for cyclists at the connection to Darebin Creek Trail on Gona Street	High

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## 6.4 LBN 4 – Heidelberg West to Viewbank Local Bicycle Route

Total Route length: 5.83 km

Length of off-road path: 2.32 km

Length of unsealed road: 0.3 km

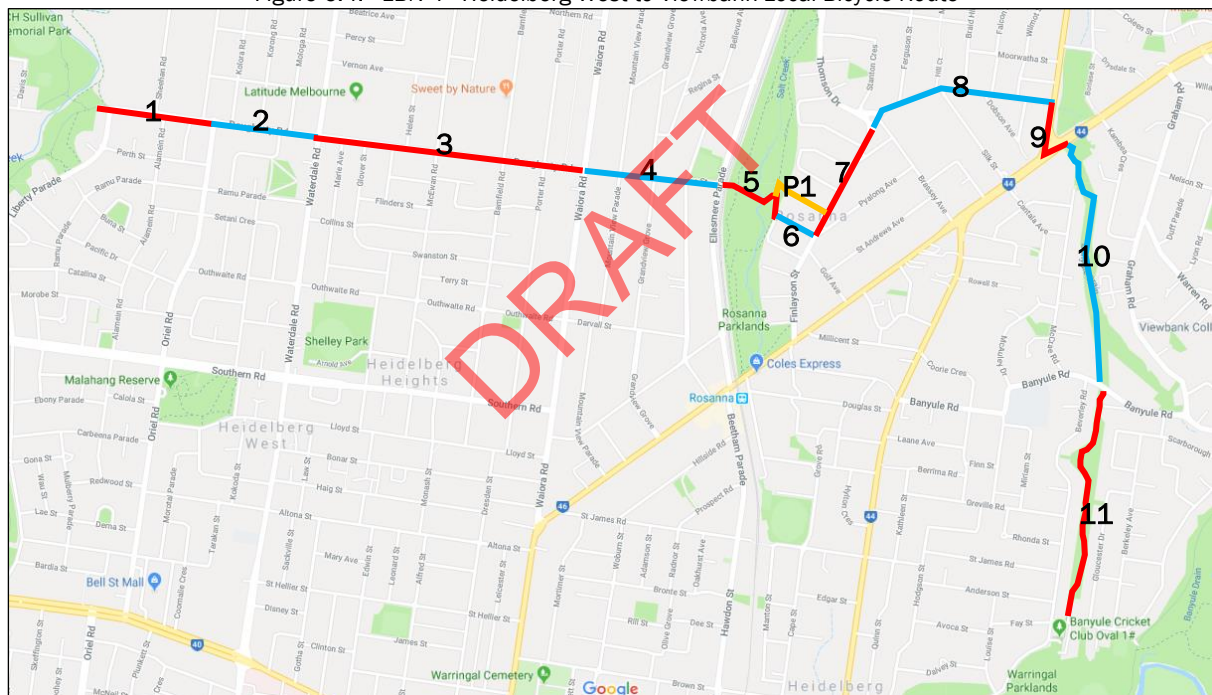
### Route summary:

This route provides an east west link to serve Rosanna Primary School, Rosanna Parklands and Rosanna Golf Links Primary School, and intersects the Watsonia to Ivanhoe East bicycle route (LBN 1) at Rosanna Parklands and joins the Yallambie to Heidelberg bicycle route (LBN 6) at Banyule Road.

### Map:

This route has been divided into 11 sections, each with defining characteristics.

Figure 6.4: - LBN 4 - Heidelberg West to Viewbank Local Bicycle Route



### Strategic Items:

Action	Priority
Upgrade path connection between Davies Street and Waiora Road	Medium
Improve wayfinding through Rosanna Parklands	Medium
Redivert the bicycle route via Pickworth Crescent to replace Von Nida Crescent	High
Upgrade the footpath on the western side of Greensborough Highway between Finlayson Street and Lower Plenty Road to a 2.5 m wide two-way shared path	High
Improve wayfinding through the Lower Plenty Road / Greensborough Highway signalised intersection	Medium
Install street lighting along River Gum Walk	Medium

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## 6.5 LBN 5 – Heidelberg West to Banyule Local Bicycle Route

Total Route length: 4.41 km

Length of off-road path: 0.2 km

Length of unsealed road: 0 km

### Route summary:

This route provides an east-west link through Banyule, connecting the Darebin Creek trail and the Main Yarra trail. The bicycle route connects cyclists to Haig Street Primary School, St Pius X School and NMIT, and links to the Heidelberg West to Fairfield route (LBN 3), the Yallambie to Heidelberg route (LBN 6) and the Macleod to Ivanhoe route (LBN 2).

### Map:

This route has been divided into 19 sections, each with defining characteristics.

Figure 6.5: LBN 5 - Heidelberg West to Banyule Local Bicycle Route



### Strategic Items:

Action	Priority
Declare a shared path on the south side of Lower Plenty Road from St James Road to the traffic signals and west side of Waiora Road between the signals to Churchill Street	High
Improve safety for cyclists at the connection to Darebin Creek Trail on Gona Street	High
During the construction period, provide temporary wayfinding signage to guide cyclists to cross the rail line via Brown Street to the south (i.e. Hawdon Street / Brown Street / Cape Street) As part of the rail line upgrade, provide a shared footbridge across the rail line	High
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium

## 6.6 LBN 6 – Yallambie to Heidelberg Local Bicycle Route

Total Route length: 4.61km

Length of off-road path: 2.71km

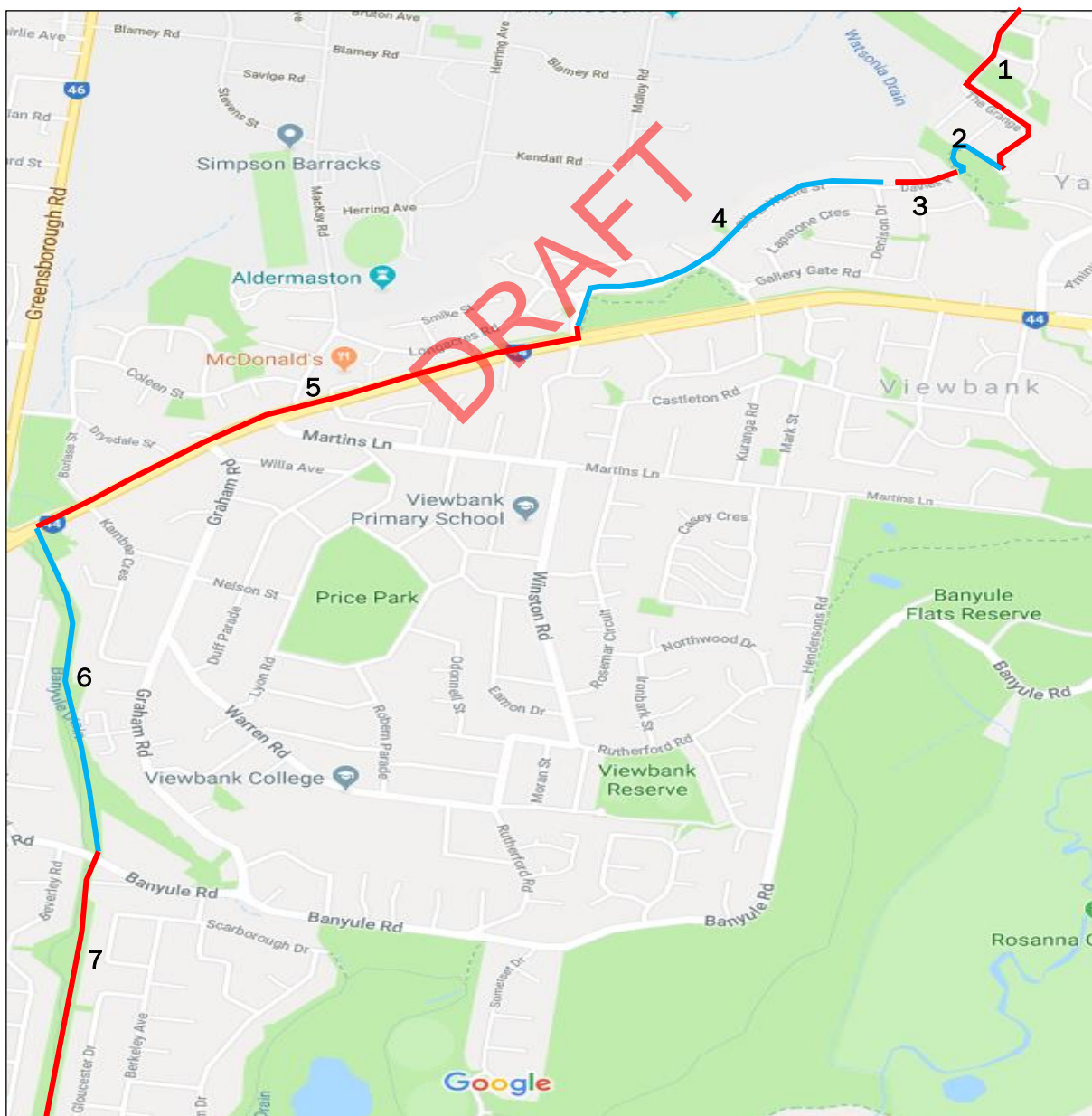
Length of unsealed road: 0 km

### Route summary:

This route utilises both the on-road local street network and off-road facilities to connect to Streeton Primary School, Viewbank Primary School, Banyule Primary School, Banyule Flats Reserve, Banyule Tennis Club and Heidelberg Primary School. This route also joins the Main Yarra Trail at Plymouth Street.

**Map:** This route has been divided into seven sections, each with defining characteristics.

Figure 6.6: LBN 6 - Yallambie to Heidelberg Local Bicycle Route



### Strategic Items:

Actions	Priority
Improve connection from Lower Plenty Road onto River Gum Walk by upgrading the footpath on the southern side of Lower Plenty Road on the approach to the Banyule Shared Trail to a shared path	High
Investigate opportunities to extend the existing shared path along the transmission line to link with the Plenty River Trail	Medium
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium

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## 6.7 LBN 7 – Bundoora to Yallambie Local Bicycle Route

Total Route length: 8.38 km

Length of off-road path: 3.43 km

Length of unsealed road: 4.95 km

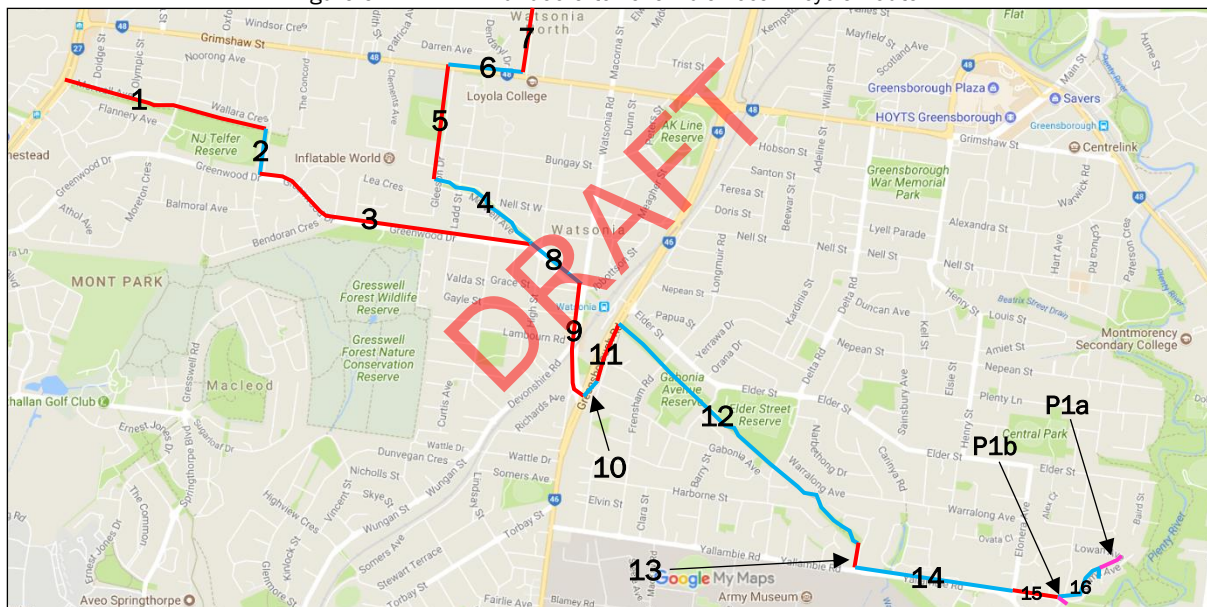
### Route summary:

This route follows the local road network and multiple off-road, shared paths. This route links Plenty Road to Greensborough Road providing connection from Bundoora to Watsonia Shopping Centre, Watsonia Railway Station and LBN 1, 6, 8 and 10. To the west, LBN 7 provides connection to Yallambie and the Plenty River Trail.

### Map:

This route has been divided into 16 sections, each with defining characteristics.

Figure 6.7: LBN 7 - Bundoora to Yallambie Local Bicycle Route



### Strategic Items:

Actions	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Implement a shared path along the south side of Grimshaw Street from Gleeson Drive to the POS crossing. The shared path should then continue along the north side of Grimshaw Street from the crossing to Sharpes Road	High
Section P1 proposes to extend LBN7 to connect with Plenty River Trail along with formalising the off-road path to Plenty River Trail located at the intersection of Allima Avenue and Tarcoola Drive	Low
Investigate opportunities to extend the existing shared path along the transmission line to link with the Plenty River Trail	Medium

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## 6.8 LBN 8 – Montmorency to Watsonia Local Bicycle Route

Total Route length: 15.85km

Length of off-road path: 0.79km

Length of unsealed road: 0 km

### Route summary:

This route provides a local bicycle network and off-road trails to connect the Montmorency Railway Station to the Watsonia Railway Station. This trail also links cyclists to Montmorency Primary School, Watsonia Heights Primary School, Greensborough Secondary College and Montmorency Park.

### Map:

This route has been divided into 43 sections, each with defining characteristics.

Figure 6.8: LBN 8 - Montmorency to Watsonia Local Bicycle Route



## pStrategic Items:

Actions	Priority
Widen paths on the approach to the bridge over Greensborough Highway to 2.5 m	High
Install shared path signage and linemarking along the off-road sections of the route	Medium
Investigate opportunities to install a contraflow bicycle lane for eastbound cyclists along Paterson Crescent through the length of the curve. This may involve constructing a cut-through to accommodate eastbound cyclist movements through the existing kerb extension at the entry point to Paterson Crescent	High
Redirect the route via a laneway located off Paterson Crescent (south of the property at 42 Paterson Crescent), which leads onto the Plenty River Trail	High
Investigate opportunities to provide a link path onto Plenty River Trail from Paterson Crescent via the reserve between 30 and 34 Paterson Crescent	Medium
Upgrade the footpath between St Helena Road and Willis Street to a 2.5 m wide shared path and install wayfinding signage to guide cyclists along route	Medium
Coordinate links with the local bicycle network within Nillumbik Shire Council	High
Widen the path between Elder Street and Park Lane to 2.5 m and install shared path signage and linemarking Install a 'Cycling Dismount' sign at both ends of the bridge	Medium
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium

## 6.9 LBN 9 – Greensborough to Diamond Creek Local Bicycle Route

Total Route length: 6.8km

Length of off-road path: 0km

Length of unsealed road: 0 km

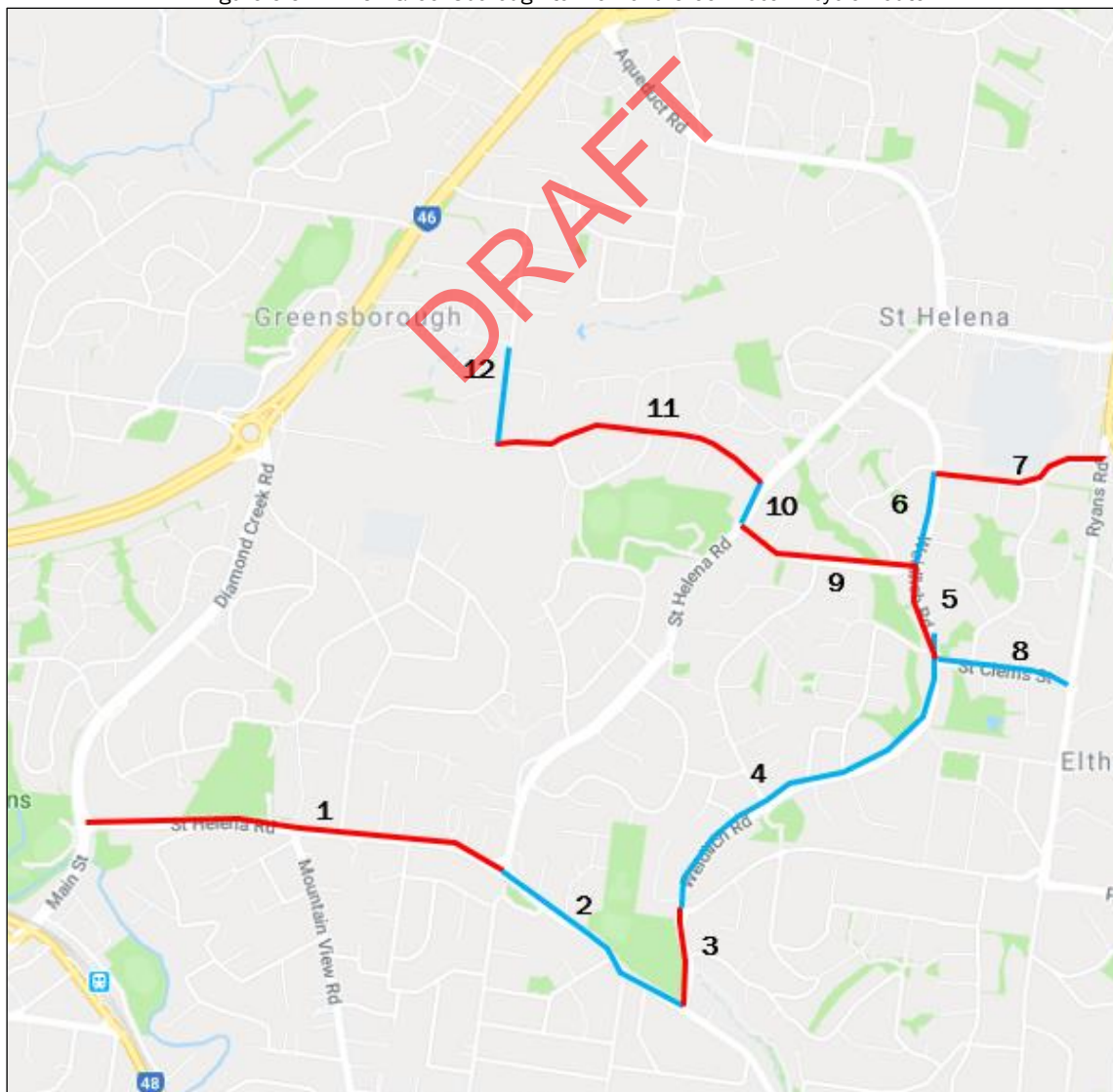
### Route summary:

This route follows a local route that connects Plenty River to the north east region of the municipality including the Greensborough Activity Centre, Greensborough Park, Malcom Blair reserve and Yandell Reserve.

The route joins with the Greensborough to Bundoora route (LBN 10) at the intersection of St Helena Road and Main Street.

**Map:** This route has been divided into 12 sections, each with defining characteristics.

Figure 6.9: LBN 9 - Greensborough to Diamond Creek Local Bicycle Route



# Strategic Items:

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Ensure links are coordinated across the municipal boundary to Nillumbik	Medium

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## 6.10 LBN 10 – Greensborough to Bundoora Local Bicycle Route

Total Route length: 11.36 km

Length of off-road path: 1.38 km

Length of unsealed road: 0 km

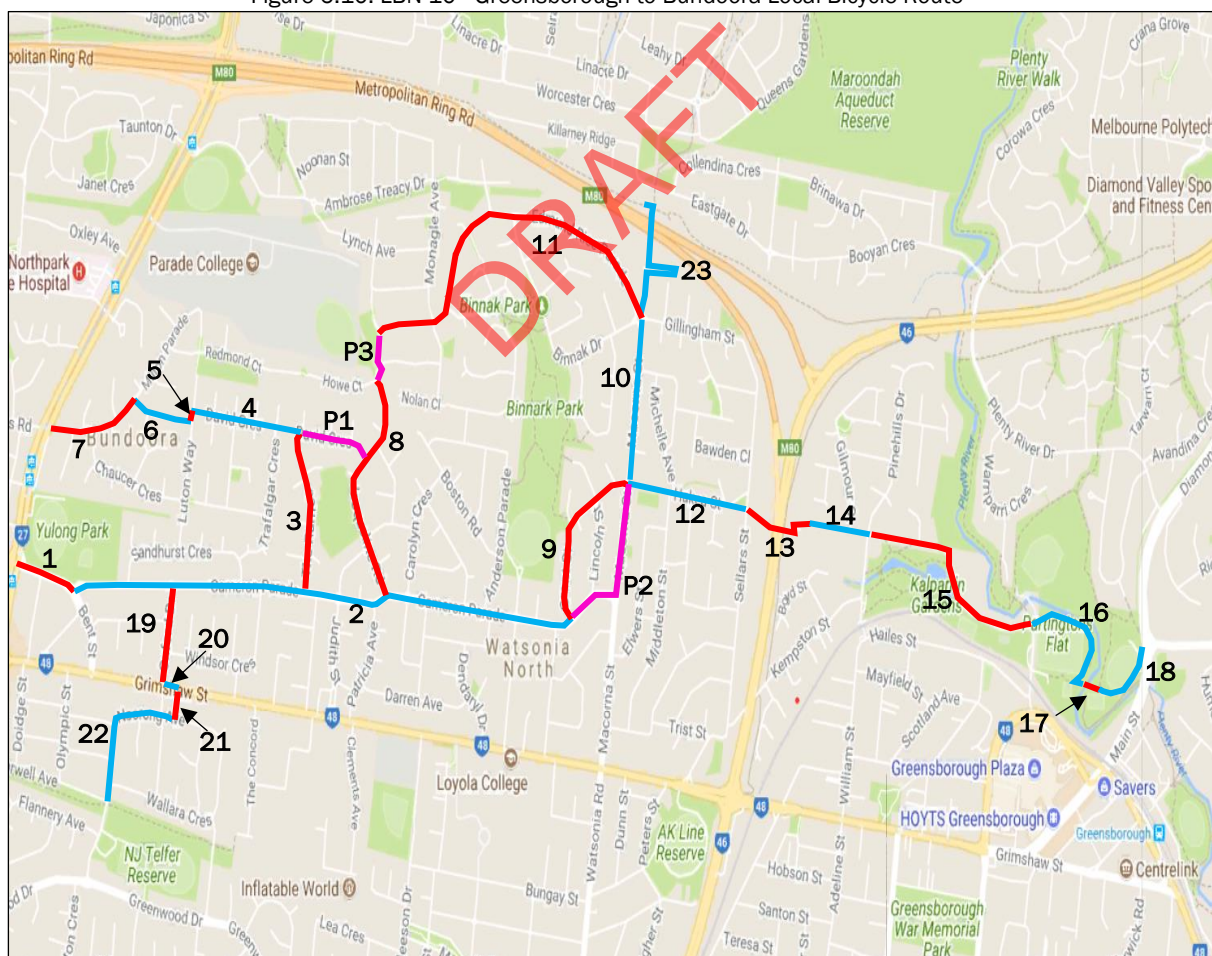
### Route summary:

This route provides cyclists with a connection between Greensborough in the east and Bundoora in the west. While the route has generally no formal cycling facilities, the route mostly utilises local roads that carry low traffic volumes and is especially desirable for recreational riders. This route provides a connection to major cycling networks such as the Metropolitan Ring Road Path, Plenty Road and Dimond Creek Road.

### Map:

This route has been divided into 23 sections, each with defining characteristics.

Figure 6.10: LBN 10 - Greensborough to Bundoora Local Bicycle Route



# Strategic Items:

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Extend the route along David Crescent, to link to Jacqueline Road, which provides riders with a more direct route to the Metropolitan Ring Road Trail	Low
Extend the route along Jacqueline Road to provide a connection to Edmund Rice Parade, providing a more direct path to the Metropolitan Ring Road Trail	Low
Redirect the route east along Cameron Parade then north on Macorna Street	Low
Upgrade the footpath between Oxford Drive to the pedestrian signals and between the signals to Balaka Place to a shared path, and upgrade the signalised pedestrian crossing on Grimshaw Street to a shared crossing (i.e. bicycle lanterns)	Medium
Consider providing a link from the underpass onto the path which runs along Greensborough Highway	Low

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## 6.11 LBN 11 – Plenty River Trail to Main Yarra Trail Local Bicycle Route

Total Route length: 5.44 km

Length of off-road path: 0 km

Length of unsealed road: 0.51 km

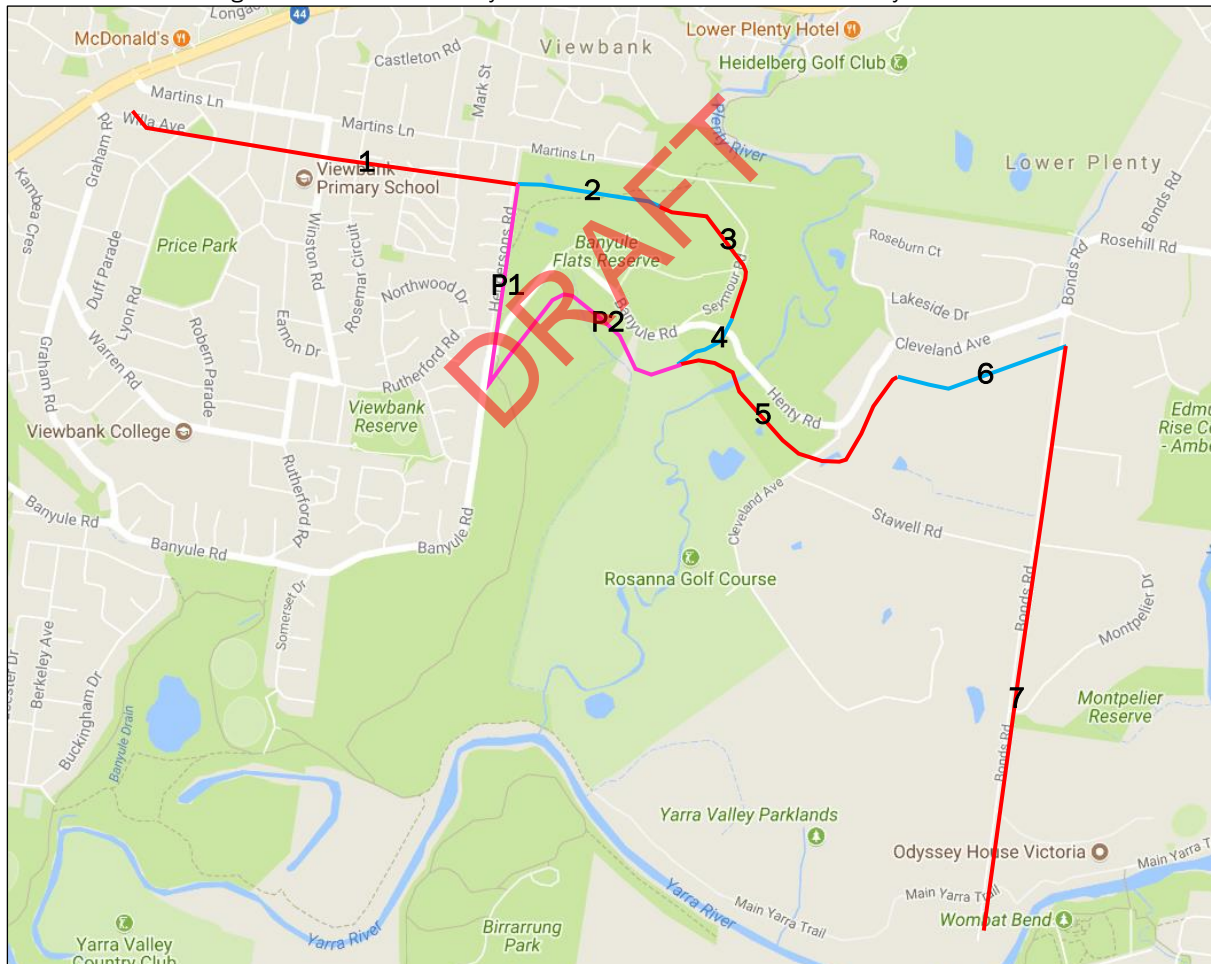
### Route summary:

This route follows the local road network and an unsealed local road connecting Viewbank and Lower Plenty. This route links LBN6, Viewbank Primary School, Plenty River Trail, and Main Yarra Trail.

### Map:

This route has been divided into seven sections, each with defining characteristics.

Figure 6.11: LBN 11 - Plenty River Trail to Main Yarra Trail Local Bicycle Route



### Strategic Items:

Action	Priority
Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
Provide standardised wayfinding signs along the route	Medium
Discontinue use of Martins Lane and Seymour Road for LBN11 due to the crushed rock surface	High
Install street lighting or as a minimum, provide delineation such as guideposts and linemarking between the beginning of the unsealed section of Martins Lane and the intersection of Seymour Road/Banyule Road	Low
Provide warning signs and repeater speed limit signs (regulatory 50 km/h) at regular intervals along section P2 and ensure a consistent treatment along Banyule Road	High
Investigate opportunities for widening Seymour Road	Low

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## 6.12 LBN 12 – Watsonia to Greensborough Local Bicycle Route

Total Route length: 2.48 km

Length of off-road path: 0.08 km

Length of unsealed road: 0 km

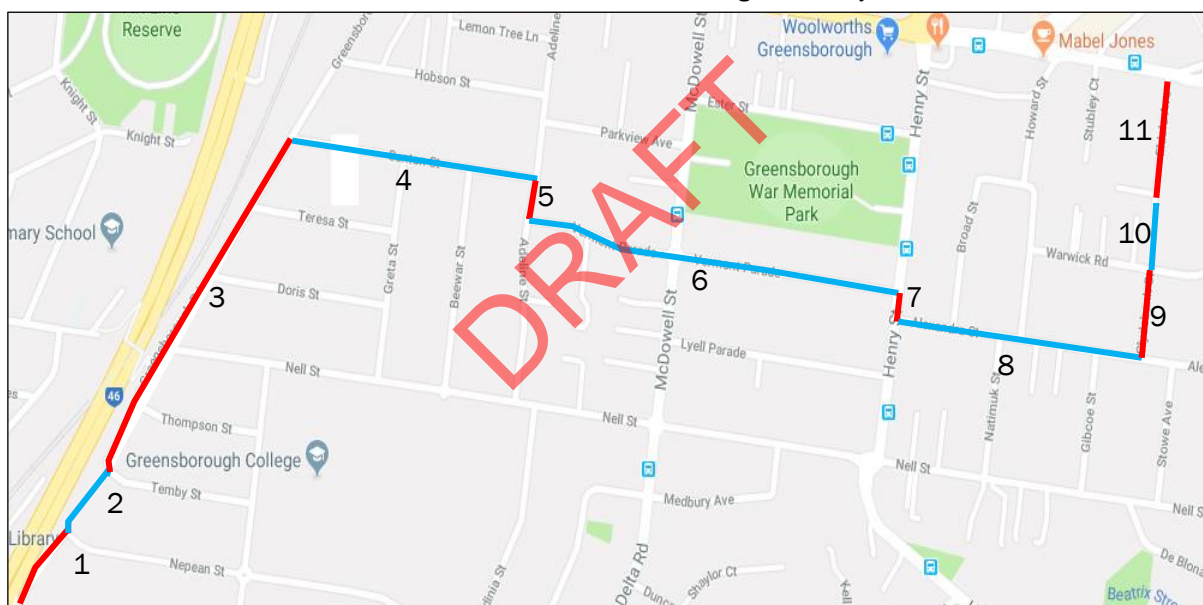
### Route summary:

This route follows the local road network connecting Watsonia Railway Station to Greensborough Railway Station. This route also links to the Greensborough Activity Centre and the Greensborough War Memorial Park.

### Map:

This route has been divided into 11 sections, each with defining characteristics.

Table 6.12: LBN 12 - Watsonia to Greensborough Local Bicycle Route



### Strategic Items:

Action	Priority
Construct a connection between Nepean Street and the shared path which is separated from the driveway for the property at 1 Nepean Street	Medium
Upgrade the footpath on the southern side of Grimshaw Street between Eldale Street and the signalised intersection of Grimshaw Street / Flintoff Street to guide cyclists to utilise the signalised crossings to safely cross Flintoff Street and Grimshaw Street	Medium

## ATTACHMENT A – ROUTE CHARACTERISTICS

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Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN1	1	Vassey St / Warncliffe Rd	Between Ivanhoe Golf course and Lower Heidelberg Rd	-37.7788, 145.0571	-37.7729, 145.0601	8.8	40 / 50		undivided	Asphalt	good	yes	no	none	yes		Yes	no	no	no	flat top speed humps
LBN1	2	Lower Heidelberg Rd	Between Warncliffe Rd and Locksley Rd	-37.7729, 145.0601	-37.7717, 145.0481	12.5	40 / 60		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.0 - 1.5	Yes	yes	no	yes	no
LBN1	3	Locksley Rd	Between Lower Heidelberg Rd and Silverdale Rd	-37.7717, 145.0481	-37.7648, 145.0538	9.0	50		undivided	Asphalt	good	yes	no	none	yes		Yes	no	no	no	no
LBN1	4	The Eyrie / Alandale Rd	Between Silverdale Rd and Oldenwald Rd	-37.7648, 145.0538	-37.7607, 145.0571	8.4	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN1	5	Oldenwald Rd	Between Alandale Rd and Studley Rd	-37.7607, 145.0571	-37.7603, 145.0564	5.5	50		undivided	Asphalt	good	yes	no	none	yes		No	no	no	no	
LBN1	6	Studley Rd	Between Upper Heidelberg Rd and Oldenwald Rd	-37.7645, 145.0468	-37.7603, 145.0564	12.0	50		undivided	Asphalt	good	yes	yes	Bicycle / parking lane	yes	1.0	Yes	yes	no	no	no
LBN1	7	Studley Rd	Between Oldenwald Rd and Banksia St	-37.7603, 145.0564	-37.7582, 145.0591	12.0	50		undivided	Asphalt	good	yes	yes	Bicycle / parking lane	yes	1.0	Yes	yes	no	no	no
LBN1	8	Banksia St	Between Studley Rd and Mount St	-37.7582, 145.0591	-37.7589, 145.0616	24.8	60		divided	Asphalt	good	yes	yes	none	yes		No	no	no	yes	no
LBN1	9	Mount St	Between Banksia St and Yarra St	-37.7589, 145.0616	-37.7577, 145.0618	14.2	40		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.3	Yes	yes	yes	yes	no
LBN1	10	Yarra St	Between Mount St and Lower Heidelberg Rd (Rosanna Rd)	-37.7577, 145.0618	-37.7586, 145.0693	13.3	40		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	wombat school crossing
LBN1	11	Yarra St	Between Rosanna Rd and Dora St	-37.7586, 145.0693	-37.7589, 145.0719	14.2	50		undivided	Asphalt	fair	yes	no	none	yes		Yes	no	no	no	no
LBN1	12	Cape St	Between Yarra St and Darebin St	-37.7583, 145.0668	-37.7544, 145.0675	13.5	40		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	yes	wombat school crossing
LBN1	13	Cape St	Between Darebin St and St James Rd	-37.7544, 145.0675	-37.7476, 145.0687	10.5	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	raised intersections
LBN1	14	Grove Rd	Between St James Rd and Station Rd	-37.7476, 145.0687	-37.745, 145.0694	7.6	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	raised intersections
LBN1	15	Station Rd	Between Grove Rd and Turnham Ave	-37.745, 145.0694	-37.7447, 145.0671	13.0	50		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.4	Yes	yes	no	yes	no
LBN1	16	Turnham Ave	Between Station Rd and Lower Plenty Rd	-37.7447, 145.0671	-37.742, 145.0664	13.0	40		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no		
LBN1	17	off-road path	Between Lower Plenty Rd and Chapman St	-37.742, 145.0664	-37.7302, 145.069	2.0			shared path	gravel	fair	no	no	off-road path	yes		No	no	no	no	no
LBN1	18	Chapman St	Between off-road trails	-37.7302, 145.069	-37.7303, 145.07	8.3	50		undivided	asphalt	good	yes	yes	none	yes		No	no	no	no	no
LBN1	19	off-road path	Between Chapman St and Aberdeen Rd	-37.7303, 145.07	-37.7292, 145.0704	1.2			footpath	concrete	good	no	no	footpath	yes		No	no	no	no	
LBN1	20	Aberdeen Rd	Between off-road trail and Birdwood Ave	-37.7292, 145.0704	-37.7275, 145.0701	7.2	50		undivided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN1	21	Birdwood Ave	Between Aberdeen Rd and May St	-37.7275, 145.0701	-37.7256, 145.0696	7.8	50		undivided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN1	22	Somers Ave	Between May St and Lindsay St	-37.7256, 145.0696	-37.7176, 145.0776	7.5	40 / 50		undivided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	speed humps
LBN1	23	Lindsay St / Powley Ave	Between Somers Ave and Richards Ave	-37.7176, 145.0776	-37.7158, 145.0793	6.7	50		undivided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN1	24	Richards Ave	Between Powley Pde and Greensborough Rd	-37.7158, 145.0793	-37.7145, 145.082	7.0	50		undivided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN1	25	Greensborough Rd / Watsonia Rd	Between Richards Ave to Watsonia Railway station	-37.7145, 145.082	-37.7128, 145.0824	varies	40		divided	asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN2	1	Gilbert Road	Between The Boulevard and Marshall Street	-37.7746, 145.0489	-37.7725, 145.0466	6.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN2	2	Marshall Street	Between Marshall Street and intersection of Norman Street and Sherwood Road	-37.7725, 145.0466	-37.768, 145.0473	11.5	50		undivided	Asphalt	Good	yes	Yes	Bicycle lanes	Yes	2.1	Yes	No	Yes	Yes	No
LBN2	3	Norman Street	Between the intersection of Norman Street and Sherwood Road and Noel Street	-37.768, 145.0473	-37.7684, 145.0459	12.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		No	Yes	Yes	No	
LBN2	4	Noel Street	Between Norman Street and Upper Heidelberg Road	-37.7684, 145.0459	-37.7659, 145.046	10.3	40		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	wombat crossing

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN2	5	Upper Heidelberg Road	Between Noel Street and St Elmo Road	-37.7659, 145.046	-37.7654, 145.0463	12.8	40		undivided	Asphalt	Good	yes	Yes	None	Yes		No	No	Yes	Yes	No
LBN2	6	St Elmo Road	Between Upper Heidelberg Road and Lantana Street	-37.7654, 145.0463	-37.7586, 145.0469	9.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	no
LBN2	7	St Elmo Road	Between Lantana Street and Banksia Street	-37.7586, 145.0469	-37.7573, 145.0472	8.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	no
LBN2	8	Banksia Street	Between St Elmo Road and Edwin Street	-37.7573, 145.0472	-37.7576, 145.0494	8.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		No	Yes	Yes	Yes	no
LBN2	9	Edwin Street	Between Banksia St and Bell Street	-37.7576, 145.0494	-37.7528, 145.0503	6.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	No
LBN2	10	Edwin Street	Between Bell Street and Montgomery Street	-37.7528, 145.0503	-37.7515, 145.0505	7.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	No
LBN2	11	Montgomery Street	Between Edwin Street and Alfred Street	-37.7515, 145.0505	-37.7517, 145.0526	6.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN2	12	Montgomery Street	Between Alfred Street and Dresden Street	-37.7517, 145.0526	-37.752, 145.0548	6.4	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN2	13	Dresden Street	Between Montgomery Street and Altona Street	-37.752, 145.0548	-37.7474, 145.0556	8.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	Yes
LBN2	14	Dresden Street	Between Altona Street and Lloyd Street	-37.7474, 145.0556	-37.7445, 145.0562	7.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	Yes
LBN2	15	Lloyd Street	Between Dresden Street and Porter Road	-37.7445, 145.0562	-37.7445, 145.0567	7.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	Yes	No	No
LBN2	16	Porter Road	Between Lloyd Street and Southern Road	-37.7445, 145.0567	-37.7431, 145.0569	6.0 - 6.3	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	Yes
LBN2	17	Porter Road	Between Southern Road and Outhwaite Road	-37.7431, 145.0569	-37.7402, 145.0574	5.8 - 6.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	No	No	Yes
LBN2	18	Porter Road	Between Outhwaite Road and Dougharty Road	-37.7402, 145.0574	-37.7354, 145.0582	7.0 - 7.4	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	Yes
LBN2	19	Porter Road	Between Dougharty Road and Northern Road	-37.7354, 145.0582	-37.7306, 145.059	7.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	Yes
LBN2	20	Porter Road	Between Northern Road and Orr St	-37.7306, 145.059	-37.7297, 145.0592	6.3 - 6.6	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN2	21	Orr Street	Between Porter Road and Waiora Road	-37.7297, 145.0592	-37.7298, 145.0609	6.6	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN2	22	Waiora Road	Between Orr Street and Joynt Street	-37.7298, 145.0609	-37.726, 145.0612	9.5 - 10	40 / 50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	Yes	No
LBN2	23	Joynt Street	Between Waiora Road and McNamara Street	-37.726, 145.0612	-37.7261, 145.0687	5.3 - 6.3	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN3	1	Rockbeare Grove	Between Salisbury Ave to Waverley Ave	-37.7762, 145.0362	-37.7711, 145.0382	6.0 - 7.3	40		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	Flat top speed humps
LBN3	2	Waverley Avenue / Wynstay Crescent	Between Rockbeare Grove and Kenilworth Parade	-37.7711, 145.0382	-37.7692, 145.0369	6.8	50		undivided	Asphalt	Fair	yes	yes	none	yes		Yes	no	Yes	no	Flat top speed humps
LBN3	3	Kenliworth Parade	Between Wallace St and Shaw St	-37.7694, 145.0388	-37.7691, 145.0355	6.0 - 9.0	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN3	4	Della Torre Crescent / Abercorn Avenue	From Kemilworth Parade to end of Abercorn Avenue	-37.7691, 145.0355	-37.7704, 145.0323	7.2 - 8.0	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN3	5	Miles Street	Between Della Torre Crescent and Livingstone Road	-37.7693, 145.0345	-37.7671, 145.0349	7.0	50		undivided	Asphalt	good	yes	no	none	yes		Yes	no	no	no	no
LBN3	6	Oriel Road	Livingstone Road to Bond Street	-37.7671, 145.0349	-37.7623, 145.0366	13.6	60		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.5 - 2.0	Yes	yes	yes	yes	no
LBN3	7	Oriel Road	Bond Street to Banksia Street	-37.7623, 145.0366	-37.7564, 145.0378	17.0	60		divided	Asphalt	good	yes	yes	bicycle lanes	yes	1.5 - 2.0	Yes	yes	yes	yes	no
LBN3	8	Oriel Road	Banksia Street to Bell Street	-37.7564, 145.0378	-37.7497, 145.04	17.0	60		divided	Asphalt	good	yes	yes	bicycle lanes	yes	1.5	Yes	yes	yes	yes	no
LBN3	9	Bell Street	Oriel Road to Oriel Road	-37.7497, 145.04	-37.7498, 145.0413	29.0	60		divided	Asphalt	good	yes	yes	none	yes		No	no	no	yes	no
LBN3	10	Oriel Road	Bell Street to Southern Road	-37.7498, 145.0413	-37.7416, 145.0429	9.8 - 14.5	60		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.5	Yes	yes	yes	yes	no
LBN3	11	Redwood St / Mulberry Pde / Gona St	Between Oriel Road and Liberty Parade	-37.7457, 145.042	-37.7449, 145.0368	6.5	50		undivided	Asphalt	good	yes	yes	none	yes		Yes	no	no	no	no
LBN3	12	Oriel Road	Between Southern Road to Dougharty Road	-37.7416, 145.0429	-37.7341, 145.0449	12.0 - 14.5	40		undivided	Asphalt	good	yes	yes	bicycle lanes	yes	1.5	Yes	yes	yes	yes	no

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN4	1	Dougharty Road	Between Liberty Parade to Oriel Road	-37.7336, 145.0407	-37.734, 145.045	13.0	60		undivided	asphalt	fair	yes	yes	bicycle lanes	yes	2.8	Yes	yes	yes	yes	rumble strips
LBN4	2	Dougharty Road	Between Oriel Road to Waterdale Road	-37.734, 145.045	-37.7345, 145.0491	13.0	60		undivided	asphalt	good	yes	yes	bicycle lanes	yes	2.8	Yes	yes	yes	yes	no
LBN4	3	Dougharty Road	Between Waterdale Road to Waiora Road	-37.7345, 145.0491	-37.7356, 145.0599	13.0	60		undivided	asphalt	good	yes	yes	bicycle lanes	yes	2.0	Yes	yes	no	no	no
LBN4	4	Davies Street	Between Waiora Road to Ellesmere Parade	-37.7356, 145.0599	-37.736, 145.0653	6.5	40		undivided	asphalt	good	yes	no	Advisory linemarking	yes		Yes	yes		no	no
LBN4	5	Off-road path	Between Ellesmere Parade to Von Nida Crescent	-37.736, 145.0653	-37.7371, 145.0678	1.0 - 2.0			off-road path	gravel	fair		no	off-road path			no	no	no	no	no
LBN4	6	Von Nida Crescent	Between off-road trail and Finlayson St	-37.7371, 145.0678	-37.7377, 145.0691	7.0	50		undivided	asphalt	good	yes	no	none	yes		Yes	no	no	no	no
LBN4	7	Finlayson St	Between Von Nida Crescent and roundabout	-37.7377, 145.0691	-37.7341, 145.0714	9.8	50		undivided	asphalt	good	yes	yes	bicycle lanes	yes	1.5	Yes	yes	no	yes	no
LBN4	8	Finlayson St	Between roundabout and Greensborough Hwy	-37.7341, 145.0714	-37.7334, 145.0787	7.2	40 / 50		undivided	asphalt	good	yes	yes	none	yes		Yes	yes	no	yes	rumble strips
LBN4	9	Greensborough Hwy	Between Finlayson St and connection onto River Gum Walk (off road path)	-37.7334, 145.0787	-37.7349, 145.079	23.0	60	Very high	undivided	asphalt	good	yes	yes	bicycle lanes		1.5	No	yes	no	no	no
LBN4	10	River Gum Walk (Off-road path)	Between Lower Plenty Rd and Banyule Rd	-37.7349, 145.079	-37.7424, 145.0807	3.0			off-road shared path	concrete	good		no	off-road shared path			no	yes	yes	no	no
LBN4	11	River Gum Walk (Off-road path)	Between Banyule Rd and Buckingham Drive	-37.7424, 145.0807	-37.7500, 145.0793	3.0			off-road shared path	concrete	good		no	off-road shared path			no	yes	yes	no	no
LBN5	1	Gona Street	Between Liberty Parade and Mulberry Parade	-37.7448, 145.0368	-37.7447, 145.0388	6.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	2	Mulberry Parade	Between Gona Street and Redwood Street	-37.7447, 145.0388	-37.7455, 145.0391	5.8	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	3	Redwood Street	Between Mulberry Parade and Oriel Road	-37.7455, 145.0391	-37.7456, 145.042	6.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	4	Oriel Road and Altona Street	Between Redwood Street and Waterdale Road	-37.7456, 145.042	-37.7464, 145.0469	9.5	40		undivided	Asphalt	Good	yes	Yes	Bicycle lanes	Yes	1.8	Yes	No	No	Yes	speed cushions
LBN5	5	Altona Street	Between Waterdale Road and Law Street	-37.7464, 145.0469	-37.7466, 145.0484	7.1	50		undivided	Asphalt	Good	yes	Yes	None	Yes		No	Yes	No	Yes	No
LBN5	6	Law Street	Between Altona Street and Haig Street	-37.7466, 145.0484	-37.7456, 145.0485	6.7	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	No	Yes	No
LBN5	7	Haig Street	Between Law Street and Dresden Street	-37.7456, 145.0485	-37.7465, 145.0558	6.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	Yes	Yes	No	No
LBN5	8	Dresden Street	Between Haig Street and Churchill Street	-37.7465, 145.0558	-37.746, 145.0559	7.5	50		undivided	Asphalt	Good	yes	no	None	Yes		No	Yes	Yes	No	No
LBN5	9	Churchill Street	Between Dresden Street and Waiora Road	-37.746, 145.0559	-37.7463, 145.058	6.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	Yes	No	No
LBN5	10	Waiora Road	Between Churchill Street and Lower Plenty Road	-37.7463, 145.058	-37.7469, 145.0579	14.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		No	No	Yes	Yes	No
LBN5	11	Lower Plenty Road	Between Waiora Road and St James Road	-37.7469, 145.0579	-37.7464, 145.0588	14.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		No	No	No	Yes	No
LBN5	12	St James Road	Between Lower Plenty Road and railway lines after Hawdon Street	-37.7464, 145.0588	-37.7473, 145.0665	7.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	13	St James Road	Across Hurstbridge rail line upto Manton Street	-37.7473, 145.0665	-37.7475, 145.0676	not yet constructed			not yet constructed	not yet constructed	not yet constructed	not yet constructed					No				No
LBN5	14	St James Road	Between Manton Street and Rosanna Road	-37.7475, 145.0676	-37.7479, 145.0712	6.4 - 7.8	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	15	St James Road	Between Rosanna Road and Hodgson Street	-37.7479, 145.0712	-37.7482, 145.0735	7.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	16	Hodgson Street	Between St James Road and Anderson Street	-37.7482, 145.0735	-37.7487, 145.0734	6.0	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	17	Anderson Street	Between Hodgson Street and Beverley Road	-37.7487, 145.0734	-37.7493, 145.0788	6.5	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	18	Beverley Road	Between Anderson Street and Buckingham Drive	-37.7493, 145.0788	-37.7499, 145.0787	7.8	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN5	19	Buckingham Drive	Between the Main Yarra Trail and Beverley Road	-37.7499, 145.0787	-37.7505, 145.082	6.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	Speed hump
LBN6	1	The Grange	Between Yallambie Rd to end of road	145.101310° -37.721773°	145.100872° -37.725468°	7.0	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	Yes	No	No
LBN6	2	off-road path	Between The Grange and Davis Place	145.100872° -37.725468°	145.099847° -37.725890°	2.5			Shared Path	Concrete	Fair		no	off-road path			no	No	Yes	no	No

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN6	3	Davis Place	Between off-road link to Denison Drive	145.099847° -37.725890°	145.098233° -37.726138°	6.4	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	Yes	No	No
LBN6	4	Silver Wattle St	Between Denison Drive and Lower Plenty Road	145.098233° -37.726138°	145.091518° -37.729856°	6.8	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	Yes	No	No
LBN6	5	Lower Plenty Road	Between Silver Wattle Road and off-road trail	145.091518° -37.729856°	145.079386° -37.734685°	9.5	70		Divided	Asphalt	Good	Yes	Yes	Bicycle Lanes	Yes	2.3	Yes	No	No	Yes	No
LBN6	6	River Gum Walk (Off-road trail)	Between Lower Plenty Road and Banyule Road	145.079386° -37.734685°	145.080752° -37.742451°	3.0			Shared Path	Concrete	Good		no	off-road path			no	Yes	Yes	no	No
LBN6	7	River Gum Walk (Off-road trail)	Between Banyule Road and Buckingham Drive	145.080752° -37.742451°	145.079350° -37.749957°	3.0			Shared Path	Concrete	Good		no	off-road path			no	Yes	Yes	no	No
LBN7	1	Off-road	Off road shared path between Plenty Road to the west and Dilkara Avenue to the east	-37.7024, 145.0578	-37.7043, 145.0675	3.0			Shared path	concrete	Good		Yes	off-road shared path	yes		No	Yes	No	No	No
LBN7	2	Dilkara Avenue	Between the shared path to the north and Greenwood Drive to the south	-37.7043, 145.0675	-37.706, 145.0672	6.4	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	No	No	No	Yes
LBN7	3	Greenwood Drive	Between Dilkara Avenue to the west and Morwell Avenue to the east	-37.706, 145.0672	-37.7087, 145.0805	9.5	50		Undivided	asphalt	Good	Yes	Yes	bicycle / parking lane	yes	1.5	Yes	yes	No	Yes	No
LBN7	4	Off-road	Off road shared path between Greenwood Drive to the south and Gleeson Drive to the north	-37.7087, 145.0805	-37.7062, 145.0757	3.5			Shared path	concrete	Good		No				No		No	No	No
LBN7	5	Gleeson Drive	Between the off road shared path to the south and Grimshaw Street to the north	-37.7062, 145.0757	-37.7017, 145.0765	7.1	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	no	No	No	No
LBN7	6	Grimshaw Street	Between Gleeson Drive to the west and Sharpes Road to the east	-37.7017, 145.0765	-37.7021, 145.0799	12.4	60		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		No	no	no	Yes	No
LBN7	7	Sharpes Road	Between Grimshaw Street to the south and Cameron Parade to the north	-37.7021, 145.0799	-37.6991, 145.0805	6.4	40		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	No	No	No	No
LBN7	8	Morwell Avenue	Between Greenwood Drive to the north and Watsonia Road to the south	-37.7087, 145.0805	-37.7104, 145.0828	5.2	40		Divided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	No	No	Yes	Yes
LBN7	9	Watsonia Road	Between Morwell Avenue to the north and Greensborough Road to the south	-37.7104, 145.0828	-37.7145, 145.083	14.2	40 / 60		Divided	asphalt	Good	Yes	Yes	bicycle lanes	yes	1.5	Yes	Yes	No	No	No
LBN7	10	Off-road	Between Greensborough Road to the west and Service Road to the east	-37.7145, 145.083	-37.714, 145.0836	1.5			Shared path	concrete	Fair		No	off-road shared path		1.5	No	No	No	No	No
LBN7	11	Service road	Between the shared path to the south and shared path to the north (near Elder St)	-37.714, 145.0836	-37.7122, 145.0845	5.6	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	Yes		Yes	No	No	No	No
LBN7	12	Off-road	Between Service Road to the north and Wendover Place to the south	-37.7122, 145.0845	-37.7203, 145.0963	2.0			Shared path	concrete	Good		No	off-road shared path			No	No	No	No	No
LBN7	13	Wendover Place	Between the shared path to the north and Yallambie Road to the south	-37.7203, 145.0963	-37.7212, 145.0961	5.8	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	No	No	No	No
LBN7	14	Yallambie Road	Between Wendover Place to the west and Elonera Avenue to the east	-37.7212, 145.0961	-37.722, 145.1038	10.1	40 / 50		Undivided	asphalt	Good	Yes	Yes	bicycle lanes	yes	1.3	No	Yes	No	No	Yes
LBN7	15	Allima Avenue	Between Elonera Avenue in the west to Tarcoola Drive in the east	-37.722, 145.1038	-37.7223, 145.1061	6.3	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	yes		Yes	No	No	No	No
LBN7	16	Allima Avenue	Between Tarcoola Drive in the west to Kurdian Court in the east	-37.7223, 145.1061	-37.7216, 145.1081	6.6	50		Undivided	asphalt	Good	Yes	Yes	Shared carriageway	Yes		Yes	No	No	No	No

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN8	1	Ibbotson Street	Between Watsonia Road and Greensborough Highway	-37.7102, 145.0828	-37.7078, 145.086	7.0	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	2	Overhead Bridge	Between Greenaway Street and Greensborough Highway	-37.7078, 145.086	-37.7082, 145.0876	2.2			Shared Path	concrete	Good		Yes	off-road shared path	Yes		No	No	No	No	
LBN8	3	Nell Street	Between Greensborough Road and Longmuir Road	-37.7082, 145.0876	-37.7081, 145.0896	7.6	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Speed Cushions
LBN8	4	Longmuir Road	Between Nell Street and Nepean Street	-37.7081, 145.0896	-37.7105, 145.0892	7.8	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Hump
LBN8	5	Longmuir Road	Between Nepean Street and Elder Street	-37.7105, 145.0892	-37.7127, 145.0873	7.6	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Hump, Roundabout
LBN8	6	Elder Street	Between Longmuir Road and Greensborough Highway	-37.7127, 145.0873	-37.7111, 145.0851	9.2	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	7	Neil Street	Between Longmuir Road and Delta Road	-37.7081, 145.0896	-37.7089, 145.0961	7.8	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	8	McDowell Street	Between Nell Street and Ester Street	-37.7089, 145.0961	-37.7051, 145.0968	6.8	50		Undivided	Asphalt	Good	Yes	Yes	Advisory linemarking	Yes		Yes	Yes	No	No	no
LBN8	9	Ester Street	Between McDowell Street and Henry Street	-37.7051, 145.0968	-37.7056, 145.1005	7.4	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	10	Henry Street	Between Ester Street and Grimshaw Street	-37.7056, 145.1005	-37.7044, 145.1007	9.1 - 14.5	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	No	no
LBN8	11	Nell Street	Between McDowell Street and Paterson Crescent	-37.7089, 145.0961	-37.7102, 145.1091	7.5	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	12	Paterson Crescent	Between Nell Street and Para Road	-37.7102, 145.1091	-37.7069, 145.1101	6.9	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Hump
LBN8	13	Para Road	Between Paterson Crescent and Plenty River Trail	-37.7069, 145.1101	-37.7073, 145.1104	10.1	60		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	Yes	no
LBN8	14	Plenty River Trail (off road trail)	Between Para Road and Poulter Avenue	-37.7073, 145.1104	-37.7066, 145.1105	2.9			Shared Path	Concrete	Good		No	Off-Road Shared Path	Yes		No	No	No	No	No
LBN8	15	Poulter Avenue	Between Plenty River Trail and Rand Street	-37.7066, 145.1105	-37.7058, 145.1098	6.4	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	No
LBN8	16	Plenty River Trail (off road trail)	Between Poulter Avenue and Rand Street	-37.7058, 145.1098	-37.7052, 145.1104	2.4			Shared Path	Concrete	Good		Yes	Off-Road Shared Path	Yes		No	No	No	No	No
LBN8	17	Rand Street	Between Plenty River Trail and Bannerman Avenue	-37.7052, 145.1104	-37.7045, 145.1116	7.2	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	No
LBN8	18	Bannerman Avenue	Between Rand Street and River Street	-37.7045, 145.1116	-37.7058, 145.1114	7.1	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	No
LBN8	19	River Street	Between Bannerman Avenue and Mountain View Road	-37.7058, 145.1114	-37.7061, 145.1166	7.1	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	No
LBN8	20	Mountain View Road	Between Bannerman Avenue and St Helena Road	-37.7061, 145.1166	-37.6999, 145.1148	10.9	50		Undivided	Asphalt	Good	Yes	Yes	Bicycle Lanes	Yes	2.3	Yes	No	No	Yes	No
LBN8	21	Off-road trail	Between Mountain View Road and Willis Street	-37.6999, 145.1148	-37.6995, 145.1149	2.6			Shared Path	Asphalt	Good		Yes	Off-road Shared Path	Yes		No	No	No	No	No
LBN8	22	Willis Street	Between St Helena Road and Bruce Street	-37.6995, 145.1149	-37.697, 145.1149	4.7	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	No	no
LBN8	23	Carnoon Street	Between Bruce Street and Greenhill Road	-37.697, 145.1149	-37.6941, 145.1175	5.1	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	No	no
LBN8	24	Greenhill Road	Between Carnoon Street and Diamond Creek Road	-37.6941, 145.1175	-37.6908, 145.1138	6.8	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Humps
LBN8	25	Nepean Street	Between Longmuir Road and Sainsbury Avenue	-37.7106, 145.0892	-37.7128, 145.0984	7.8	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	26	Sainsbruy Avenue	Between Nepean Street and Cam Street	-37.7128, 145.0984	-37.7143, 145.0984	10.7	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	27	Cam Street	Between Sainsbury Avenue and Henry Street	-37.7143, 145.0984	-37.7146, 145.1017	7.2	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	28	Henry Street	Between Cam Street and Elder Street	-37.7146, 145.1017	-37.7168, 145.1013	7.6	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	no
LBN8	29	Elder Street	Between Henry Street and Plenty River Trail	-37.7168, 145.1013	-37.7178, 145.1106	8.4	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	Speed Cushions

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN8	30	Plenty River Trail (off road trail)	Between Elder Street and Para Road	-37.7178, 145.1106	-37.7181, 145.1134	4.8			Shared Path	Concrete	Good		No	off-road shared path	Yes		No	No	No	No	
LBN8	31	Park Lane	Between Plenty River Trail and Para Road	-37.7181, 145.1134	-37.7181, 145.114	6.0	50		Undivided	Asphalt	Good	No	Yes	None	Yes		No	No	No	No	Road Hump
LBN8	32	Para Road	Between Park Lane and Rattray Road	-37.7181, 145.114	-37.7186, 145.1139	12.8	60		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	Yes	no
LBN8	33	Rattray Road	Between Para Road and Were Street	-37.7186, 145.1139	-37.7175, 145.121	13.5	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	no
LBN8	34	Were Street	Between Rattray Road and Mayona Road	-37.7175, 145.121	-37.7154, 145.1206	8.8	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	35	Off Road Path	Between Station Road and Mayona Road	-37.7154, 145.1206	-37.7149, 145.1207	3.7			Level Crossing	Concrete	Good		Yes	None	Yes		No	No	No	No	no
LBN8	36	Mayona Road	Between Were Street and Kelvin Avenue	-37.7149, 145.1207	-37.715, 145.1213	7.6	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Two-lane slow point
LBN8	37	Kelvin Avenue	Between Mayona ROad and Baldwin Avenue	-37.715, 145.1213	-37.7133, 145.1198	7.3	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	38	Baldwin Avenue	Between Kelvin Avenue and Mountain View Road	-37.7133, 145.1198	-37.7123, 145.1221	7.3	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	39	Mountain View Road	Between Baldwin Avenue and River Street	-37.7123, 145.1221	-37.7061, 145.1166	8.7	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	40	Rattray Road	Between Were Street and Reichelt Avenue	145.1210212	-37.7207, 145.1278	6.7	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN8	41	Reichelt Avenue	Between Rattray Road and Grand Boulevard	-37.7207, 145.1278	-37.7245, 145.1284	7.5	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Hump, Roundabout
LBN8	42	Grand Boulevard	Between Reichelt Avenue and Main Road	-37.7245, 145.1284	-37.7258, 145.1239	7.5	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Flat Top Speed Hump, Roundabout
LBN8	43	Grand Boulevard	Between Reichelt Avenue and Bolton Street	-37.7245, 145.1284	-37.72, 145.1374	7.2	40 / 50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN9	1	St Helena Road	Between Main Street and Karingal Drive	-37.6997, 145.1077	-37.7009, 145.122	13.2	60		Divided	Asphalt	Good	Yes	Yes	Bicycle lanes	Yes	1.5	No	Yes	No	Yes	no
LBN9	2	Karingal Drive	Between St Helena Road and Weidlich Road	-37.7009, 145.122	-37.7047, 145.1281	13.5	60		Divided	Asphalt	Good	Yes	Yes	Bicycle lanes	Yes	1.7	No	Yes	No	Yes	no
LBN9	3	Weidlich Road	Between Karingal Drive and Yangoora Place	-37.7047, 145.1281	-37.7021, 145.1281	12.4	50		Undivided	Asphalt	Good	Yes	Yes	Bicycle lanes	Yes	1.5	Yes	Yes	No	Yes	no
LBN9	4	Weidlich Road	Between Yangoora Place and St Clems Street	-37.7021, 145.1281	-37.6953, 145.1367	10.6	50		Undivided	Asphalt	Good	Yes	Yes	Bicycle lanes	Yes	1.6 - 1.9	Yes	Yes	No	Yes	blister island, wombat crossing, speed cushions
LBN9	5	Weidlich Road	Between St Clems Street and Katherine Drive	-37.6953, 145.1367	-37.6928, 145.136	10.7	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	no
LBN9	6	Weidlich Road	Between Glen Katherine Drive and Calendonía Drive	-37.6928, 145.136	-37.6903, 145.1368	10.7	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	wombat crossing
LBN9	7	Calendonía Drive	Between Weidlich Road and Ryans Road	-37.6903, 145.1368	-37.69, 145.1424	10.6	40		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN9	8	St Clems Street	Between Weidlich Road and Ryans Road	-37.6954, 145.1367	-37.6961, 145.1413	6.7	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN9	9	Glen Katherine Drive	Between Weidlich Road and St Helena Road	-37.6929, 145.136	-37.6917, 145.1301	11.0	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	no
LBN9	10	St Helena Road	Between Glen Katherine Drive and Allumba Drive	-37.6917, 145.1301	-37.6906, 145.1308	12.2	60		Undivided	Asphalt	Good	Yes	Yes	None	Yes		No	No	No	Yes	no
LBN9	11	Allumba Drive	Between St Helena Road and Beales Road	-37.6906, 145.1308	-37.6895, 145.1218	8.9	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	No	Speed Cushions
LBN9	12	Beales Road	Between Allumba Drive and Sette Court	-37.6895, 145.1218	-37.6868, 145.1222	9.2	50		Undivided	Asphalt	Good	Yes	Yes	None	Yes		Yes	No	No	Yes	Speed Cushions, Blister Island
LBN10	1	Bent Street	Between Plenty Road and Cameron Parade	-37.6979, 145.0591	-37.6986, 145.0615	12.5	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	2	Cameron Parade	Between Bent Street and Grant Street	-37.6986, 145.0615	-37.6993, 145.0829	10.8	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	3	The Rameo	Between Between Cameron Parade and David Crescent	-37.6986, 145.0714	-37.6949, 145.0712	7.1	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	4	David Crescent	Between The Rameo and Luton Way	-37.6949, 145.0711	-37.6944, 145.0667	7.1	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN10	5	Luton Way	Between Luton Way and Shelley Avenue	-37.6944, 145.0667	-37.6947, 145.0666	7.1	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	6	Shelley Avenue	Between Luton Way and Milton Parade	-37.6948, 145.0666	-37.6942, 145.0642	7.2	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	7	Milton Parade	Between Milton Parade and Plenty Road	-37.6941, 145.0642	-37.6948, 145.0605	10.9	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	8	Jacqueline Road	Between Cameron Parade and Howe Court	-37.6987, 145.075	-37.6937, 145.0745	7.1	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	9	Grant Street	Between Cameron Parade and Macorna Street	-37.6992, 145.0829	-37.6962, 145.0853	7.1	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	10	Macorna Street	Between Grand Street/Hakea Street and Edmund Rice Parade	-37.696, 145.0853	-37.6924, 145.0858	8.9	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	yes	no
LBN10	11	Edmund Rice Parade	Between Macorna Street and the Edmund Rice Parade Reserve	-37.6926, 145.0747	-37.6922, 145.0858	8.9	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	No
LBN10	12	Hakea Street	Between Macorna Street and the Greensborough underpass	-37.6961, 145.0854	-37.6968, 145.0905	7.4	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	13	Greensborough Hwy under path	Between Hakea Street and Yando Street	-37.6968, 145.0906	-37.697, 145.0932	1.8			Off-road path	Concrete	Good		no	off-road path	yes		Yes	no	no	no	speed cushions
LBN10	14	Yando Street	Between the GB Hwy Bypass and Haliday Court	-37.6971, 145.0932	-37.6976, 145.0986	7.2	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	N/A
LBN10	15	Yando Street	Between Haliday Court and Kalparrin Ave	-37.6976, 145.0986	-37.6993, 145.1029	7.2	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	16	Plenty River Trail	Beginning at Yando Street and through Whatmough Park	-37.6993, 145.1029	-37.7006, 145.1047	2.3			Off-road path	Concrete	Good	yes	no	off-road path	yes		No	no	no	no	no
LBN10	17	Plenty River Trail Bridge	Between Whatmough Park and Greensborough Tennis Club	-37.7006, 145.1047	-37.7007, 145.1056	1.9			Off-road path	Bridge deck	Good		no	off-road path	yes		No	no	no	no	No
LBN10	18	Reserve car park access	Between Greensborough Tennis Club and Main Street	-37.7008, 145.1056	-37.6998, 145.1077	5.0			undivided	Asphalt	Good	yes	no	none	yes		Yes	no	no	no	No
LBN10	19	Oxford Drive	Between Cameron Parade and Grimshaw Street	-37.6984, 145.0657	-37.7007, 145.0653	10.9	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	Speed humps
LBN10	20	Grimshaw Street	Between Oxford Drive and Balaka Place	-37.7007, 145.0654	-37.7008, 145.0659	13.3	60		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	21	Balaka Place	Between Grimshaw Street and noorong Avenue	-37.7007, 145.0659	-37.7014, 145.0658	7.9	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	yes	no
LBN10	22	noorong Avenue	Balaka Parade and Morwell Avenue	-37.7014, 145.0658	-37.7034, 145.063	6.7	50		undivided	Asphalt	Good	yes	yes	none	yes		Yes	no	no	no	no
LBN10	23	Marcona Street	Between Marcona Street to Metropolitan Ring Road Path Trail	-37.6923, 145.086	-37.6898, 145.0865	5.0 - 2.5			Off-road path	Asphalt/Concrete	Good		yes				No	no	no	no	Raised median
LBN11	1	Martins Lane	Between Lower Plenty Road and intersection of Martins Lane and Hendersons Road	-37.7318, 145.0849	-37.7336, 145.0975	7.6	40 / 50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	Yes	Speed cushions
LBN11	2	Martins Lane	Between intersection of Martins Lane and Hendersons Road and beginning of unsealed section of Martins Lane	-37.7336, 145.0975	-37.7341, 145.1019	6.2	50		undivided	Asphalt	Good	yes	Yes	None	Yes		Yes	No	No	No	No
LBN11	3	Martins Lane and Seymour Road	Between the beginning of the unsealed section of Martins Lane and the sealed section of Seymour Road	-37.7341, 145.1019	-37.7372, 145.1045	4.1	50		undivided	Gravel	Poor	no	No	None	No		No	No	No	No	Narrow road
LBN11	4	Seymour Road	Between the sealed section of Seymour Road and Banyule Road	-37.7372, 145.1045	-37.7384, 145.1027	3.2 - 5.0	50		undivided	Concrete	Fair	no	No	None	No		No	No	No	No	Narrow road
LBN11	5	Banyule Road, henty Road and Cleveland Avenue	Between the intersection of Banyule Road and Seymour Road and the intersection of Cleveland Avenue and Lakeside Drive	-37.7384, 145.1027	-37.7387, 145.1099	5.5	50		undivided	Asphalt	Good	no	No	None	No		No	Yes	Yes	no	Speed Cushions

Route	Section No.	Road	Section Description	GPS from	GPS to	Road width (m)	Speed limit (km/h)	Traffic volumes	Road configuration	Pavement Type	Pavement condition	Roadside kerb and channel or edgeline	Street lighting	Type of bicycle facility	Footpaths? (for children)	Width of bicycle lanes	parked vehicles	presence of bicycle linemarking	Presence of bicycle signage and wayfinding signage	Buses	Traffic Calming Devices
LBN11	6	Cleveland Avenue	Between the intersection of Cleveland Avenue and Lakeside Drive and Bonds Road	-37.7387, 145.1099	-37.7379, 145.1154	5.9	50		undivided	Asphalt	Fair	no	No	None	No		No	Yes	No	No	No
LBN11	7	Bonds Road	Between the intersection of Bonds Road and Cleveland Avenue and Main Yarra Trail	-37.7379, 145.1154	-37.7531, 145.1127	3.1	50		undivided	Asphalt	Fair	no	No	None	No		No	Yes	No	No	Narrow road
LBN12	1	Dennett Street	Between Elder Street and Nepean Street	-37.711, 145.0853	-37.7101, 145.0861	6.1	50		undivided	Asphalt	Good	yes	yes	Advisory linemarking	yes		Yes	yes	no	no	no
LBN12	2	Shared Path	Between Nepean Street and Temby Street	-37.7101, 145.0861	-37.7094, 145.0869	1.6			shared path	Concrete	Good		yes	off-road path			No	no	no	no	no
LBN12	3	Greensborough Road	Between Temby Street and Nell Street	-37.7094, 145.0869	-37.7079, 145.0878	8.6	50		undivided	Asphalt	Good	yes	yes	wide kerbside lane	yes		No	yes	yes	no	Speed Cushions
LBN12	4	Greensborough Road	Between Nell Street and Santon Street	-37.7079, 145.0878	-37.7056, 145.09	12.2	50		undivided	Asphalt	Good	yes	yes	bicycle lanes	yes	1.7 - 2.0	No	yes	yes	no	Speed Cushions
LBN12	5	Santon Street	Between Grensbourough Road and Adeline Street	-37.7056, 145.09	-37.706, 145.0941	6.5	50		undivided	Asphalt	Good	yes	yes	Advisory linemarking	yes		Yes	yes	yes	no	no
LBN12	6	Adeline Street	Between Santon Street and Nell Street	-37.706, 145.0941	-37.7065, 145.094	5.5	50		undivided	Asphalt	Good	yes	no	Advisory linemarking	yes		Yes	yes	yes	no	no
LBN12	7	Vermont Parade	Between Adeline Street and Henry Street	-37.7065, 145.094	-37.7073, 145.1003	6.2	50		undivided	Asphalt	Good	yes	yes	Advisory linemarking	yes		Yes	yes	yes	no	no
LBN12	8	Henry Street	Between Vermont Parade and Nell street	-37.7073, 145.1003	-37.7076, 145.1002	9.2	50		undivided	Asphalt	Good	yes	yes	bicycle lanes	yes	2.0	No	yes	yes	no	no
LBN12	9	Alexandra Street	Between Henry Street and Clyde bank Avenue	-37.7076, 145.1002	-37.7081, 145.1044	6.6	50		undivided	Asphalt	Fair	yes	yes	Advisory linemarking	yes		Yes	yes	yes	no	no
LBN12	10	Clyde bank Avenue	Between Alexandra Street and Warwick Road	-37.7081, 145.1044	-37.7071, 145.1045	6.5	50		undivided	Asphalt	Good	yes	no	Advisory linemarking	yes		Yes	yes	yes	no	no
LBN12	11	Shared Path	Between Warwick Road and Eldale Avenue	-37.7071, 145.1045	-37.7063, 145.1046	1.2			shared path	Concrete	Good		yes	off-road path			No	no	yes	no	no
LBN12	12	Eldale Avenue	Between Warwick Road and Grimshaw Street	-37.7063, 145.1046	-37.7049, 145.1048	6.1	50		undivided	Asphalt	Good	yes	yes	Advisory linemarking	yes		Yes	yes	no	no	no

## **ATTACHMENT B – SUMMARY OF LOCALISED FINDINGS AND ACTION ITEMS**

DRAFT

Route	Item No.	Section	Issue	Action	Priority
1	1.1	1	The route starts / terminates at the Ivanhoe Golf Course. No direct link has been provided to the Main Yarra Trail from the Ivanhoe Golf Course	Redivert route to the east along The Boulevard to provide direct connection into Main Yarra Trail (via Eaglemont Tennis Club)	High
	1.2	7	Banksia Street has very high traffic volumes. Additionally, the kerbside traffic lane is not sufficiently wide to safely accommodate cyclists	Realign the bicycle route to encourage cyclists to utilise the service road along the south of Banksia Street, gaining access from the existing path on the eastern side of Studley Road	High
	1.3	11	Rosanna Road and Dora Street carries very high volumes of traffic. No bicycle crossing facilities are provided at the Yarra Street / Rosanna Road and Yarra Street / Dora Street intersections. As a result, cyclists are currently required to cross through heavy traffic with no protection, and no warning provided to motorists.	Design and construct a safe cycle crossing facility at the Yarra Street / Rosanna Road and Yarra Street / Dora Street intersections. Alternatively, redivert the route onto Banksia Street between Cape Street and Dora Street, and upgrade the footpath on the northern side of Banksia Street to a shared path	High
	1.4	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	1.5	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium
2	2.1	1	There is debris along the side of the road on Rockbeare Grove. This may cause cyclists to lose control and fall if they try to evade or ride over debris.	Regular maintenance to remove debris should be undertaken.	Maintenance
	2.2	5	The wayfinding sign installed on the eastern side of St Elmo Street / Upper Heidelberg Road intersection may not be visible for cyclists travelling northbound, as it is outside of their expected field of vision. There is a chance that cyclists may miss this sign as it is located on the opposite side of the road.	Consider relocating this wayfinding sign to the western side of Upper Heidelberg Road.	Low
	2.3	5	Upper Heidelberg Road carries very high volumes of traffic. No formal bicycle crossing facility currently exists for cyclists to safely cross Upper Heidelberg Road, resulting in an unsafe situation for cyclists crossing Upper Heidelberg Road	Construct a shared path on the west side of Upper Heidelberg Road from St Elmo Road to the existing signalised pedestrian crossing, and on the east side from the crossing to Noel Street	High
	2.4	16, 17	The crossing at the Southern Road / Porter Road intersection is unsafe for cyclists due to high traffic volumes along Southern Road	Construct a refuge crossing across Southern Road to allow cyclists to stage their crossing	Medium

Route	Item No.	Section	Issue	Action	Priority
	2.5	21	Cyclists should travel through/with traffic at The Waiora Road / Kingsbury Drive intersection. A shared path was identified on Orr Street which crosses Kingsbury Drive to the west of the signals, leading to a shared path which connects onto Waiora Road north of the signals. This could be used as an alternative route for recreational cyclists at this location	Declare the shared path as an alternate route. Wayfinding signs should be provided to advise cyclists of the route direction	Medium
	2.6	All	Advisory bicycle linemarking is missing along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	2.7	All	Wayfinding signage is inconsistent along the route	Provide standardised wayfinding signs along the route	Medium
3	3.1	1	There is no cyclist access path from Rockbeare Grove to the Darebin Creek Trail	Provide cyclist access to Darebin Parklands and Darebin Creek trail	Medium
	3.2	5	There is no cyclist connection between Miles Street and Livingstone Street. Cyclists are required to ride onto the footpath via a property crossover to continue along the route	Construct a bicycle path cut-through in the centre of the landscaping. Provide a 'cyclist dismount' sign, and signage to guide cyclists to cross Livingstone Street at the signals	Medium
	3.3	6, 7, 8	There is a lack of green pavement treatments in bicycle lanes along Oriel Road across conflict points	Provide green coloured pavement treatments at conflict points along the bicycle lanes on Oriel Road between Livingstone Street and Bell Street	Low
	3.4	9	Bell Street carries very high traffic volumes. Kerbside lanes are narrow and insufficient to safely accommodate a cyclist	Upgrade the footpath on the northern side of Bell Street between Oriel Road to Oriel Road to a shared path, and encourage cyclists to use the signalised crossing	Medium
	3.5	11	Cyclists will be frequently crossing between the Darebin Creek Trail and Gona Street. There is currently no warning provided to motorists travelling along Liberty Parade of cyclists crossing at this location	Install warning signs on Liberty Parade advising motorists of cyclists crossing Liberty Parade between Gona Street and the Darebin Creek Trail	High
	3.6	11	A chain link fence across the entry to the Darebin Creek Trail may not be seen by cyclists and may cause a cyclist to destabilise	Replace chain fence with an alternative fence that can be seen more clearly	High
	3.7	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	3.8	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium
4	4.1	1	The pavement around the curve on Doughartys Road is cracked and may present a hazard to cyclists	Rectify the pavement to provide a smooth surface for cyclists	Maintenance

Route	Item No.	Section	Issue	Action	Priority
	4.2	4	The bicycle path connection between Waiora Road and Davies Street is via a narrow 1.2 m wide footpath, which is insufficient for a cyclist. Additionally, this section is very steep, allowing cyclists to pick up speed as they travel down towards Davies Street	Upgrade the path connection between Davies Street and Waiora Road. This can be achieved by: - widening the existing footpath to 2.5 m and designating it to a shared path - provide signage and linemarking to guide cyclists onto path	Medium
	4.3	4	Cyclists travelling eastbound on Davies Street crossing Ellesmere Parade onto the off-road path are vulnerable to motor vehicles travelling along Ellesmere Parade. There is currently no warning signage along Ellesmere Parade warning motorists of cyclists that may be crossing	Install bicycle warning signage on Ellesmere Parade	Low
	4.4	5	The path through Rosanna Parklands is difficult to navigate due to a lack of wayfinding signage	Install wayfinding signage to guide cyclists through Rosanna Parklands	Medium
	4.5	5	There is no connection between Von Nida Crescent and the trail through Rosanna Parklands. However, it is noted that there is a connection at Pickworth Court. Additionally, it is noted that Pickworth Court has been provided with bicycle linemarking and wayfinding signage, providing a more intuitive route than Von Nida Crescent	Redivert the bicycle route via Pickworth Crescent to replace Von Nida Crescent	High
	4.6	9	No safe facility has been provided to accommodate cyclists turning right from Finlayson Street onto Greensborough Highway. This requires cyclists to turn across five lanes of traffic on a very busy road, placing cyclists at risk	Upgrade the footpath on the western side of Greensborough Highway between Finlayson Street and Lower Plenty Road to a 2.5 m wide two way shared path	Low
	4.7	9	It is difficult for cyclists to navigate along the bicycle route through the Lower Plenty Road / Greensborough Highway signalised intersection. Bicycle lanterns have been installed at the intersection, however, no wayfinding is available	Install holding rails and wayfinding linemarking to guide cyclists through the signalised crossings at the Lower Plenty Road / Greensborough Highway intersection	Medium
	4.8	10, 11	There is no lighting provided along River Gum Walk	Install lighting along River Gum Walk	Low

Route	Item No.	Section	Issue	Action	Priority
5	5.1	1	Cyclists are frequently crossing between Darebin Creek Trail and Gona Street. There is currently no warning provided to motorists travelling along Liberty Parade of cyclists crossing at this location	Install warning signs on Liberty Parade advising motorists of cyclists crossing Liberty Parade between Gona Street and the Darebin Creek Trail	High
	5.2	10, 11	Cyclists crossing between Churchill Street and St James Road currently have to merge onto Waiora Road and Lower Plenty Road, which carries very high volumes of traffic. The signalised intersection of Lower Plenty Road / Waiora Road provides a signalised crossing which can provide a safe crossing for cyclists.	Declare a shared path on the south side of Lower Plenty Road from St James Road to the traffic signals and west side of Waiora Road between the signals to Churchill Street, to provide a safe crossing for cyclists between St James Road and Churchill Street.	High
	5.3	13	The section of the route where it crosses the railway is currently closed for construction as part of the track duplication between Heidelberg and Rosanna.	During the construction period, provide temporary wayfinding signage to guide cyclists to cross the rail line via Brown Street to the south (i.e. Hawdon Street / Brown Street / Cape Street) As part of the rail line upgrade, provide a shared footbridge across the rail line	High
	5.4	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	5.5	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium
6	6.1	1	There is an opportunity to link LBN 6 to the Plenty River Trail and to LBN 7 by a new shared path along the transmission line, providing for a more cohesive network	Investigate opportunities to extend the existing shared path along the transmission line to link with the Plenty River Trail	Medium
	6.2	2	There is no linemarking provided along the path between The Grange and Davis Place	Install linemarking along the path	Medium
	6.3	2	There is no signage placed at the beginning and end of the path between The Grange and Davis Place to indicate that it is a shared path	Install shared path signage at both ends	Medium
	6.4	4	There is currently no guidance provided to cyclists at the roundabouts along Silver Wattle Road	Provide sharrows on the approach and within the circulating lane of the roundabouts indicating the direction of travel.	Low
	6.5	5	There is a lack of bicycle symbol linemarking in the bicycle lanes along Lower Plenty Road	Install bicycle symbol linemarking consistently in the bicycle lanes along Lower Plenty Road	Medium

Route	Item No.	Section	Issue	Action	Priority
	6.6	5	It is difficult for cyclists travelling west on Lower Plenty Road to navigate to River Gum Walk. Cyclists are required to traverse onto a private driveway and onto the footpath prior to the trail entry point. This will be easily missed by a cyclist with the majority of cyclists likely to miss the turn off and continue to the signalised intersection	<p>Improve connection from Lower Plenty Road onto River Gum Walk. This may include the following:</p> <ul style="list-style-type: none"> <li>- construct a bicycle ramp from Lower Plenty Road on the approach to the entry point to River Gum Walk</li> <li>- upgrade the footpath to a 2.5 m wide shared path between River Gum Walk and the new bicycle ramp</li> <li>- install wayfinding signage to guide cyclists onto the bicycle ramp and River Gum Walk</li> </ul>	High
	6.7	All	Advisory bicycle linemarking is missing along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	6.8	All	Wayfinding signage is inconsistent along the route	Provide standardised wayfinding signs along the route	Medium
7	7.1	1, 12	There are fixed objects located along the side of the off-road shared paths that could pose a hazard to cyclists. There are locations where the shared path weaves around hazards at tight angles which may result in cyclists failing to negotiate these bends and travelling off the path. Additionally, infrastructure such as park benches and cyclist lean rails may be struck by cyclists during dark conditions if they cannot be seen	Remove hazards or realign path to safely navigate around these hazards. At locations where the path weaves around hazards at tight angles, either remove the hazard or realign the path to provide a smoother alignment around these hazards. Consider linemarking and signage to delineate hazards (i.e. reflectors on lean rails)	High
	7.2	1, 4, 10, 12	There are locations along the off-road shared paths where vegetation may impede cyclists	Ensure vegetation is kept clear from the shared path	Maintenance
	7.3	5	The footpath that connects Gleeson Drive (between 74 and 80 Gleeson Drive) is less than 2.5 m and has a blind corner that could result in crashes between pedestrians and cyclists	Widen and realign the footpath between 74 and 80 Gleeson Drive to 2.5 m, for use as a shared path with clear sight lines	Medium
	7.4	5, 6	There is currently no connection for cyclists when turning right out of Gleeson Drive onto Grimshaw Street. Additionally, cyclists must cross four lanes of traffic and ride on a road that requires physical segregation for safe use by cyclists	Implement a shared path along the south side of Grimshaw Street from Gleeson Drive to the signalised pedestrian crossing. The shared path should then continue along the north side of Grimshaw Street from the crossing to Sharpes Road	High

Route	Item No.	Section	Issue	Action	Priority
	7.5	9	Parking outside the shopping areas along Watsonia Road (western carriageway) requires vehicles to angle park. The majority of vehicles need to reverse out of these car parks when leaving and this may result in collisions between vehicles and cyclists	Consider providing green pavement along the bicycle lane at Watsonia Road to enhance the awareness of cyclists travelling along the bicycle lanes to motorists reversing out of the parking bays	Medium
	7.6	10	This section is narrow and steep and may result in run off road crashes or collisions between cyclists and other path users. Additionally, there is a steep drop off and abrupt entry to Service Road	Consider widening the footpath to 2.5 m for use as a shared path. Provide signage to instruct cyclists to slow down, and modify the footpath alignment to provide a smoother transition onto Service Road	Medium
	7.7	10, 12	There are sections along these off-road paths where the width of the shared path is less than 2.5 m	Widen the shared paths along the route to 2.5 m	Low
	7.8	12	There is an opportunity to extend the shared path to link with the Plenty River Trail and to LBN 6 by a new shared path along the transmission line, providing for a more cohesive network	Investigate opportunities to extend the existing shared path along the transmission line to link with the Plenty River Trail	Medium
	7.9	13	There is a steep decline for southbound cyclists and this may lead to a loss of control in the vicinity of the roundabout. Additionally, it is difficult for cyclists to indicate the direction of travel, as they need to keep their hands on the brakes where Wendover Place meets Yallambie Road.	Install signage to instruct cyclists to slow down on the approach to the roundabout, and install signage to warn motorists along Yallambie Road of the presence of cyclists at the intersection	Medium
	7.10	14	It was noted that the bicycle lanes along this section were narrower than bicycle lanes elsewhere along LBN7 (1.3 m). This may lead to collisions between cyclists and motorists.	Widen bicycle lanes where required	Low
	7.11	16	There is no connection from Kurdian Court at the end of the route to Plenty River Trail	Extend LBN7 to connect with Plenty River Trail at the path connection point located at the intersection of Allima Avenue / Lowan Avenue	Low
	7.12	All	Advisory bicycle linemarking is missing along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	7.13	All	Wayfinding signage is inconsistent along the route	Provide standardised wayfinding signs along the route	Medium
8	8.1	2	The width of the paths leading to the bridge across Greensborough Highway is insufficient to safely accommodate two-way pedestrian and cyclist movements	Widen the paths on the approach to the bridge over Greensborough Highway to 2.5 m	High

Route	Item No.	Section	Issue	Action	Priority
	8.2	2,16,21,30	Shared path signage and linemarking is missing along off-road sections of the route	Install shared path signage and linemarking along the off-road sections of the route	Medium
	8.3	12	Cyclists enter Paterson Crescent which is a one-way road against the flow of traffic, with a curve limiting sightlines for motorists to cyclists that may be entering	Investigate opportunities to install a contraflow bicycle lane for eastbound cyclists along Paterson Crescent through the length of the curve. This may involve constructing a cut-through to accommodate eastbound cyclist movements through the existing kerb extension at the entry point to Paterson Crescent	High
	8.4	13, 14	Currently the route merges from Para Road onto a trail under the bridge, however, no path exists to provide the connection	Redirect the route via a laneway located off Paterson Crescent (south of the property at 42 Paterson Crescent), which leads onto the Plenty River Trail	High
	8.5	13, 14	There is a reserve between 30 and 34 Paterson Crescent (opposite Julinda Court) which could be used to provide a link path between Paterson Crescent and the Plenty River Trail	Investigate opportunities to provide a link path onto the Plenty River Trail from Paterson Crescent via the reserve between 30 and 34 Paterson Crescent	Medium
	8.6	21	It is unclear for cyclists travelling northbound on Mountain View Road and crossing St Helena Road on where the route continues, due to the lack of wayfinding signage. Additionally, cyclists are expected to travel onto the footpath to connect between Mountain View Road and Willis Street, which is insufficient in width to accommodate two-way cyclist and pedestrian movements	Upgrade the footpath between St Helena Road and Willis Street to a 2.5 m wide shared path and install wayfinding signage to guide cyclists along the route	Medium
	8.7	25	The route terminates at the intersection of Greenhill Road and Diamond Creek Road, near the municipal boundary with Nillumbik Shire Council. No bicycle facilities are provided along Diamond Creek Road, which carries high volumes of traffic	Coordinate links with the local bicycle network within Nillumbik Shire Council	High
	8.8	30	The path connecting Elder Street and Park Lane through Montmorency Park is narrow and insufficient to accommodate safe cyclist movements. The path further narrows at the bridge	Widen the path between Elder Street and Park Lane to 2.5 m and install shared path signage and linemarking Install 'cyclist dismount' signs at both ends of the bridge	Medium
	8.9	31	Park Lane has pavement failures (crocodile cracking and potholes) along the road	Repair the pavement defects	Maintenance
	8.10	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	8.11	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium

Route	Item No.	Section	Issue	Action	Priority
9	9.1	1	There is no guidance for cyclists travelling on St Helena Road to indicate to cyclists to continue straight onto Karingal Drive	Provide sharrows indicating the direction of travel	Medium
	9.2	2	Some of the bicycle symbol linemarking within the bicycle lanes along Karingal Drive are worn	Refresh the bicycle symbol linemarking	Maintenance
	9.3	2	There is no guidance to indicate to cyclists to turn onto Weidlich Road	Provide wayfinding signage at the Karingal Drive / Weidlich Road intersection	Low
	9.4	6	Damaged pavement at the wombat crossing on Weidlich Road south of Caledonia Drive may cause cyclists to destabilise	Rectify the damaged pavement to provide a smooth surface	Maintenance
	9.5	11	Speed cushions have been installed at several locations along Allumba Drive. The gap between the outer cushion and the kerb and the spacing between cushions is insufficient to allow a cyclist to safely cycle through	Ensure spacing of speed cushions are provided in accordance with the standards to allow cyclists to ride safely through	High
	9.6	12	The bicycle route stops on Beales Road at the municipal boundary	Ensure links are coordinated across the municipal boundary to Nillumbik	Medium
	9.7	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	9.8	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium
10	10.1	1	Bent Street has high traffic volumes. This presents a high safety risk to cyclists.	Consider introducing on-road bicycle lanes along Bent Street	Medium
	10.2	1	The pavement has remote longitudinal cracking in some sections	Repair longitudinal cracks	Maintenance
	10.3	1	There are several roundabouts along Cameron Parade. The lane narrows rapidly on the approach/departures of these roundabouts, forcing cyclists to merge into the path of vehicles	Install sharrows on roundabout approaches/departures and circulating lanes	Medium
	10.4	3	Grass is growing between the channel and pavement, near Bandalong Court. The pavement is uneven 50 m north of Berringa Court	Rectify pavement defects	Maintenance
	10.5	3	There is no give way/hold line along intersecting roads	Install give way hold lines on intersecting roads	Medium
	10.6	4	There are some pavement failures at the Luton Way intersection bell mouth	Rectify pavement defects	Maintenance

Route	Item No.	Section	Issue	Action	Priority
	10.7	4	There is a missing link between David Crescent and Jacqueline Road	Consider extending the route further east along David Crescent to link up with Jacqueline Road	Low
	10.8	6	Grass is growing along the edge of channel along Shelley Avenue near the Milton Parade intersection. Pavement failures exist within the Luton Way intersection bell mouth	Rectify the pavement defects. Raise or relocate the pit lid in the westbound lane at the Shelley Avenue/Luton Way intersection	Maintenance
	10.9	7	Longitudinal cracking exists near the kerb along various sections	Rectify the pavement defects	Maintenance
	10.10	8	There is tree debris on Jacqueline Road near Cameron Parade. There is pavement failure near Paul Court	Rectify the pavement defects and clear debris	Maintenance
	10.11	8	There is a missing link between Jacqueline Road and Edmund Rice Parade.	Consider extending the link along Jacqueline Road north/east towards Edmund Rice Parade	LOW
	10.12	9	Grant Street has a steep grade south of Newton Court, which could be difficult for deceleration and climbing	Consider redirecting the route further east along Cameron Parade and north on Macorna Street	Medium
	10.13	10	Macorna Street has steep grades just north of Hakea Street	Provide signage to warn cyclists of steep grades	High
	10.14	11	There is tree debris at various concentrated locations	Undertake regular street sweeping	Maintenance
	10.15	11	There are speed cushions along Hakea Street. Only two cushions have been provided per segment, which may promote vehicles shifting towards cyclists and increase the risk of collision	Provide three cushions per segment	Medium
	10.16	12	Tree debris at various locations	Undertake regular street sweeping	Maintenance
	10.17	12	The concrete path is cracking and shoving	Reconstruct concrete path	Maintenance
	10.18	12	The wooden barrier is broken and is intruding onto the path	Repair the wooden barrier	Maintenance
	10.19	13	The path which runs below Greensborough Highway is too narrow to safely accommodate cyclists, especially given the steep grades	Widen the path to 2.5 m	Medium
	10.20	13	The path connecting Hakea Street to Yando Street does not connect with the bike path which runs along Greensborough Highway	Investigate opportunities to providing a link from the path between Hakea Street and Yando Street to the path running along Greensborough Highway	Medium
	10.21	13	There is no street lighting on the approach to the underpass	Provide lighting along the path on the approach to the underpass	Medium

Route	Item No.	Section	Issue	Action	Priority
	10.22	15	The footpath between Haliday Court and Kalparrin Avenue is narrow and has a solid barrier line, which may result in conflict between cyclists travelling in opposite directions	Consider upgrading the existing footpath to a shared path	Medium
	10.23	16	The bridge is too narrow for two-way movements. Also, the bridge railing could catch on bicycle handlebars	Install advisory warning signage on the approaches to the bridge, and fix the bridge railings to ensure it does not catch on bicycle handlebars	Medium
	10.24	17	Speed humps within the Greensborough Tennis Club car park are abrupt and their associated linemarking is faded	Provide alternative cyclist friendly speed calming measures	Medium
	10.25	19	Grimshaw Street carries high traffic volumes and is unsafe for cyclists to cross between Balaka Place and Oxford Drive	Upgrade the footpath between Oxford Drive to the pedestrian signals and between the signals to Balaka Place to a shared path, and upgrade the signalised pedestrian crossing on Grimshaw Street to a shared crossing (i.e. bicycle lanterns)	High
	10.26	20	Angled parking on the western side of Balaka Place may result in conflict between cyclists and reversing vehicles	Consider installing a 1.0 m painted island which will provide a buffer between vehicles reversing out of the angled parking spaces on Balaka Place and cyclists	Medium
	10.27	21	There is a raised median between Aruma Court and Decathlon Street, which restricts vehicles from overtaking cyclists and may increase the risk of cyclist crashes	Install sharrows to improve motorist awareness to cyclists.  Alternatively, consider removing the raised median through this section. If vehicular loss of control is an issue within this section, speed calming measures could be an alternative treatment	Medium
	10.28	All	There is a lack of advisory bicycle linemarking along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	10.29	All	There is a lack of wayfinding signage along the route	Provide standardised wayfinding signs along the route	Medium
11	11.1	1, 2	Advisory bicycle linemarking is missing along some sections along the route	Provide advisory bicycle linemarking (bicycle symbols, breadcrumbs and sharrows) along the local road sections of the route	Medium
	11.2	1	Given that there is wayfinding signage at Viewbank Primary School, it is recommended that wayfinding signage be installed at the beginning of the route to provide a continuous treatment	Provide wayfinding signage at Section 1 and 2, particularly for directions to Viewbank Primary School	Low

Route	Item No.	Section	Issue	Action	Priority
	11.3	2	There is a "No Through Road" sign located at the intersection of Martins Lane and Hendersons Road. This may cause confusion for cyclists as LBN11 continues along Martins Lane despite the presence of the "No Through Road" sign	Provide signage to advise cyclists that the route continues along Martins Lane	Low
	11.4	3	The current crushed rock surface may be unsuitable for cyclists, particularly those with touring or road bikes designed for paved surfaces or well-maintained unsealed surfaces. This section currently has rutting and uneven surface conditions	Discontinue the use of this road for LBN11	High
	11.5	3	There is a lack of signage and linemarking at the Plenty River Trail shared path and Martins Lane intersection.	Signage and linemarking should be implemented to establish priority movements at the shared path intersection	Medium
	11.6	3, 4	No street lighting or delineation such as guide posts exist to provide delineation of the route for cyclists during dusk/dawn	Install street lighting or as a minimum, provide delineation such as guideposts and linemarking between the beginning of the unsealed section of Martins Lane and the intersection of Seymour Road/Banyule Road	Low
	11.7	3, 4	The current path width along sections 3 and 4 of Martins Lane could pose a hazard to cyclists and cause difficulties for wayfinding. Additionally, it was observed on site that a council maintenance vehicle that was stopped, blocked access along these sections. It was also noticed that there were two gates that if closed, could restrict access along these sections	Discontinue the use of this road for LBN11	High
	11.8	4	The current pavement has debris from trees along the edgeline. This may cause cyclists to lose control and fall if they try to evade or ride over the debris	Regular maintenance to remove debris should be undertaken	Low
	11.9	4	The intersection of Seymour Road and Banyule Road has poor sight lines and could cause intersection crashes between cyclists and motorists	Discontinue the use of this road for LBN11	High
	11.1	5, 6	There are currently table drains with a sudden drop-off that could pose a hazard to cyclists. The absence of edgelines combined with sections where vegetation restricts visibility of the drain and drop-off could result in cyclists running off the road and falling from their bicycle	Install edgelines along section 5 and 6	High

Route	Item No.	Section	Issue	Action	Priority
	11.11	5	A single lane, two-way bridge is located on Henty Road that crosses Plenty River. The footpath on the southern side that may be used by cyclists, has ramps that appear to be short and steep. This may cause cyclists to attempt to use the footpath and lose control	Consider installing sharrows to encourage cyclists to use the through traffic lane or conducting pavement works to flatten the ramps to the footpath	Low
	11.12	6, 7	The pavement condition for Section 6 and 7 has some potholing and deteriorating pavement. This may destabilise cyclists	Conduct pavement repairs where required	Maintenance
12	12.1	1	The bicycle symbols installed within the shared path between Elder Street and Dennett Street are difficult to see, as there is limited colour contrast between the bicycle symbols and the surrounding pavement. Additionally, as this section is a shared path, the installation of bicycle symbols may mislead its users into thinking it is a bicycle path only. This may result in bicycle crashes into pedestrians	Install shared path linemarking and consider treatments to increase visibility	High
	12.2	2	The driveway access at 1 Nepean Street (on the corner of Dennett Street and Nepean Street) does not include a formal connection between the road and the shared path, and cyclists are currently required to utilise this driveway to continue on the shared path. Cars were observed to be parked on the driveway, blocking access to the shared path	construct a connection between Dennett Street and the shared path which is separated from the driveway	Medium
	12.3	4	A way finding sign has been installed opposite Teresa Street on Greensborough Road. This way finding sign is intended to guide cyclists to turn at Santon Street, however, its location may cause confusion for cyclists and lead them to turn into Teresa Street, instead of Santon Street	Relocate the way finding sign opposite Santon Street	High
	12.4	11	Two bollards exist on either side of the shared path connection between Clydebank Street and Eldale Avenue. This presents a hazard to cyclists	Replace the two bollards on either side of the shared path connection between Clydebank Street and Eldale Avenue with a single centrally located bollard	High

Route	Item No.	Section	Issue	Action	Priority
	12.5	11	The grated pit lid located within the shared path between Clydebank Street and Eldale Avenue is installed in the direction of travel of a cyclist. This has a potential for a bicycle tyre to snag in the grille and result in a cyclist being destabilised	Rotate the grated pit so that it aligns perpendicular to the direction of travel	Medium
	12.6	12	The route terminates at the intersection of Grimshaw Street / Eldale Avenue. Grimshaw Street carries very high volumes of traffic. No safe connection is provided from Eldale Avenue into the Greensborough Activity Centre	Upgrade the footpath on the southern side of Grimshaw Street between Eldale Street and the signalised intersection of Grimshaw Street / Flintoff Street to guide cyclists to utilise the signalised crossings to safely cross Flintoff Street and Grimshaw Street	Medium

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