

Wallan Town Centre Access and  
Movement Plan

APPENDIX

A

WALLAN TOWN CENTRE ACCESS AND  
MOVEMENT PLAN – BACKGROUND  
REPORT (APRIL 2016)

# Background Report

## Wallan Town Centre Access and Movement Plan

CG151028

Prepared for  
Mitchell Shire Council

7 April 2016



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# 1 Introduction

## 1.1 Overview

Mitchell Shire Council is currently preparing a Master Plan and Urban Design Framework (UDF) for Wallan Town Centre. Cardno Victoria Pty Ltd (Cardno) has been engaged to prepare an Access and Movement Plan to inform the Town Centre Masterplan and UDF. The Wallan Town Centre Master Plan builds on the Wallan Structure Plan which was adopted by Council in 2015.

As part of the development of the Access and Movement Plan, a review of the existing conditions within the Town Centre and immediate area, including vehicle, public transport and active travel conditions and infrastructure has now been completed. In addition, the existing gaps in the transport network for all modes have been assessed. The following detail of this report summarises the findings existing conditions review and gap analysis.

## 1.2 Location and Key Land Use

The Wallan Town Centre is located approximately 44km north of Melbourne along the Hume Freeway currently has a population of around 10,000 people.

The Wallan Town Centre area is generally bounded by William Street in the north, Wyndham Street in the east, Duke Street in the south and Stanley Street and Wellington Street in the west. The Wallan Town Centre comprises a Primary Study Area and Secondary Study area for the master planning purposes, and these areas are illustrated in Figure 1-1.

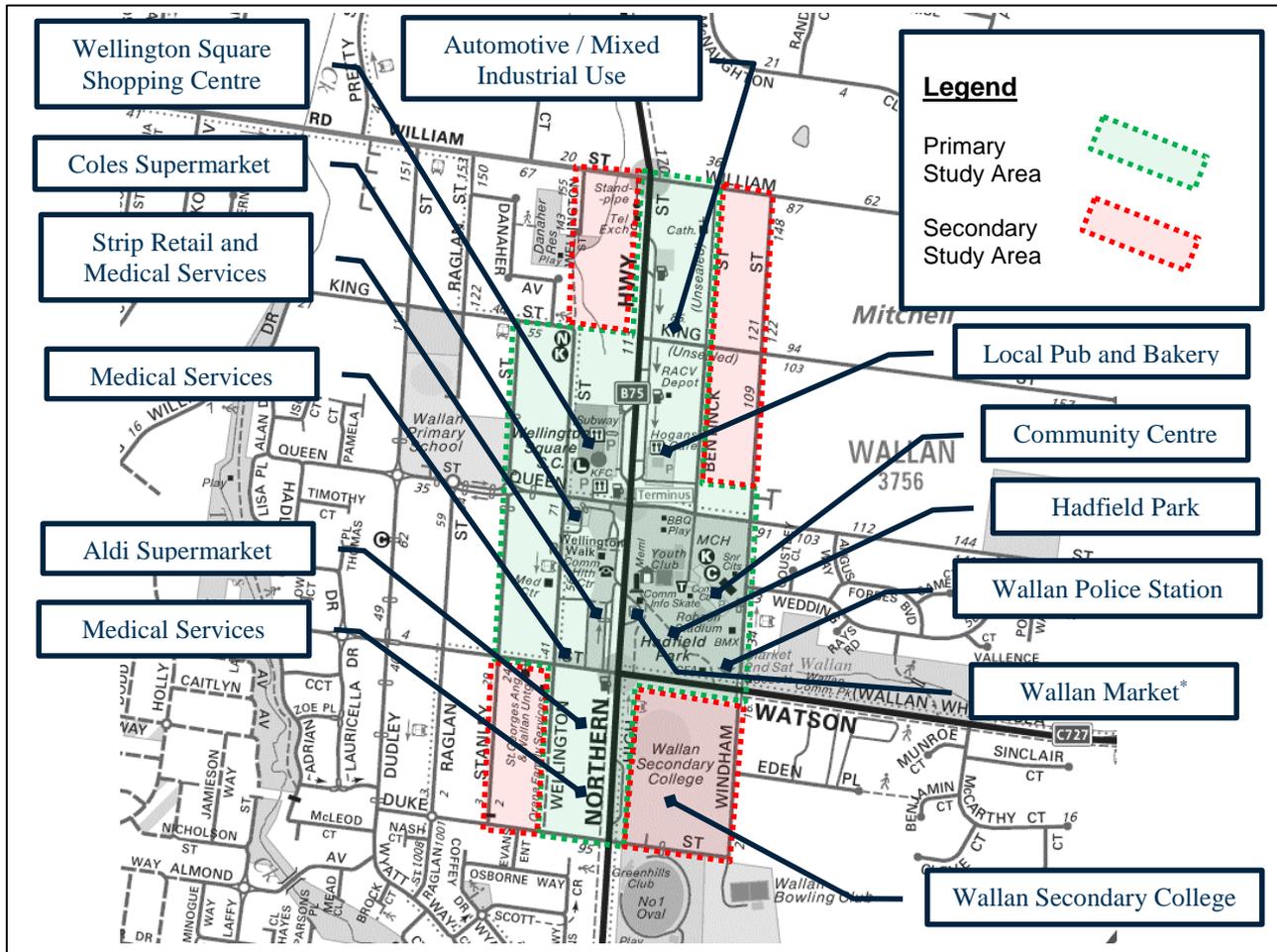
**Figure 1-1 Site Locality**



The town centre includes a range of land uses of varying intensities. The retail offerings of the town centre are primarily located on the western side of the Northern Highway. Hadfield Park, the Wallan Community Centre and Wallan Secondary College are located on the eastern side of the Northern Highway.

The key land uses within the study area are outlined in Figure 1-2.

**Figure 1-2 Key Land Uses**



\* Second Saturday of each month

As outlined in Figure 1-2, the key land uses in the Wallan Town Centre include:

- > Educational facilities – Wallan Secondary College;
- > Retail offerings – Wellington Square Shopping Centre, Strip retail, Standalone Aldi and Coles Supermarkets;
- > Medical / Health Care – Wallan Medical Centre, Wallan Pharmacy, Nexus Primary Health;
- > Government uses – Mitchell Shire Council Office, Wallan Police Station;
- > Industrial/commercial area – low level strip automotive;
- > Environmental values and community/recreational assets – Hadfield Park;
- > Residential land (low density);
- > Dining/Entertainment – Hogan’s Pub, Pretty Sally Bakery, proposed family restaurant (north of Queen Street); and
- > Civic uses – Wallan Multi Purpose Community Centre, R B Robson Stadium.

In addition, the Wallan Scout Group Market which takes place on the second Saturday of each month, is held in the south and west of Hadfield Park.

Notable land uses and trip generators further afield include:

- > Wallan Primary School (200m east of the town centre)
- > Wallan Recreational Reserve (immediately south of the town centre)

The areas surrounding the town centre are typically low density residential lots, with medium density developments increasingly prevalent.

### **1.3 References**

In preparing this report, reference has been made to a number of background documents, with the key documents set out as follows:

- > Plan Melbourne;
- > Transport Integration Act 2010;
- > Mitchell Planning Scheme;
- > Wallan Structure Plan; and
- > Other documents as nominated.

## 2 Key Relevant Background Documents

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### 2.1 The Transport Integration Act

The State Government's Transport Integration Act (the Act) came into effect on 1 July 2010, with the purpose of creating a framework for the provision of an integrated and sustainable transport system in Victoria.

The Act sets out six transport objectives as follows:

1. *provide a means by which persons can access social and economic opportunities to support individual and community wellbeing;*
2. *facilitate economic prosperity;*
3. *actively contribute to environmental sustainability;*
4. *provide for the effective integration of transport and land use and facilitate access to social and economic opportunities;*
5. *facilitate network-wide efficient, coordinated and reliable movements of persons and goods at all times; and*
6. *be safe and support health and wellbeing.'*

In essence the Act aims to ensure all relevant stakeholders work towards a common goal to provide an integrated and sustainable transport system.

Government departments and agencies are bound by the Act and are therefore required to have regard to the transport system objectives and decision-making principles when making decisions and exercising powers.

### 2.2 Plan Melbourne

Plan Melbourne, the current Metropolitan Planning Strategy, was developed by the State Government and adopted in May 2014. It is an integrated land use and transport plan aimed at guiding the way the city will grow and change over the next 40 years. It is a strategy to house, employ and connect more people to jobs and services closer to where they live.

Wallan falls within Northern Subregion of Plan Melbourne, and Plan Melbourne classifies Wallan Town Centre as an *Existing Activity Centre*.

Plan Melbourne aims to provide good-quality neighbourhood travel options to help people reach a wide range of local services and activities within 20 minutes, supporting social inclusion and well-being. The concept of a 20-minute neighbourhood as outlined in Plan Melbourne is illustrated in Figure 2-1.

**Figure 2-1 The 20-Minute Neighbourhood Concept**



Based on the above, the future development of the Wallan Activity Centre must include planning for access via all transport modes and promote the use of sustainable transport modes (i.e. walking, cycling and public transport) as a means of access.

Further review is being undertaken of the 20-minute neighbourhood concept as part of the Plan Melbourne refresh. In particular, the Plan Melbourne Refresh Discussion Paper (October 2015) highlights that the 20 minute neighbourhood should refer to a 20 minute walking distance (rather than a 20 minute car trip), which further encourages the densification of communal activities and services.

**Figure 2-2 The 20-Minute Neighbourhood Concept – Plan Melbourne Refresh**



## **2.3 Growth Areas Authority**

### **2.3.1 North Growth Corridor Plan**

The North Growth Corridor Plan (NGCP) was prepared by the former Growth Areas Authority and facilitated the expansion of the Urban Growth Boundary (UGB). It identifies the Wallan Area within a 'logical inclusion zone' and designated Wallan as a Principal Town Centre.

As a Principal Town Centre, the NGCP designates Wallan as a regional centre which would service the wider growth area and be well serviced by heavy rail, as well as multiple public transport routes, arterial roads and regional cycling and trail networks.

The NGCP seeks to enhance the public transport network with new rail stations along the Sydney-Melbourne rail line supported by a series of high capacity public transport services which will connect substantial parts of the corridor to higher order town centres and to stations along the heavy rail corridor.

Specific to Wallan, the NGCP notes that development in the area will have a significant impact on the character and functionality of the Wallan township. The NGCP notes that Wallan will require good transport connections to the services and facilities planned in the North Growth Corridor and that the township can be linked to the wider growth area via public transport links into the Aitken Boulevard Principal Public Transport Network (PPTN) and the Sydney – Melbourne rail line.

### **2.3.2 Logical Inclusions Process**

The Logical Inclusions Process was completed in June 2012 and resulted in Wallan being included in the UGB with support from Council.

## **2.4 Mitchell Shire Planning Scheme**

The Mitchell Shire Planning Scheme notes that planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.

Key transport strategies outlined by the Planning Scheme include:

- > Ensuring access is provided to developments in accordance with forecast demand, taking advantage of all available modes of transport and to minimise adverse impacts on existing transport networks and the amenity of surrounding areas.
- > Coordinating improvements to public transport, walking and cycling networks with the ongoing development and redevelopment of urban area.
- > Concentrating key trip generators such as higher density residential development in and around Central Activities Districts, Principal, Major and Specialised Activity Centres on the Principal Public Transport Network
- > Requiring integrated transport plans to be prepared for all new major residential, commercial and industrial developments.
- > Requiring that substantial increases in activity in employment corridors are connected to the Principal Public Transport Network.
- > Providing routing, bus stop and interchange arrangements for public transport services in new development areas.
- > Providing safe, convenient and direct pedestrian and cycling access to activity centres, public transport interchanges and other strategic redevelopment sites.

## 3 Wallan Structure Plan

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### 3.1 Overview

The Wallan Structure Plan was endorsed by Council in March 2015 and outlines the vision for Wallan as it grows from the current population of 10,000 people to 50,000 people in the future.

The Structure Plan sets a clear framework for the future growth of the township and aims to support sustainable growth of the town while retaining aspects of Wallan's 'country town' character.

### 3.2 Key Directions

Part B: *A Plan for Wallan's Growth and Change* of the Structure Plan outlines Directions to guide the growth of the township. The key transport related directions are summarised as follows:

#### **Direction B4 - Ensure people can move easily and safely throughout Wallan**

- > *A connected network of walking and cycling paths and trails that follows open space corridors and connects residents to a variety of destinations across Wallan is identified.*
- > *The Structure Plan recommends improvements to existing key streets within Wallan that form a key part of the pedestrian network.*
- > *A future bus network that improves access to existing neighbourhoods and ensures good access to future neighbourhoods is identified.*
- > *The Structure Plan outlines a future road network that establishes a clear hierarchy of vehicle movements.*

#### **Direction C2 - Make the Northern Highway a Great 'Country Town' Main Street**

- > *Recommendations for future improvements to the Northern Highway are provided. These improvements include additional pedestrian crossings across the Highway, pedestrian priority at intersecting side streets and retention of the Avenue of Honour in future designs.*

#### **Direction C3 - Transform Wallan's shopping strip into a vibrant and engaging public space**

- > *The Structure Plan provides scenarios for the reconfiguration of the shopping area on the west side of the Northern Highway, north of Watson Street and south of Queen Street.*
- > *These scenarios aim to provide for improved experience for pedestrians including wider footpaths, additional tree planting and potential public plaza spaces. An additional master planning process is recommended for this precinct (Priority Project 2).*

#### **Direction C4 - Encourage a town structure that supports potential change and redevelopment**

- > *The Structure Plan proposes a circulation road around the periphery of the town centre, which feeds vehicles into car parks at the rear of shops and eases vehicle congestion along the Northern Highway.*

### 3.3 Priority Projects

Part D: *Making it Happen* of the Structure Plan outlines six priority projects aimed at guiding the transformation of Wallan.

An overview of Priority Project 2 – *Town Centre Master Plan and Urban Design Framework* is detailed in the Structure Plan as follows:

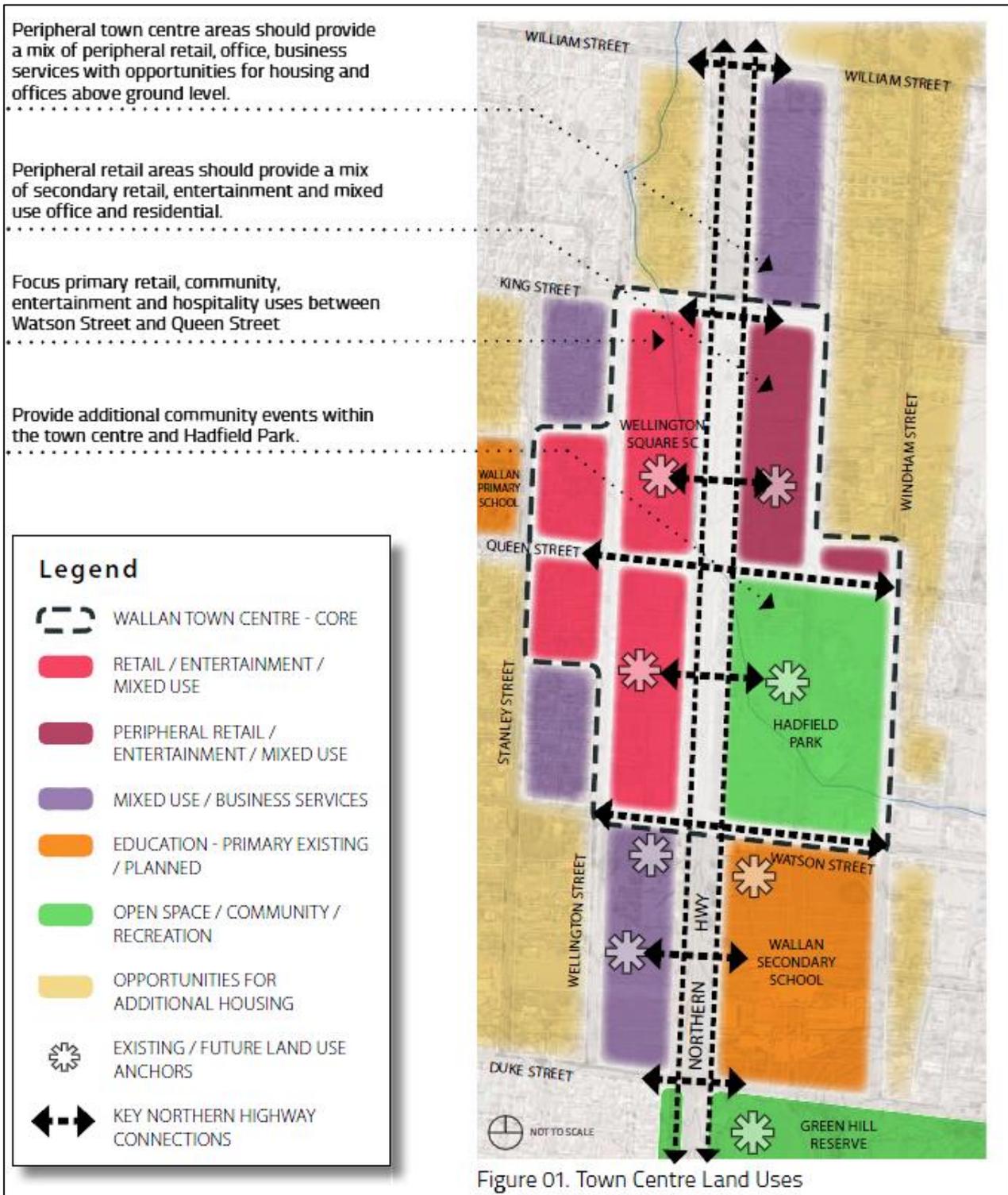
*"The development of the town centre emerged as a critical success factor during the preparation of the structure plan. The Master Plan and Urban Design Framework will examine the town centre in closer detail and establish requirements for the design of buildings as well as for public areas. The purpose is to provide clear expectations to the market in terms of the expected quality of design before any rezonings take place."*

Key outcomes to be achieved through Priority Project 2 include the following transport related outcomes:

- > If the VicRoads proposal to duplicate the Northern Highway, is required, ensure that it is designed to respond to its town centre context and provide a high level of pedestrian amenity.
- > Develop a secondary vehicle circulation network around the town centre (which also considers streets outside the core of the town centre area).

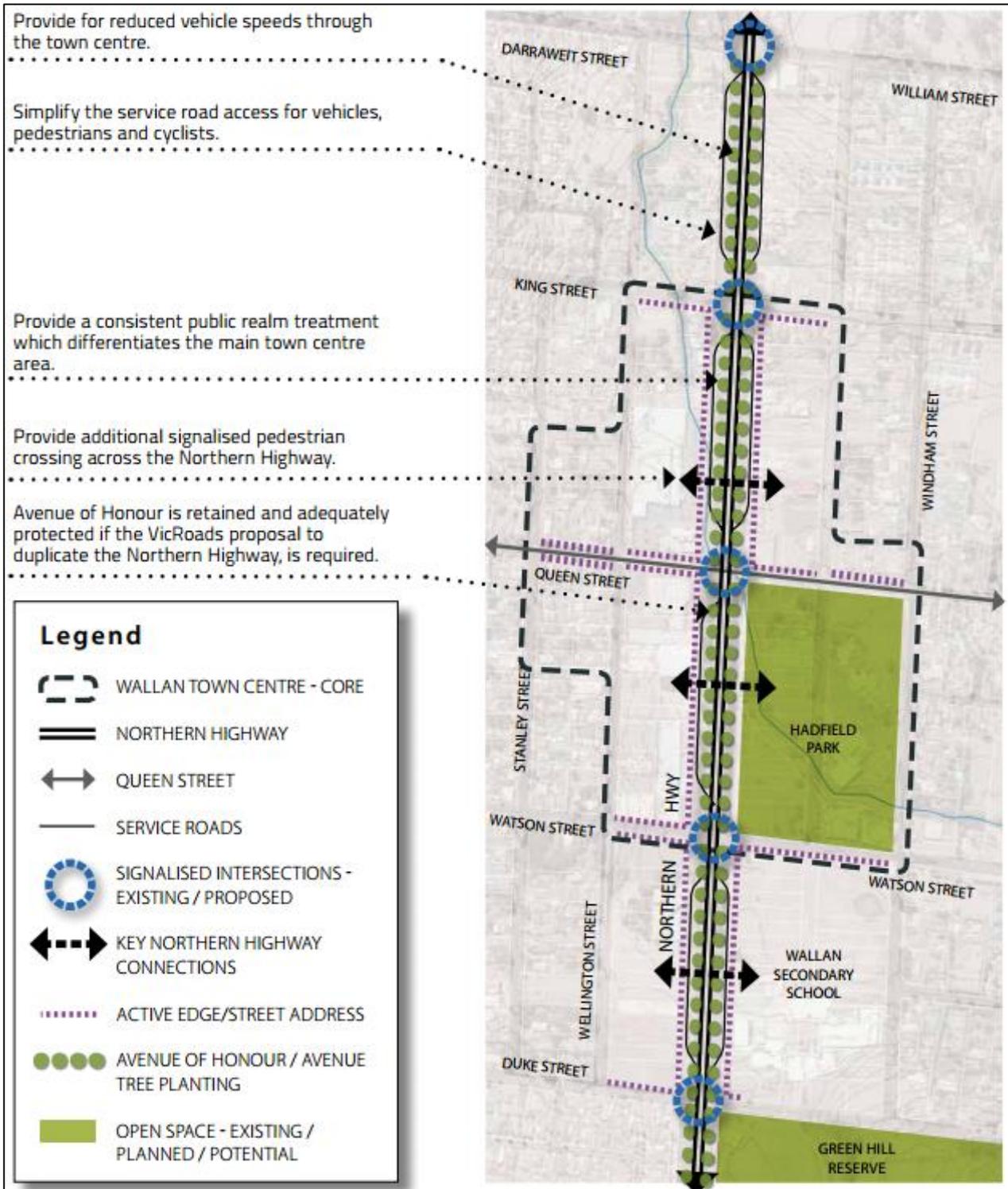
In relation to the above, Figure 1 of the Structure Plan which is reproduced below in Figure 3-1 outlines the anticipated future land uses within the town centre and key east-west connections across the Northern Highway.

**Figure 3-1 Wallan Structure Plan Excerpt – Future Land Uses**



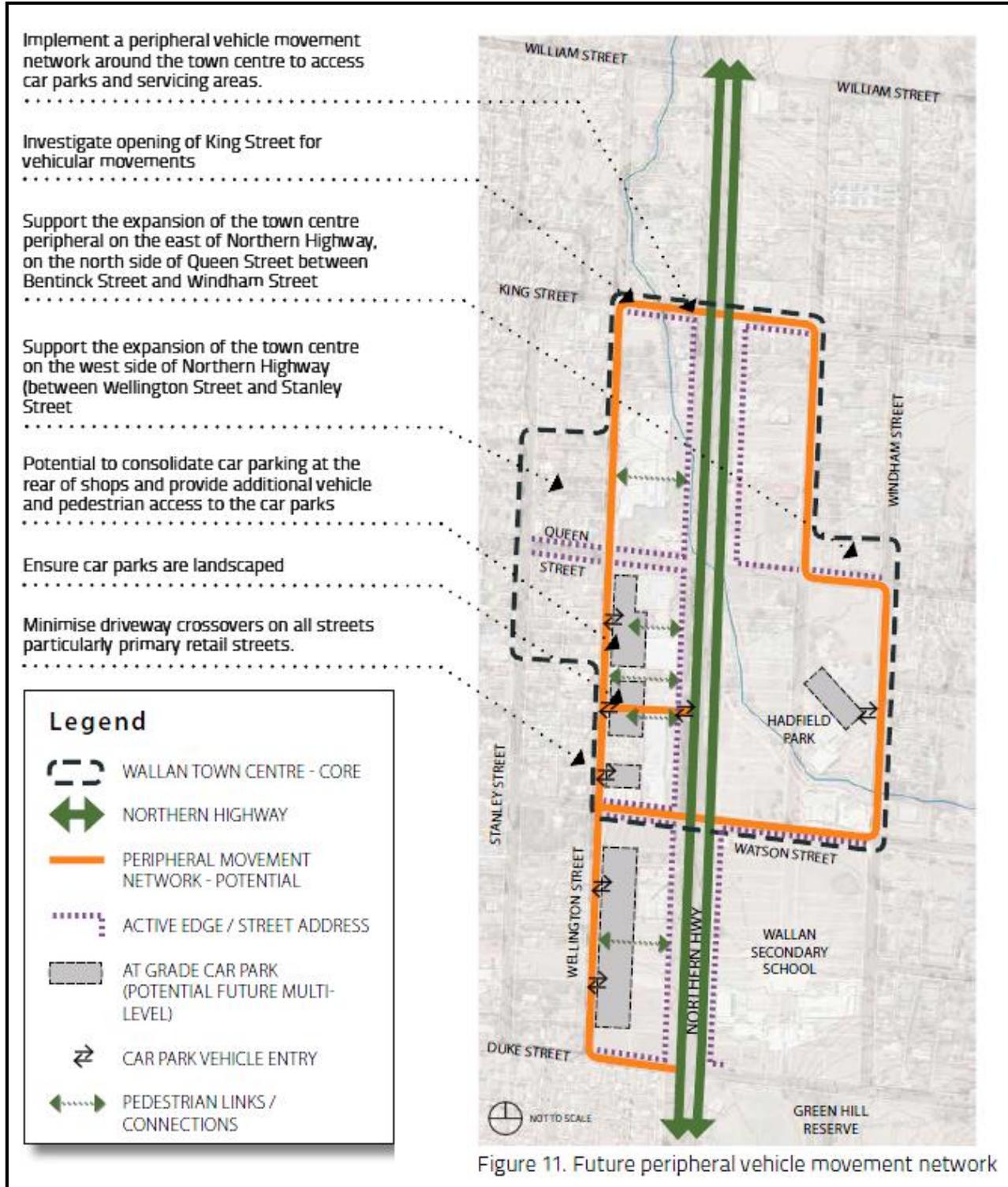
In addition the Structure Plan includes a concept plan for the Northern Highway, reproduced below as Figure 3-2, which indicates the locations of midblock pedestrian crossing locations. Additionally the Northern Highway concept plan identifies the intersections with King Street and Duke Street are proposed signalised intersections.

**Figure 3-2 Wallan Structure Plan – Northern Highway Concept Plan**



The potential peripheral movement network identified by the Structure Plan is shown in Figure 3-3. Of note the potential peripheral movement network would require the construction of King Street between Wellington Street and Northern Highway, as well as the construction of Wellington Street between Watson Street and Duke Street.

**Figure 3-3 Wallan Structure Plan – Northern Highway Concept Plan**



## 4 Road Network

### 4.1 Existing Road Network

#### 4.1.1 Road Network Hierarchy

The existing road network serving the Wallan Town Centre comprises a conventional grid network established either side of the Northern Highway, which is a designated Primary Arterial Road, with a series of east west local roads in Duke Street, Watson Street, Queen Street, King Street and William Street intersecting with the Highway at approximately 350 metre intervals.

A north south grid of local roads, consisting of Stanley Street, Wellington Street, Bentick Street, and Windham Street has a closer spacing with streets at approximately 100 metres intervals.

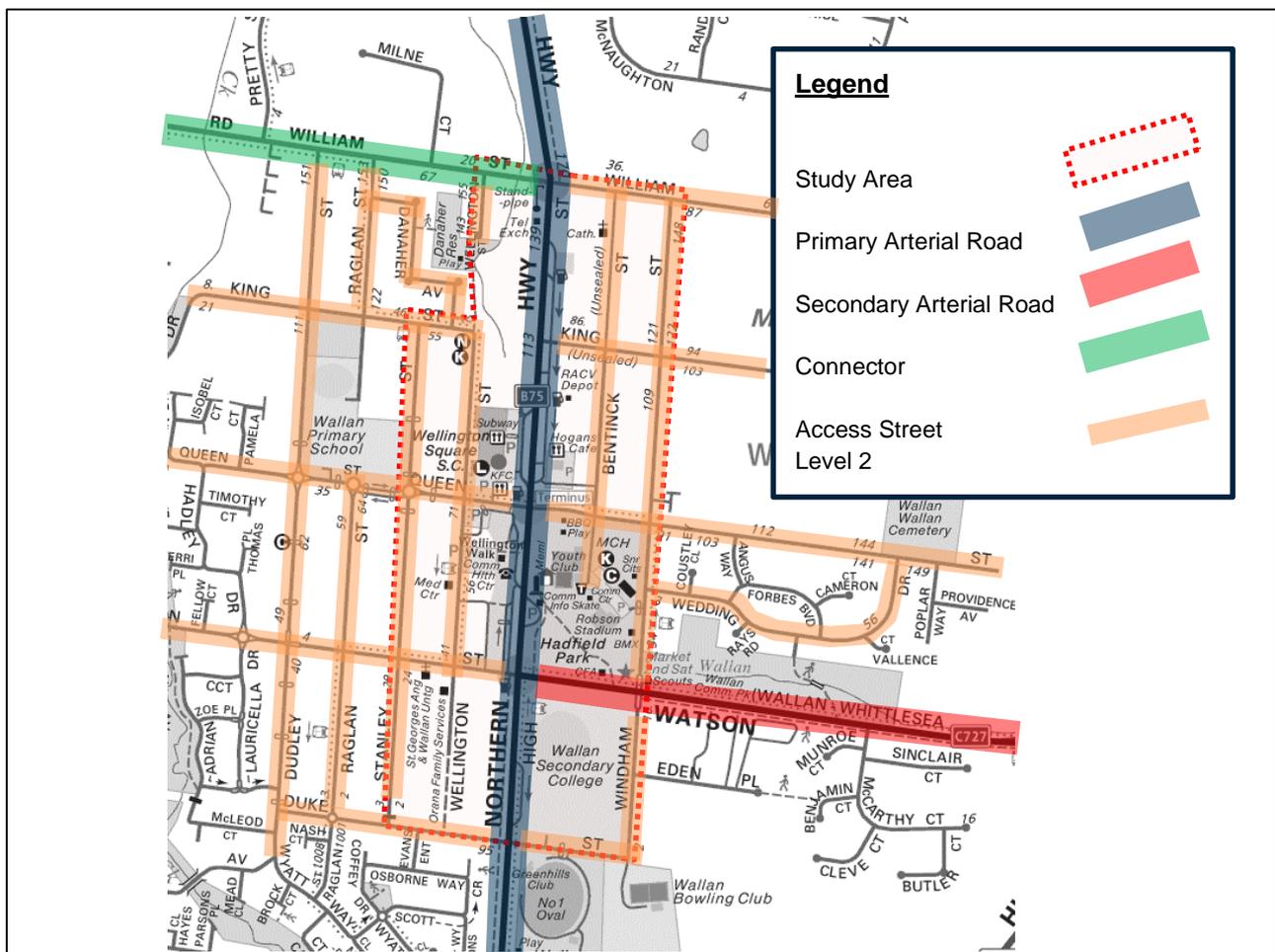
The grid is discontinuous in a number of locations where sections of roads have not been constructed. Of note, Wellington Street (between King Street and William Street), King Street (between Wellington Street and Northern Highway), Wellington Street (between Watson Street and Duke Street) are either 'goat track' roads or are not constructed at all.

Watson Street (Wallan Whittlesea Road), runs to the east from Northern Highway and functions as a Secondary Arterial Road providing access to Wallan East, and is the only crossing point of the Hume Freeway and the Melbourne Sydney railway line within 2 kilometres of the town centre.

William Street (Wallan Darraweit Road) runs to the west from Northern Highway and functions as a Major Local Road providing access to Darraweit and recent subdivisions north west of the township.

The road network hierarchy for the study area and surrounds is provided in Figure 4-1.

**Figure 4-1 Road Network Hierarchy**



## 4.2 Arterial / Major Roads

**Northern Highway (High Street)** runs in a north-south direction through Wallan connecting the town to the Hume Freeway in the south and Kilmore in the north.

The Northern Highway is classified as a Primary Arterial Road and typically provides a single traffic lane in each direction, flaring at main intersections to provide auxiliary / turning lanes.

The Northern Highway provides access to a number of service roads on both sides of the arterial road, in particular within the Wallan town centre between Duke Street and William Street. The Northern Highway service roads provide access into adjacent land uses as well as on-street car parking within the township.

Traffic signals control the intersections of Northern Highway with Taylors Road (south of the Town Centre), Watson Street, Queen Street and William Street.

The intersection with Duke Street is a fully directional signalised intersection. The intersection with King Street is an unsignalised T-intersection, given that the western leg (King Street between Wellington Street and Northern Highway) is not yet constructed.

A review of VicRoads SCATS traffic signal detector data indicates the Northern Highway currently carries in the order of 17,000 vehicles / day.

It is noted that the Northern Highway acts as the primary north-south connection throughout the Wallan Town Centre, as a result of Wellington Street (to the east) being discontinuous, and Bentick Street (to the west) does not continue south to Watson Street.

**Watson Street (Wallan Whittlesea Road)** runs in an easterly direction from the Northern Highway in the south of the study area and provides the only link within the study area between Wallan Township across the Hume Freeway and the Melbourne Sydney railway line to Epping – Kilmore Road.

Watson Street also provides the only vehicular access between the township and Wallan Station, and the Wallan East Growth area which includes Wallara Waters.

Northerly oriented ramps to the Hume Freeway are provided from Watson Street. It is understood southern on/off ramps would be provided in the future, with land set aside for the provision of these ramps.

Watson Street currently provides a single traffic lane in each direction, with the intersection of Watson Street / Wyndham Street controlled by traffic signals.

A review of VicRoads SCATS traffic signal detector data indicates that Watson Street, east of the Northern Highway, currently carries in the order of 7,000 vehicles / day.

**William Street (Wallan – Darraweit Road)** is a Major Local Road running west from Northern Highway, serving residential precincts in the north west of Wallan and linking through to Old Sydney Road and Darraweit.

The road is constructed with an undivided carriageway and provides a single traffic lane in each direction.

## 4.3 Local Roads

The balance of the road network within the Town Centre comprises a network of local streets which have been developed over time to support development within the centre and to provide access to abutting properties.

The existing higher order local roads, which can be expected to continue to support the arterial road network as the area develops, typically provide for a single traffic lane in each direction in addition to unrestricted kerbside parking, and are listed as follows.

- > **Watson Street**, running west from Northern Highway to west of Hadley Drive;
- > **Duke Street**, running from Windham Street in the east to Dudley Street in the west;
- > **King Street**, running from King William Drive in the west past Windham Street in the east (currently discontinuous between Wellington Street and Northern Highway);

- > **Queen Street**, running east-west from Lisa Place in the west to the Wallan Cemetery in the east;
- > **William Street**, running east from Northern Highway as a connector road, terminating at the Hume Freeway. West of the Northern Highway, William Street extends as Darraweit Road to Darraweit;
- > **Stanley Street**, running in a north-south direction from King Street in the north to Duke Street in the south;
- > **Wellington Street**, running in a north-south direction from William Street in the north to Watson Street in the south.
  - Between Watson Street and Duke Street, Wellington Street is a gravel road, which is truncated at Duke Street preventing through access;
  - Between William Street and King Street, Wellington Street provides no through vehicular access, however the road reserve and an informal bicycle/pedestrian link is maintained through this section;
- > **Bentinck Street**, running north-south from William Street to Queen Street where it continues south towards car parking Wallan Multi-Purpose Centre and RB Robson Stadium and eventually connects to Windham Street; and
- > **Windham Street**, running north-south William Street to Duke Street.

#### **4.4 Existing Gaps in the Road Network**

Currently, a road connection within the road reserve of Wellington Street has not been constructed between William Street and King Street in the north, and between Watson Street and Duke Street in the south.

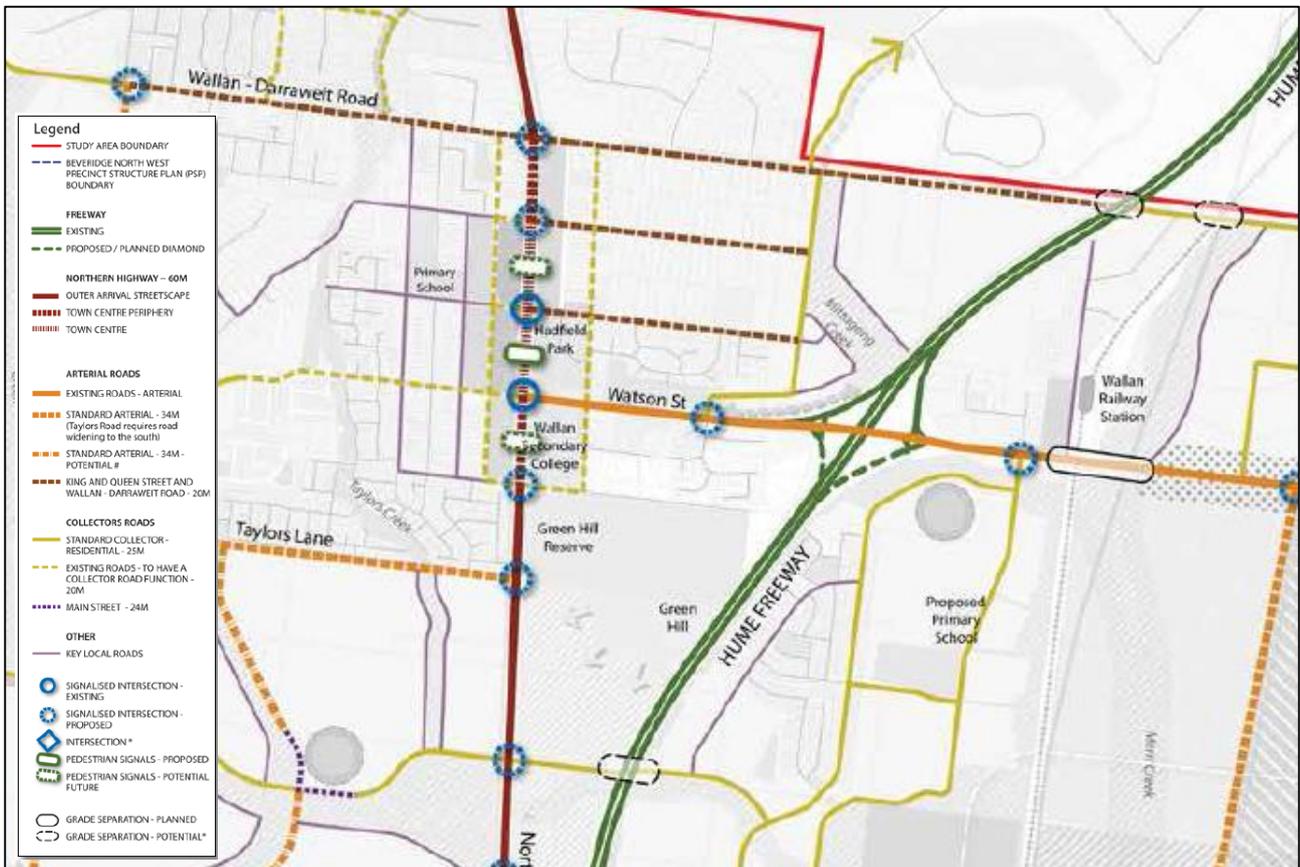
Furthermore the connection along King Street between Northern Highway and Wellington Street has not been constructed and currently is vacant land, and an open creek drain.

It is noted that the road reserve for Bentinck Street appears to extend south from Queen Street through to Watson Street, however the southern half of this connection has not been constructed, and the Wallan Skate Park and Hadfield Park facilities have been constructed over this road reserve. It is understood that there is no plan to construct the southern extension of Bentinck Street through to Watson Street.

## 4.5 Future Road Network – Wallan Structure Plan

The future road network for the town centre, as identified by the Wallan Structure Plan, is provided in Figure 4-2.

**Figure 4-2 Future Road Network - Wallan Structure Plan Excerpt**



The Structure Plan identifies the following changes to the existing road network and function of the town centre:

- > Wellington Street and Windham Street as having a Collector Road function, within the existing 20m (approximately) wide road reserve;
- > King Street to be constructed through to Northern Highway;
- > Intersections of Northern Highway / King Street and Northern Highway / Duke Street to be signalised;
- > Wellington Street to be constructed through to William Street (Wallan – Darraweit Road), and through to Duke Street;
- > Three new pedestrian crossings mid-block on Northern Highway; and
- > Extension of William Street east to Epping-Kilmore Road (Potential grade separation).

## 4.6 Proposed Arterial Road Duplications

### 4.6.1.1 Northern Highway

Preliminary discussions with VicRoads indicate that the Northern Highway, within the town centre, will be duplicated in the future. The timing of these works are unknown.

It is understood VicRoads envisage that the Northern Highway will provide two through lanes in each direction with a wide central median. Dedicated on-road bicycle lanes are to be provided in both directions.

Dedicated turn lanes will be provided at intersections as appropriate, however no slip lanes are currently contemplated in the vicinity of the town centre.

VicRoads have indicated the trees which form the Avenue of Honour would be persevered and appropriately protected in any design.

#### **4.6.1.2 Watson Street**

Preliminary discussions with VicRoads indicate that Watson Street, between the Northern Highway and the Hume Freeway, will be duplicated in the future. The timing of these works are unknown.

It is understood VicRoads envisage that Watson Street will provide two through lanes in each direction with a central median. Dedicated on-road bicycle lanes are to be provided in both directions. Dedicated turn lanes will be provided at intersections as appropriate however no slip lanes are currently contemplated in the vicinity of the town centre.

# 5 Pedestrians

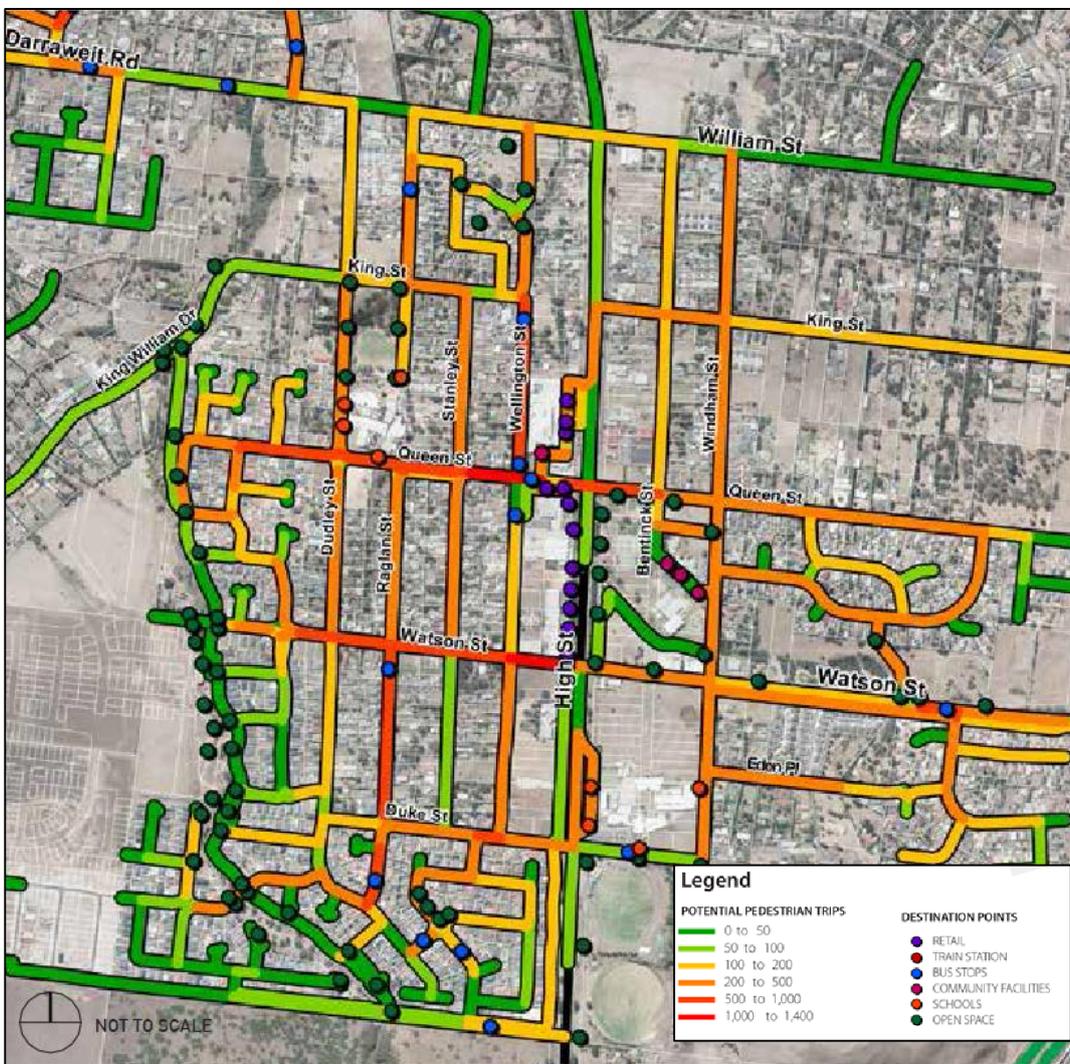
## 5.1 Overview

Pedestrian paths are provided around the Wallan Town Centre, however pedestrian paths and connections are inconsistent in a number of locations. The quality of construction of the existing paths also varies widely throughout the study area with paths in some locations provided as sealed concrete paths, sealed asphalt paths, gravel paths or informal paths.

## 5.2 Key Routes

A Principal Pedestrian Network (PPN) Analysis was undertaken as part of the Wallan Structure Plan, utilising the methodology developed by the former Department of Transport, Planning and Local Infrastructure. The results of this analysis is reproduced in Figure 5-1, and provides an assessment of the likely pedestrian volumes to be generated as a result of the key land uses and their location.

**Figure 5-1 Wallan Structure Plan – PPN Analysis**

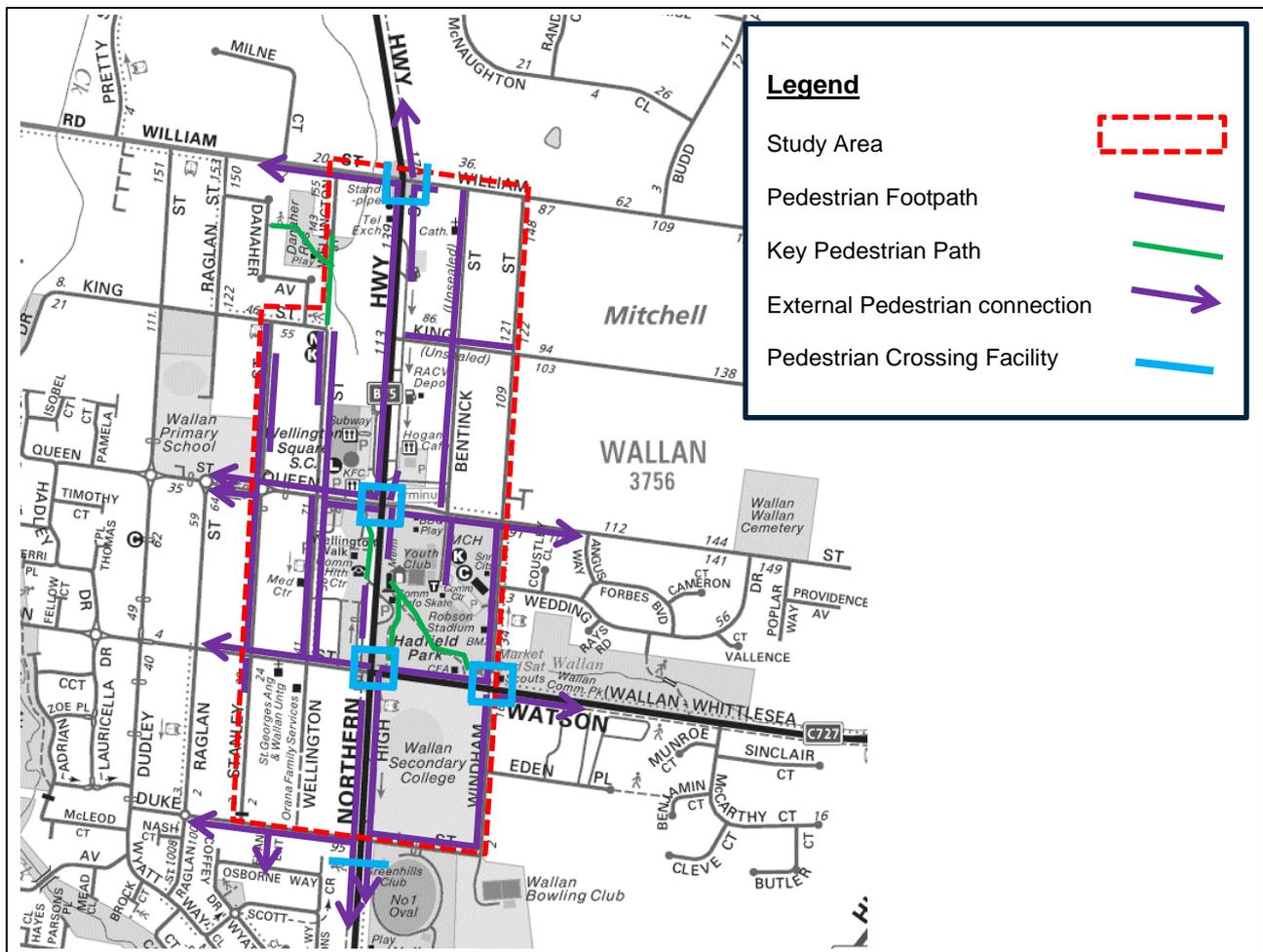


The PPN analysis identifies both Queen Street and Watson Street, west of the Northern Highway as locations of high pedestrian activity.

### 5.3 Existing Pedestrian Infrastructure

The existing footpath provisions within the Wallan town centre are summarised in Figure 5-2.

**Figure 5-2 Existing Footpath and Crossing Provisions**



### 5.4 Gaps in Pedestrian Network

As noted previously, numerous roads within the study area are provided with footpaths on only one side, or provide discontinuous sections of footpath. The following connections are not currently provided (within the study area):

- > Windham Street, north of Queen Street to William Street, entirely missing of western side and partially completed on eastern side;
- > Windham Street, south of Watson Street, only partially completed on eastern side;
- > Queen Street, southern side between Stanley Street and Wellington Street;
- > Watson Street, southern side between Stanley Street and Northern Highway;
- > Wellington Street, western side between King Street and Queen Street (discontinuous);
- > Wellington Street, between Watson Street and Duke Street;
- > Wellington Street, both sides of the road, south of William Street;
- > King Street, both sides of the road, between Wellington Street and Stanley Street;
- > Bentick Street, eastern side between William Street and Queen Street;
- > Northern Highway, eastern side between William Street and Queen Street (discontinuous); and

- > Stanley Street, eastern side between King Street and Duke Street (discontinuous).

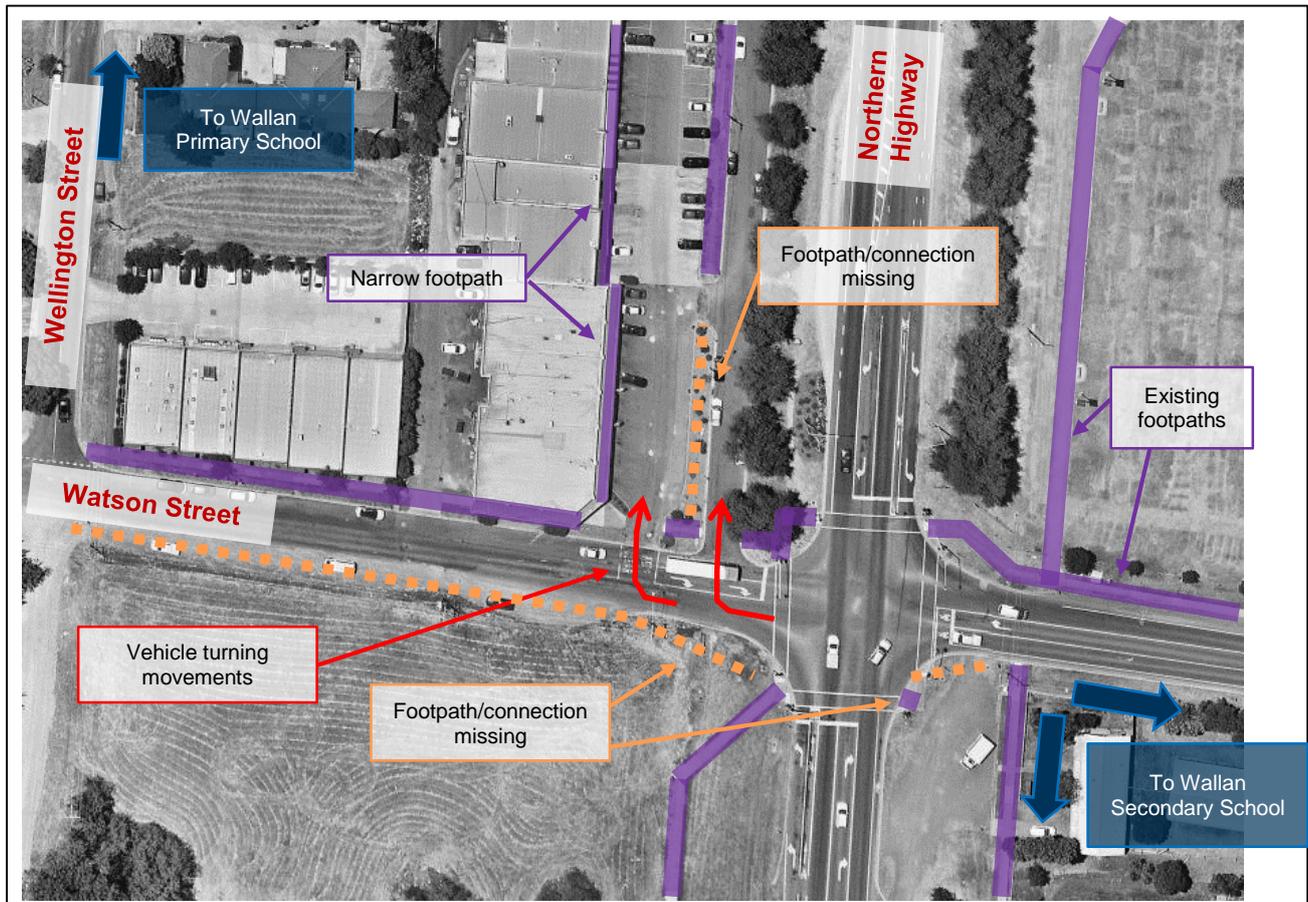
## 5.5 Site Observations

Observations on-site indicate that typically pedestrian movements are catered for in an ad hoc manner, with a number of locations providing poor connectivity between areas and assuming pedestrians can walk on the road carriageway or on the landscaped verge. Whilst this may be acceptable in some locations with low traffic volumes, as the town centre continues to grow and become increasingly active for pedestrian movements, the pedestrian connections should be further reinforced.

Observations on-site indicate that the mix between pedestrian movements and vehicle turning movements may inhibit access around the town centre. Of note, the following locations should be reviewed based on existing deficiencies in pedestrian infrastructure:

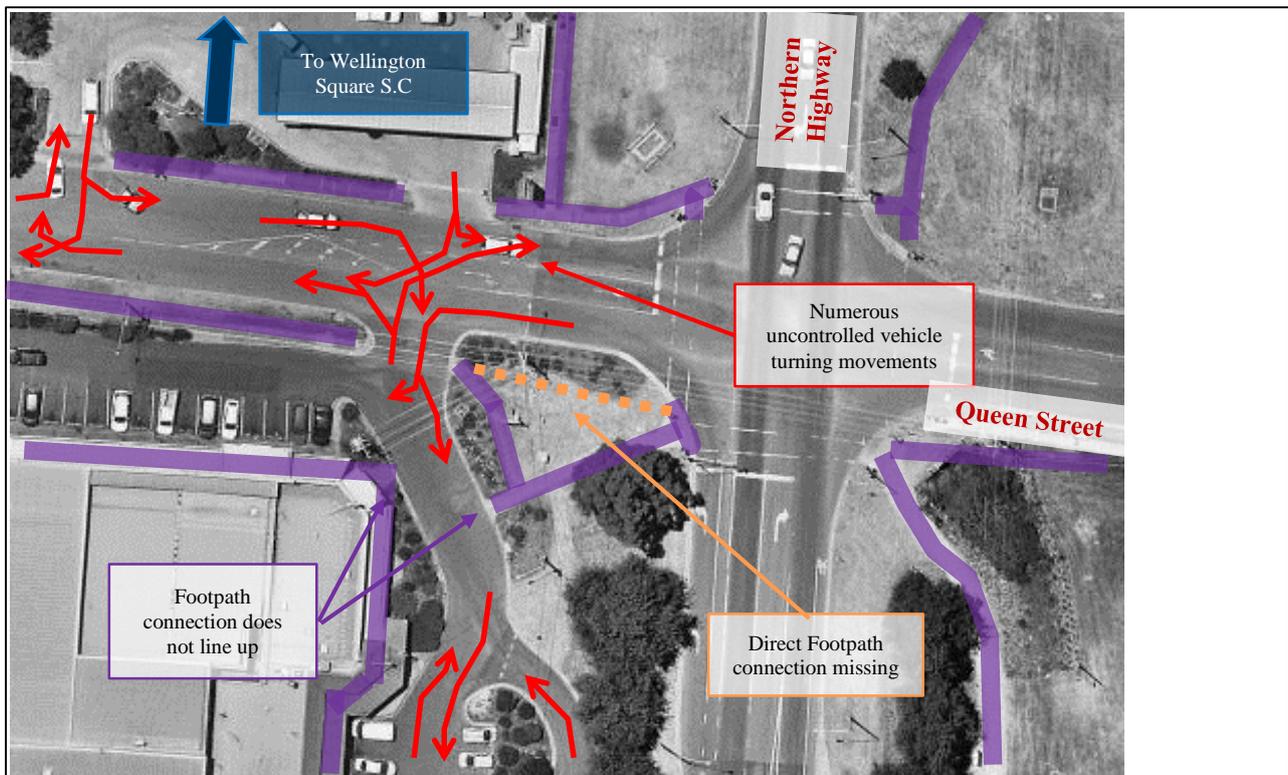
- > **The intersection of Watson Street / Northern Highway:** As shown in Figure 5-3, the interface between this intersection and the retail strip shopping is poorly provided for pedestrians. Pedestrians were observed to be subservient to the numerous vehicle movements into the service road and parking areas, in close proximity to the signalised intersection which may lead to drivers exhibiting reduced awareness of pedestrians. The footpath at the frontage of the retail strip is quite narrow and does not encourage pedestrian movements.
- > Through stakeholder consultation, Cardno has been advised that the southern side of Watson Street (between Northern Highway and Wellington Street) is a popular route for school children, despite the absence of a footpath, due to the complexity and inherent safety risks of navigating the northern side of Watson Street (and the retail access).

**Figure 5-3 Intersection on Northern Highway / Watson Street – Existing Pedestrian Provisions**



- > **The Queen Street interface, west of Northern Highway:** As shown in Figure 5-4, the access to the Coles car park, the Wellington Walk car park access and the Service Station egress are located around 30 metres from the signalised intersection of Northern Highway / Queen Street, which results in a number of potential turning movement conflict points which are essentially uncontrolled. Pedestrian movements through this area are not prioritised over the vehicle movements and pedestrians must be cognisant of the numerous potential movements whilst navigating the area. The signalised pedestrian crossing at the intersection of Northern Highway / Queen Street is currently the preferred pedestrian crossing location with respect to the existing pedestrian infrastructure, however it is noted that in order to utilise this facility pedestrians are forced to cross traffic access points adjacent the Coles / Wellington Square car parks. A key pedestrian desire line between Coles/shops to the south and the southern entrance to Wellington Square Shopping Centre, which is not catered for as part of the existing conditions (pedestrians should cross at the signalised intersection of Northern Highway/ Queen Street, which is some 70m east of the key desire line).

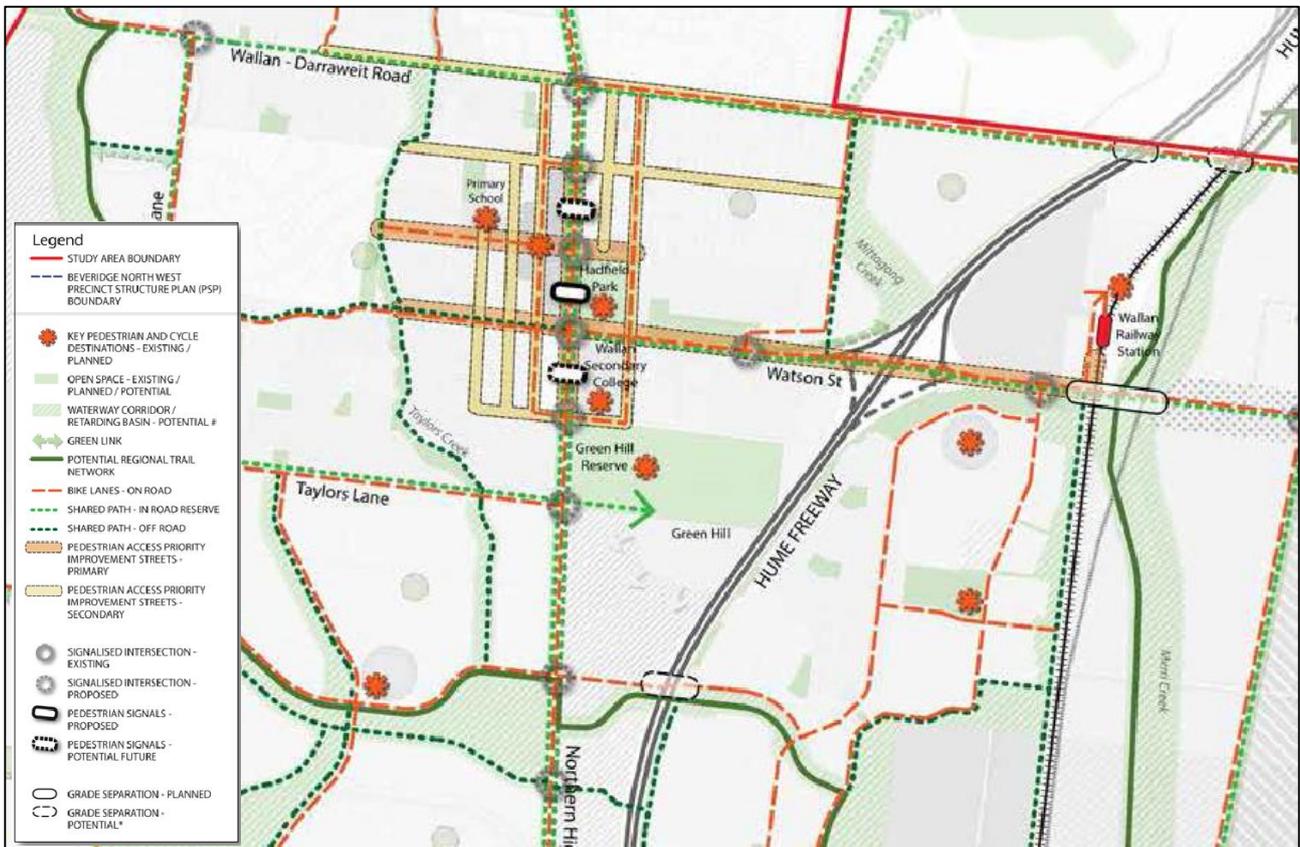
**Figure 5-4 Intersection of Northern Highway / Queen Street – Existing Pedestrian Provisions**



## 5.6 Future Pedestrian Infrastructure

The future pedestrian network of the town centre, as outlined in the Wallan Structure Plan, is provided in Figure 5-5.

**Figure 5-5 Future Pedestrian Infrastructure – Wallan Structure Plan Excerpt**



The Structure Plan identifies the following changes to the existing pedestrian network:

- > Northern Highway (between Duke Street and King Street), Watson Street and Queen Street to be 'Pedestrian Access Priority Improvement Streets – Primary';
- > Proposed Pedestrian Crossing on Northern Highway, mid block between Watson Street and Queen Street; and
- > Two potential Pedestrian Crossings on Northern Highway; one mid block between Duke Street and Watson Street and one mid block between Queen Street and King Street.

# 6 Cyclists

## 6.1 Overview

The bicycle network within the study area is currently limited and provides little connectivity or dedicated infrastructure for cyclists. As the existing Principal Bicycle Network (PBN) currently terminates at Donnybrook Road some 14km south of Wallan no connection is available to the wider bicycle network.

The bicycle infrastructure that has been delivered in Wallan is centred around the Northern Highway with on-road lanes and bicycle head start line marking provided at the signalised intersections with Watson Street, Queen Street and William Street.

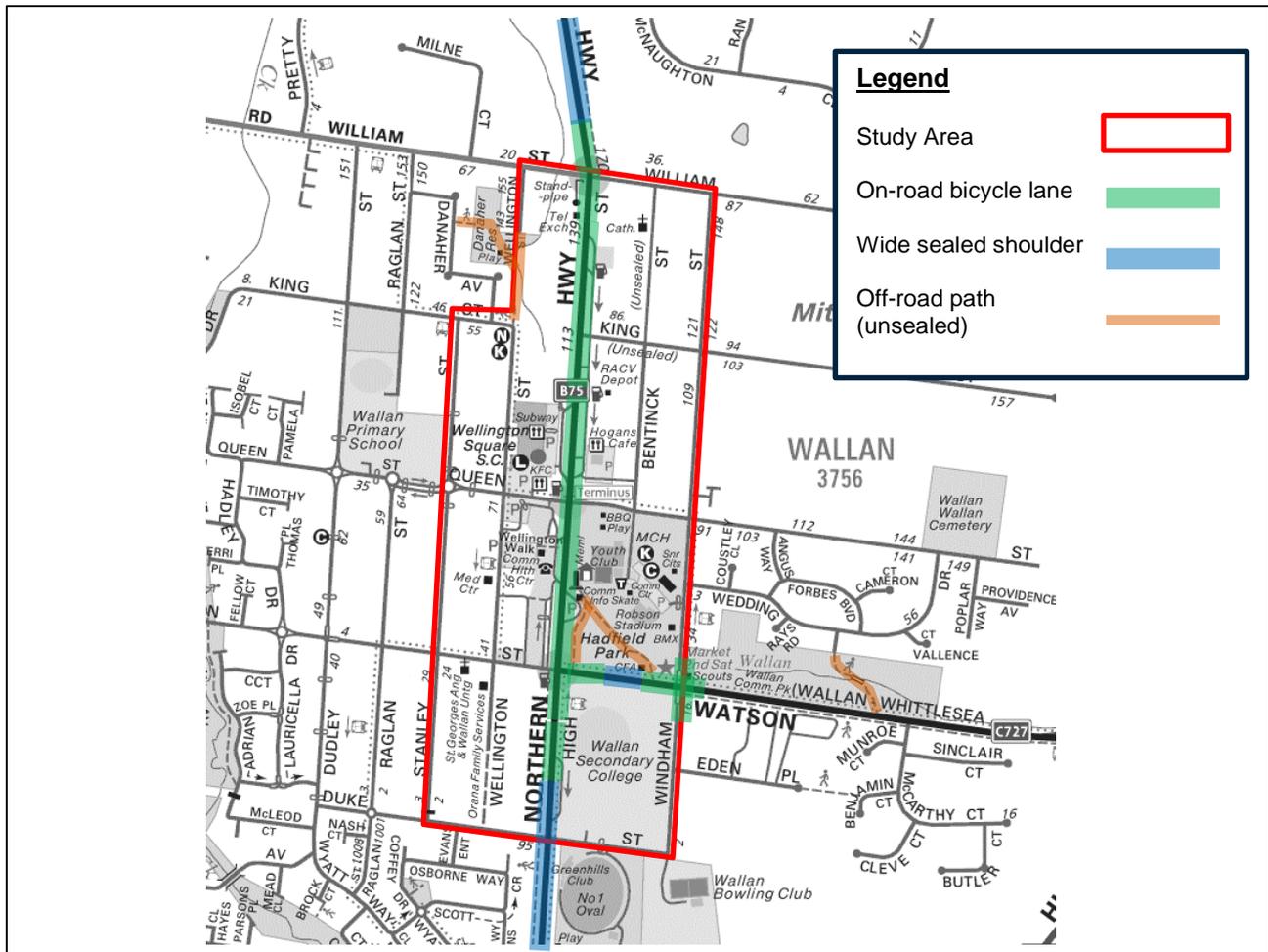
In light of the above the bicycle network available in Wallan is limited to the existing road network with cyclists typically required to share road space with motorists.

## 6.2 Key Routes

The Northern Highway forms the key bicycle route through the study area and provides dedicated bicycle lanes from 100m south of Watson Street to north of William Street as well as at signalised intersections. It is noted that the Northern Highway does not provide for a continuous bike lane, whereby at some sections cyclists are required to merge with traffic, utilise the shoulder of the Northern Highway or seek an alternate route.

Local streets in the study area serve as alternate bicycle routes, and with low traffic volumes and speeds observed, cyclists are able to share the traffic lane with vehicles.

**Figure 6-1 Existing Bicycle Infrastructure**



### 6.3 Site Observations

Site Observations indicate a low level of bicycle movements through the local town centre.

Signalised intersections within the study area are typically provided with bike lanes and advanced bicycle storage boxes at the stop lines. However the bicycle lane generally does not extend through the mid block section. Of note, cyclists riding between the town centre to the rail station are likely to use Watson Street. At the intersection of Watson Street / Windham Street, bicycle lanes are appropriately provided however travelling further east on Watson Street the bicycle lane terminates, with no clear alternative route for cyclists other than merging with the traffic lane. A footpath is provided on the southern side of Watson Street approximately 1.5m wide, which is insufficient to operate as a shared bicycle/pedestrian path.

### 6.4 Gaps in the Existing Bicycle Network

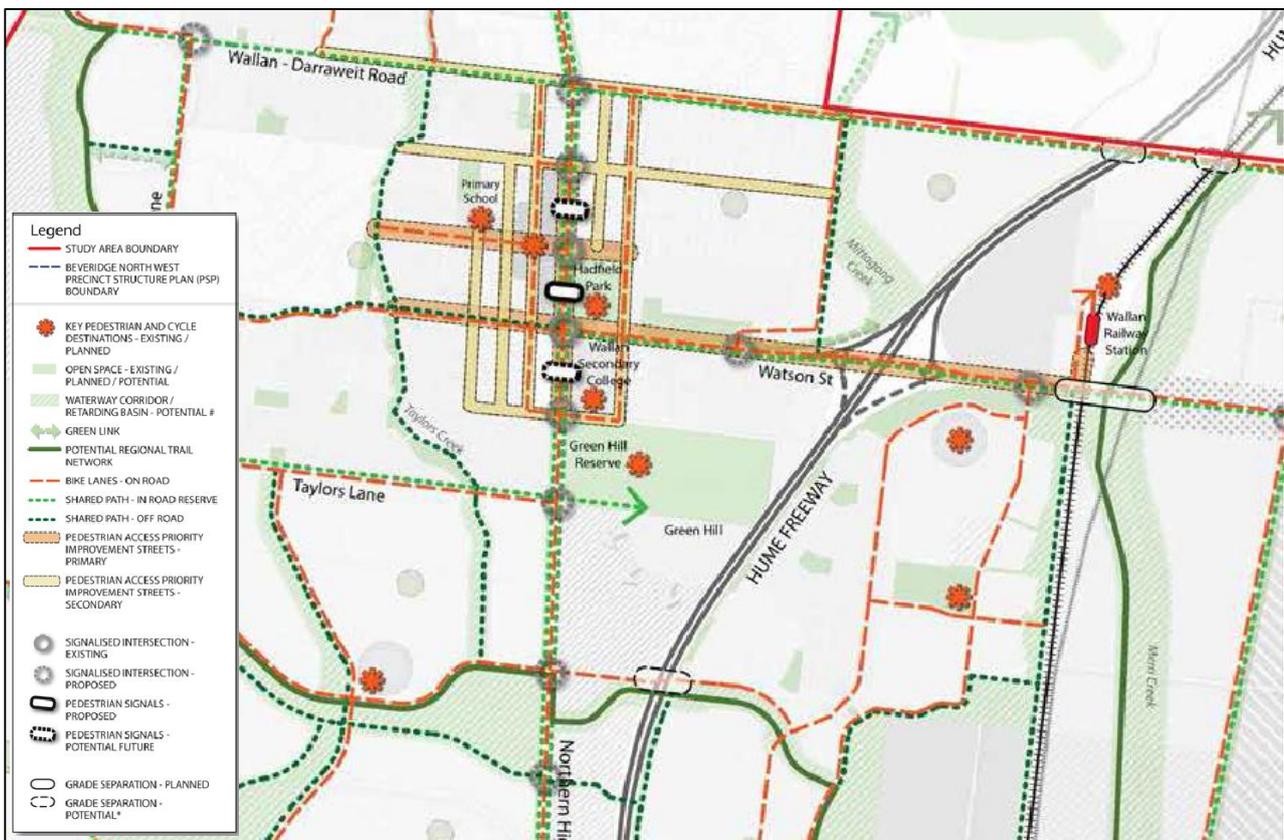
Watson Street represents a key gap in the bicycle network as it is the primary connection between the town centre, the Wallan Train Station and Wallan East.

A linemarked bicycle lane is provide on the Northern Highway adjacent the town centre however the bicycle symbol line markings are provided sparingly and are not likely to be clear to motorists as to the presence of the cycle lane. Further north and south of the town centre, no bicycle lane markings are provided limiting connections to the town centre.

### 6.5 Future Bicycle Infrastructure – Wallan Structure Plan

The future bicycle network of the town centre, as outlined in the Wallan Structure Plan, is provided in Figure 6-2.

Figure 6-2 Future Bicycle Infrastructure – Wallan Structure Plan Excerpt



The Structure Plan identifies the following changes to the existing bicycle network within the town centre:

- > On Road bicycle lanes for Northern Highway, Watson Street, Wellington Street and Windham Street;
- > Off road shared path on Watson Street, west of the Northern Highway, connecting to shared paths along Taylors Creek and Strathaird Creek;

## 7 Public Transport

### 7.1 Existing Public Transport Services

The public transport servicing Wallan is limited to the railway services that operate along the Melbourne-Sydney railway, the local Wallan Town Service bus route, and two V/line coach services.

Train services are operated by V/Line and run 7 days a week providing a direct connection to the metropolitan rail network via stops at Craigieburn, Broadmeadows, Essendon, North Melbourne and Southern Cross stations. Services typically depart at 1 hour intervals during the day and at approximately 30 minute intervals during the peak hours.

The Wallan Town Service bus route operates from Monday to Friday with services typically timetabled to correspond to morning (5.30am-8am) and evening peak (4.30pm-7.30pm) periods. During these peak periods, services depart at approximately 30 minute intervals. Outside of these times no bus service is provided. The Wallan Town Service bus route generally services the area immediately surrounding the Wallan town centre as illustrated in Figure 7-1.

V/line operate a rural bus service from Melbourne to Deniliquin (via Heathcote, Rocheste, Echuca and Moama) and Melbourne to Barham (via Cohuna, Rochester and Heathcote). The services stop outside the Wallan Public Hall once a day between Monday and Friday.

The Wallan railway station is located approximately 2km east of the Wallan town centre as illustrated in Figure 7-1.

Vehicular and pedestrian connections between the town centre and railway station are limited to Watson Street (with a 1.5m footpath provided on the southern side only).

The existing bus infrastructure within the town centre is shown in detail in Figure 7-2.

**Figure 7-1 Wallan Town Service Bus Route and Railway Station**

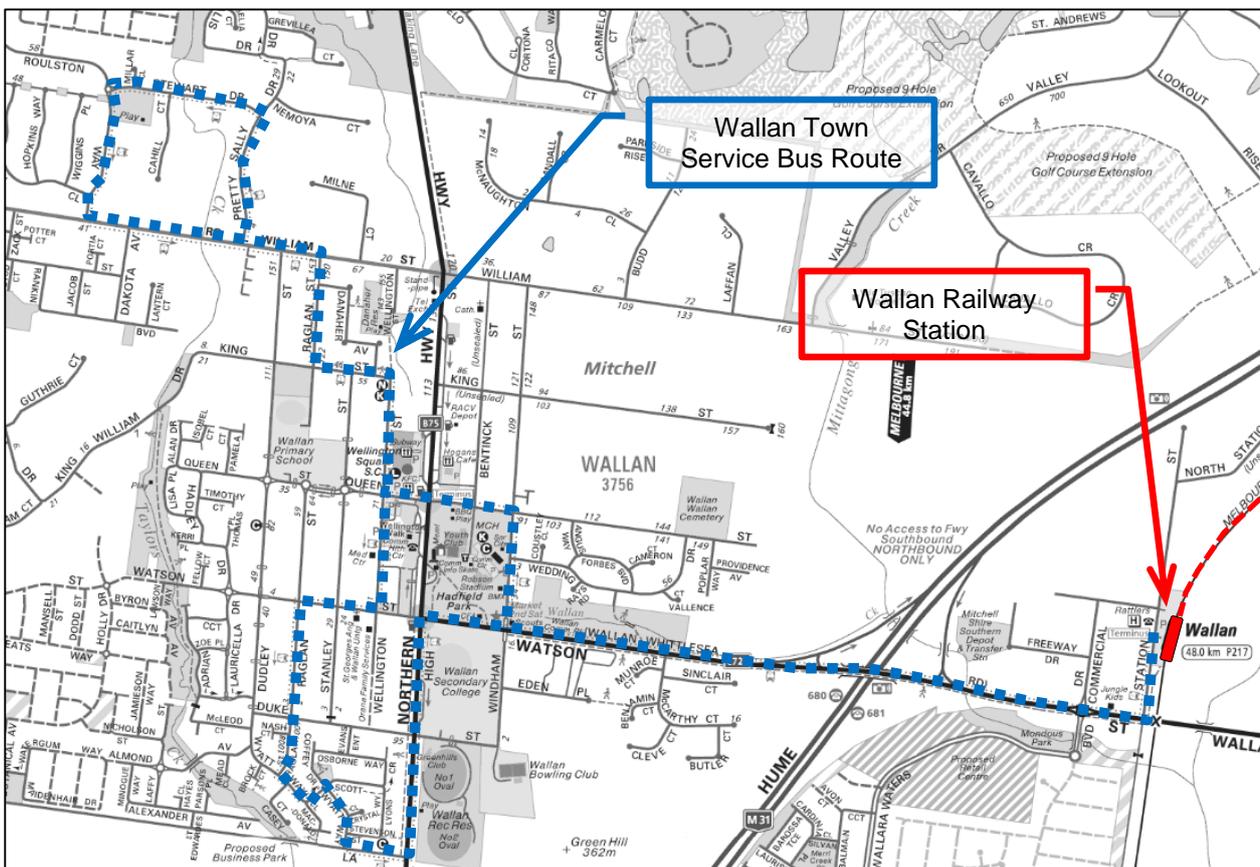
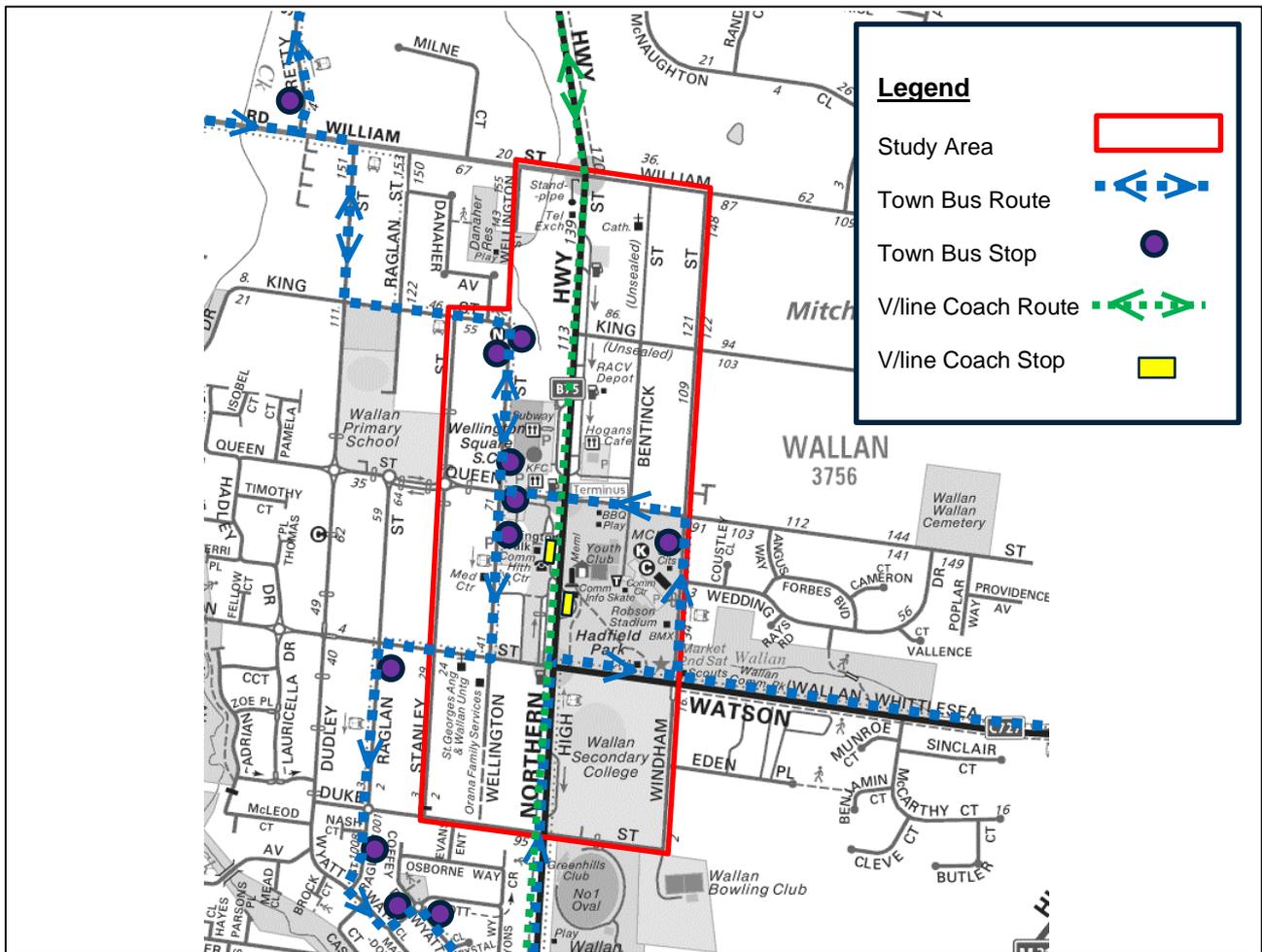


Figure 7-2 Existing Bus Infrastructure



## 7.2 Site Observations

Site observations indicate that shelters are typically provided at each bus stop within the bounds of the study area. Footpath links are provided to and from the bus shelters which connect into the wider pedestrian footpath network. Given that only a single bus service is provided to service the Wallan Town Centre, gaps in service provision exist where the bus stops are not provided in proximity to residential areas.

It is noted that given the town bus route operates in the loop, that the connectivity for some locations may be limited and restrict the uptake of this mode. For example if a passenger were to board the bus south of the town centre, they would have to complete almost the whole loop (via the railway station) in order to get the Wellington Square Shopping Centre, or depart at Watson Street and walk to the centre.

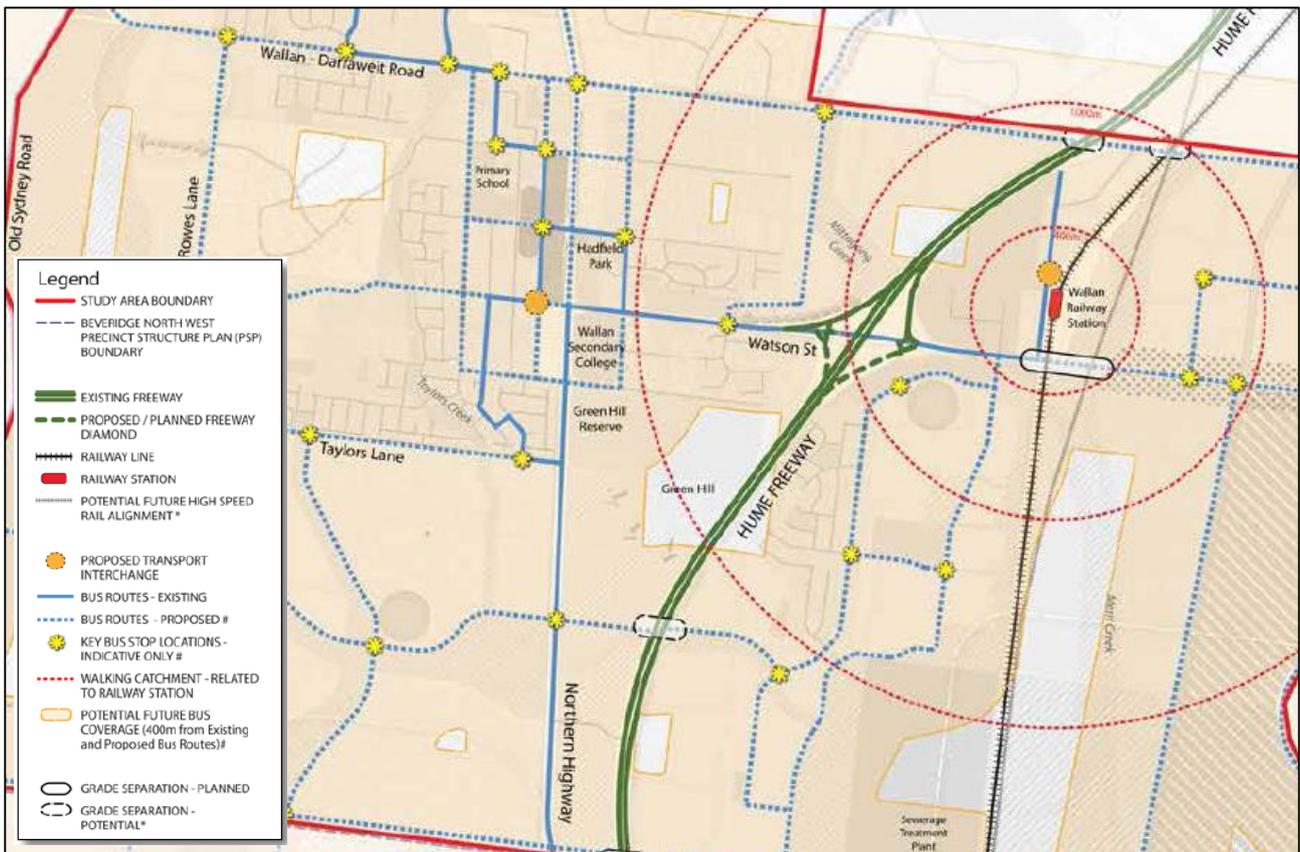
## 7.3 Future Bus Services

Preliminary discussions were held Public Transport Victoria who indicated that Wallan may be serviced by up to seven bus routes in the future. The timing of the additional services is unclear and the exact bus routes would be determined as the demand arises. However, it is envisaged that a majority of bus services which connect at the bus interchange will further connect to the Wallan train station, further strengthening this link.

## 7.4 Future Public Transport Infrastructure – Wallan Structure Plan

The future public transport infrastructure of the town centre, as identified by the Wallan Structure Plan, is provided in Figure 7-3.

**Figure 7-3 Future Public Transport Infrastructure – Wallan Structure Plan Excerpt**



The Structure Plan identifies the following changes to the existing public transport network and function of the town centre:

- > Potential high speed rail;
- > Grade separation / Level crossing removal on Watson Street;
- > Potential bus routes on Windham Street, Wellington Street, Dudley Street, King Street, Queen Street and Duke Street; and
- > Transport interchange on Watson Street / Wellington Street.

## 8 Traffic Access Considerations

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Access to retail components of the town centre has been observed to be problematic and the source of confusion for motorists.

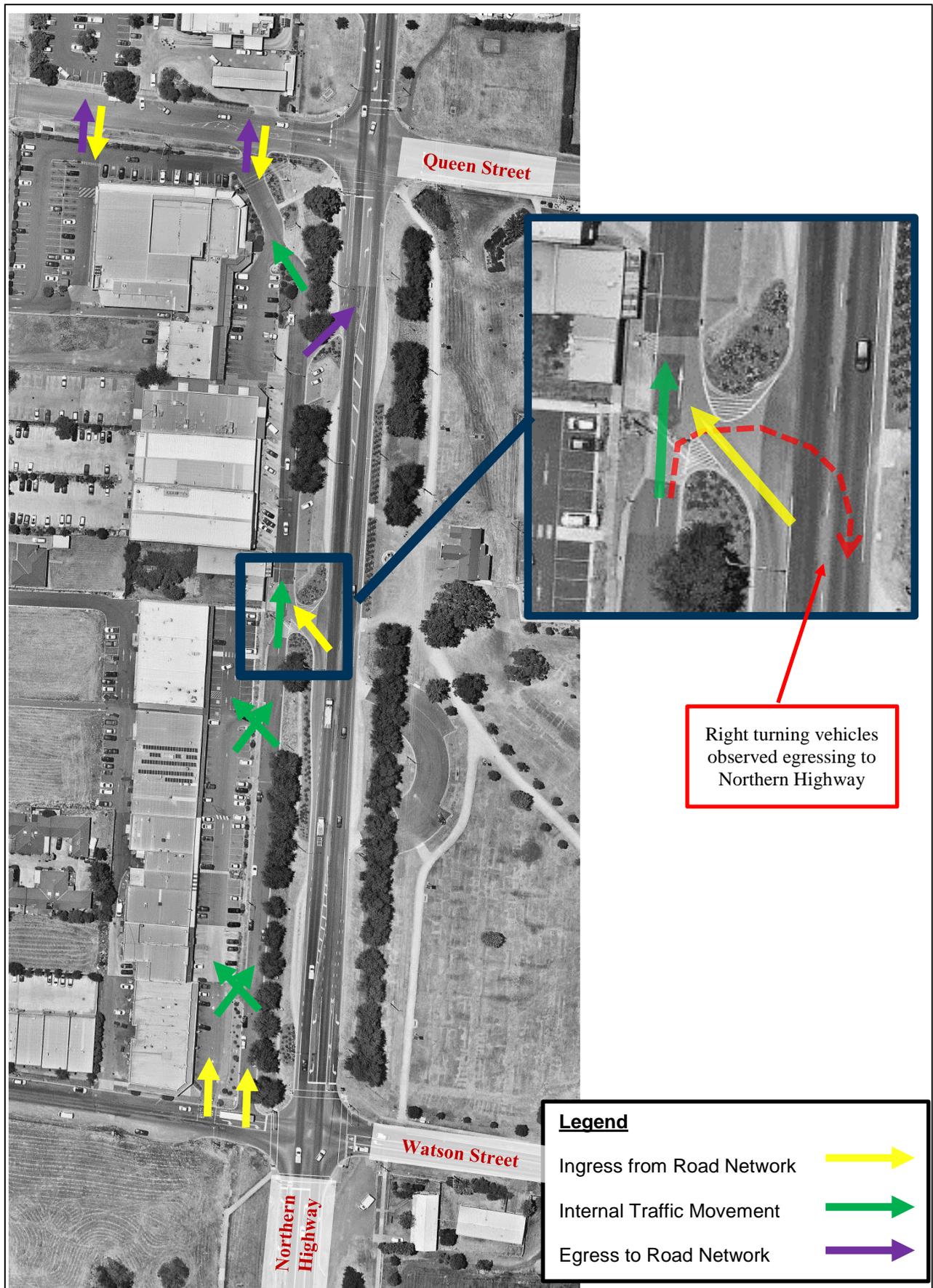
As noted in Section 5.5 (Pedestrian Site Observations), the intersections of Northern Highway / Watson Street and Northern Highway / Queen Street present problems due to pedestrians conflicting with vehicle turning movements.

### 8.1 Northern Highway Midblock Access (between Watson Street and Queens Street)

The overall access to properties on the retail strip in the northbound direction from the Northern Highway is provided via a service road in a one way fashion with the only egress points permitted towards the Queen Street end. This results in increased traffic volumes along the length of the service road as any vehicle which enters from Watson Street must exit approximately 300 metres north of Watson Street, near the intersection of Northern Highway with Queen Street. The overall access arrangement for the retail strip is illustrated in Figure 8-1.

Although signage and line marking has recently been provided to control the service road ingress in front of 57 High Street, vehicles were observed to be egressing at this location to Northern Highway, as indicated in Figure 8-1.

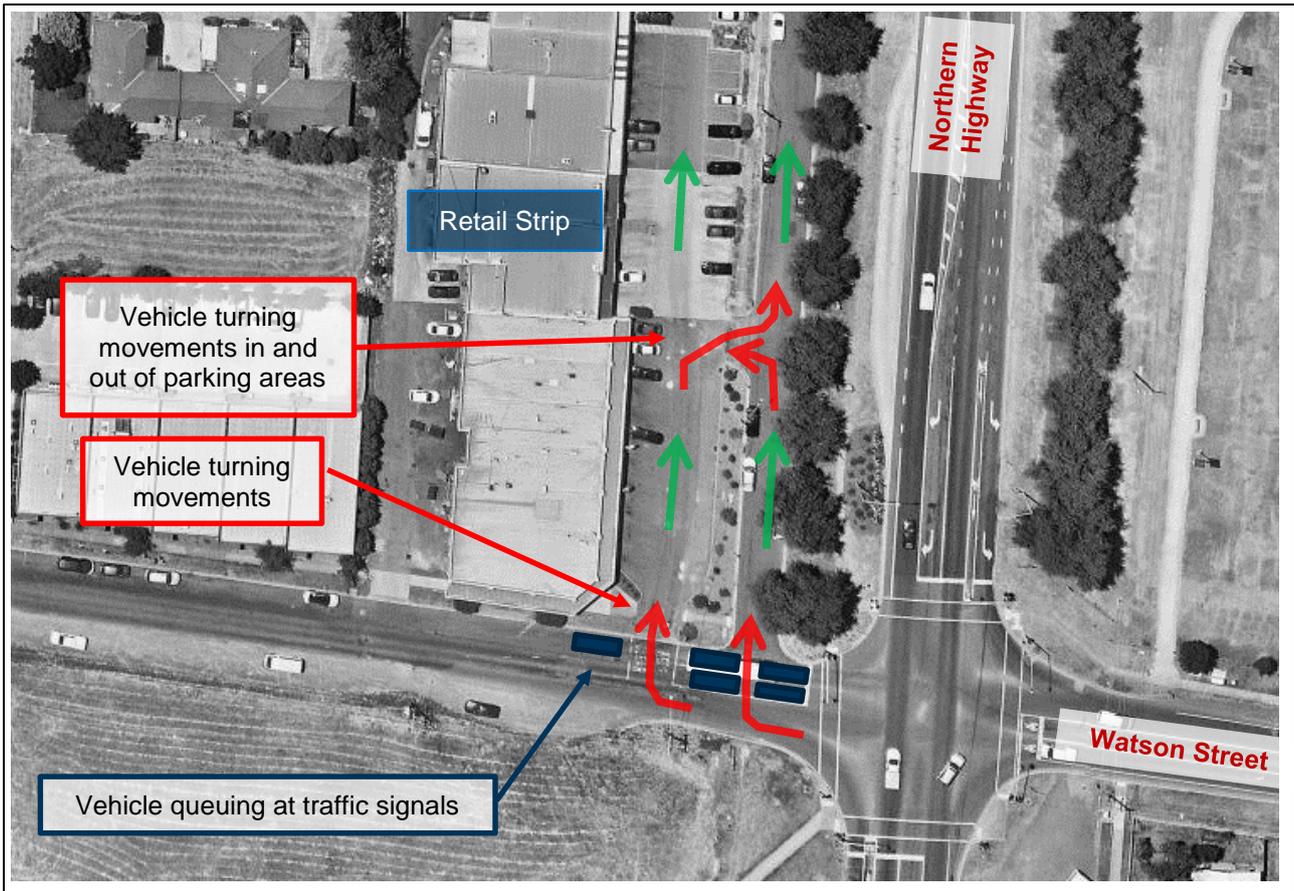
**Figure 8-1 Overall Retail Strip – Existing Access Provisions**



## 8.2 Access and Movement near the Northern Highway / Watson Street Intersection

The service road and car parking arrangement for the retail strip near the Northern Highway / Watson Street intersection presents issues as motorists arriving from Watson Street are provided with two options to access the strip retail parking, either via the service road or the car park. As Watson Street is the minor leg at the intersection of Northern Highway / Watson Street, queuing of vehicles is to be expected in this location which in turn can impede right turning movements into the retail strip parking, as identified in Figure 8-2.

**Figure 8-2 Existing Traffic Operation – Northern Highway / Watson Street**



Further north of Watson Street, both the service road and the retail strip car parking operate in one way manner with all traffic restricted to northbound movements only. Opportunity is provided for vehicles to change between the two traffic streams however the parallel nature of the two routes, and relative proximity of the two streams, results in a tendency for vehicles traveling between the two areas at an angle rather than perpendicular, which reduces the sight lines available to motorists of the adjacent traffic stream.

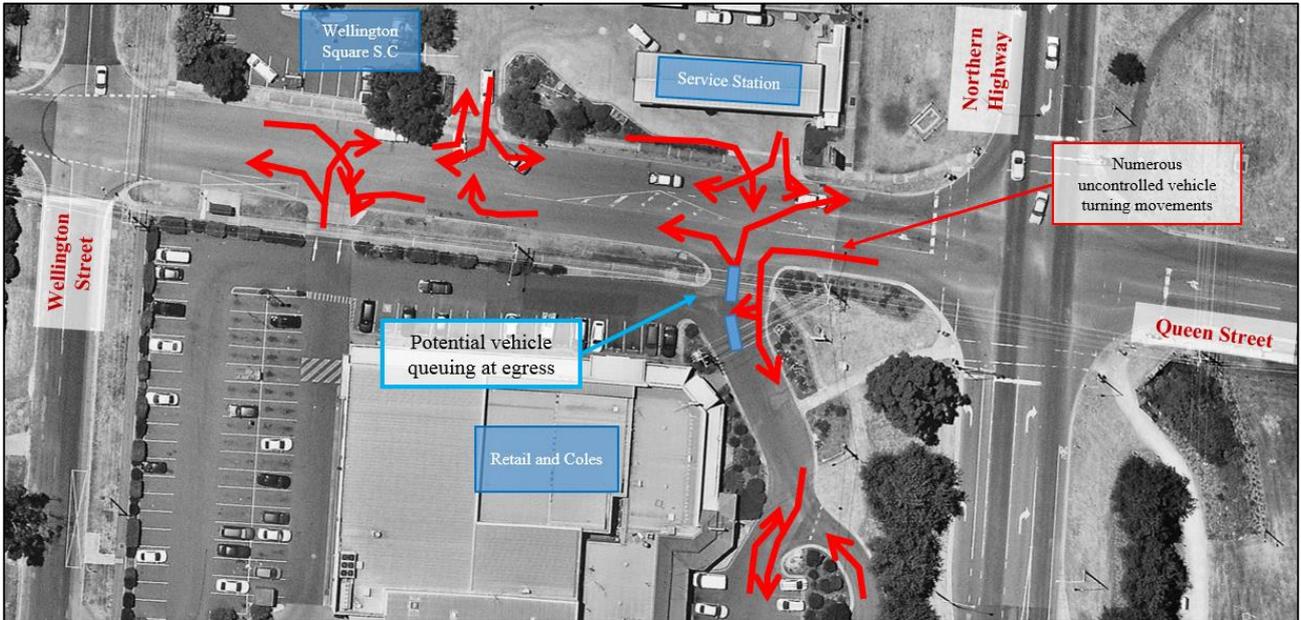
The on-site car parking for the retail strip (at the frontage of the strip tenancies) is intended to operate with a one way aisle for its length (with the exception of parking at the front of 56-58 High Street, which is two-way due to the dead end aisle). However, parking is provided in a 90 degree arrangement on both sides which gives the motorist the impression that the vehicle circulation is two-way (as would be typical for any other car park with 90 degree parking spaces on both sides). Signage and line marking within the retail strip parking is poor and could be confusing to infrequent visitors.

### 8.3 Access and Movement near the Northern Highway / Queen Street Intersection

The intersection of the Northern Highway / Queen Street and the interface with the shopper traffic access points on both sides of Queen Street results in a multitude of vehicle turning movements and conflict points. It is noted that the design of the access is likely to become more problematic upon the increased usage of the retail offerings, including Wellington Square Shopping Centre, and the town centre itself.

The existing operation of this component of the town centre is illustrated in Figure 8-3.

**Figure 8-3 Existing Traffic Operation – Northern Highway / Queen Street**



The access to the retail area to the south-west of the intersection is located quite close to the departure side of the signalised intersection, and as such vehicles slowing to turn into these areas may inadvertently slow following traffic. Additionally, the access to the Coles section of the car park is provided with minimal setback to Queen Street, and as such if more than one vehicle was queuing to egress to Queen Street this access would be blocked. The potential for confusion for motorists in this area is compounded by the lack of defined pedestrian crossing points.

## 9 Parking Provisions

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### 9.1 Overview

Car parking for the town centre is provided for with a combination of on-site car parking (from Northern Highway), rear car parking (from Wellington Street and Bentick Street) and on-street parking from the Northern Highway service roads.

Car parking is typically unrestricted and no designated staff car parking areas are indicated on-site. Parking spaces around the retail strip are time restricted (1 hour parking) on market days. A number of disabled car parking spaces are interspaced amongst the standard car parking spaces.

### 9.2 Loading Areas

A large loading area is provided for the Wellington Square Shopping Centre, on the eastern (rear) side of the Shopping Centre accessed from Wellington Street. A designated loading area is provided for the Coles Site within the southern portion of the car park.

The loading requirements for the retail strip are accommodated in the rear car park, accessed from Wellington Street, however some loading was observed to take place informally in front of the retail strip within the on-site car park (accessed from the Northern Highway service road).

### 9.3 Passenger pick-up/drop-off

No dedicated pick-up/drop-off facilities were observed on-site, with any pick-up/drop-off requirements likely taking place informally or utilising the on and off street car parking provisions.

### 9.4 Car Parking Surveys

Cardno commissioned and undertook car parking surveys within the Wallan Town Centre to gain an understanding of the existing utilisation of public car parking in the precinct. Car parking surveys were undertaken on Friday 18<sup>th</sup> December and Saturday 19<sup>th</sup> December and are expected to be associated with the busier time of year for the retail land uses, being close to the Christmas break.

The existing car parking supply is shown in Figure 9-1, with the results for spot surveys for the retail core area shown in Figure 9-2 and Figure 9-3.

A review of the spot parking surveys results reveals typically low utilisation of the existing parking supply, with a peak utilisation of 43% recorded for all car parking on the surveyed Thursday.

Further car parking surveys were undertaken on Saturday 12<sup>th</sup> February 2016, to correspond with a Wallan market day. Car parking occupancy during this period was notably higher than the non-market Saturday. Additionally, overspill car parking onto the residential streets surrounding Hadfield Park was prevalent with on-street car parking on Windham Street, Watson Street and Queen Street surrounding Hadfield Park largely fully utilised, and informal car parking taking place on the eastern side of Northern Highway between Watson Street and the Wallan Secondary School. Car parking surveys during the market day are provided in Figure 9-4. It should be noted that the Wallan market represents an atypical period, and does represent 'base line' parking conditions for the further development of the town centre.

Figure 9-1 Existing Car Parking Supply – Retail Core

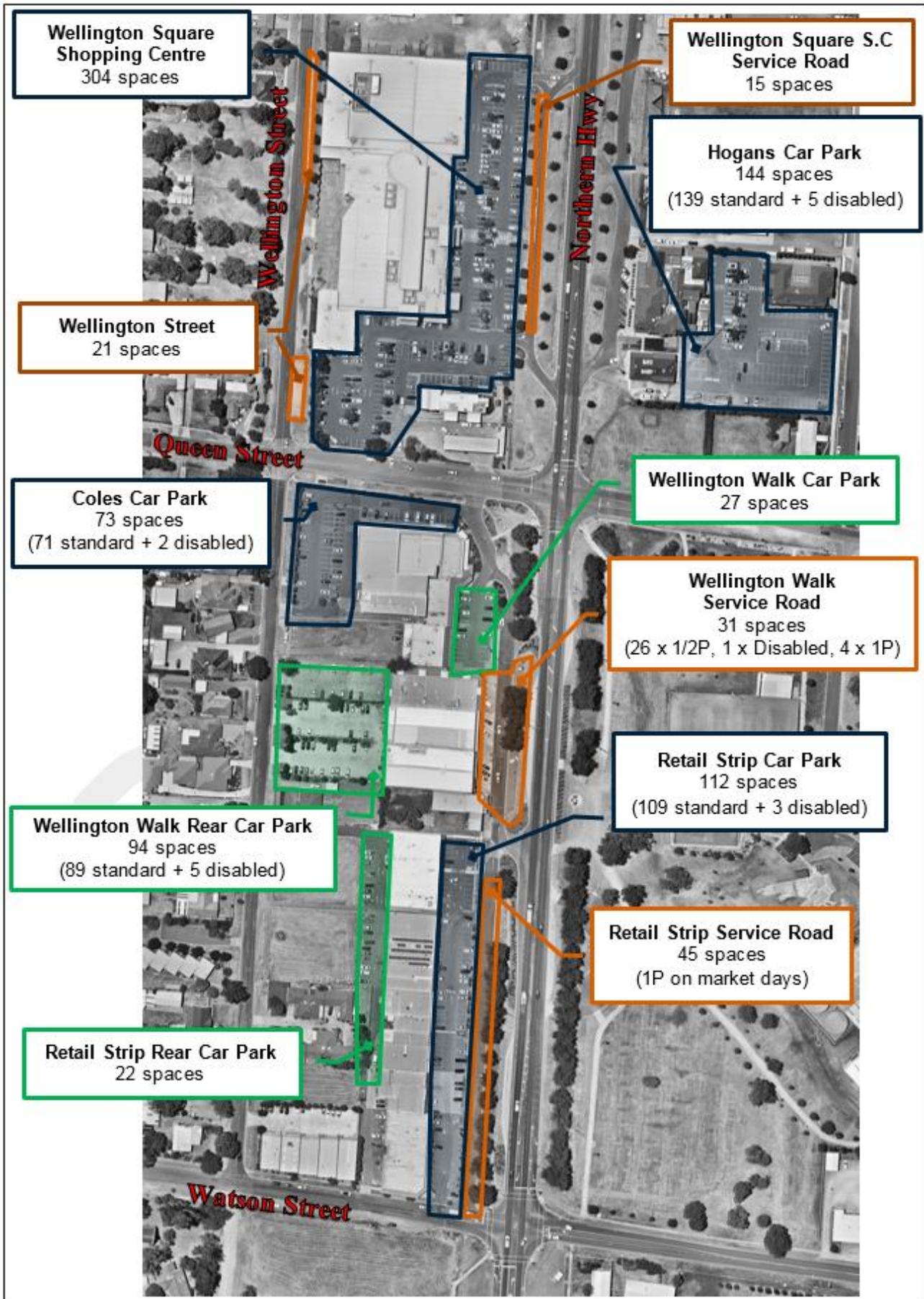


Figure 9-2 Existing Car Parking Occupancy – 2pm Thursday 17<sup>th</sup> December 2015

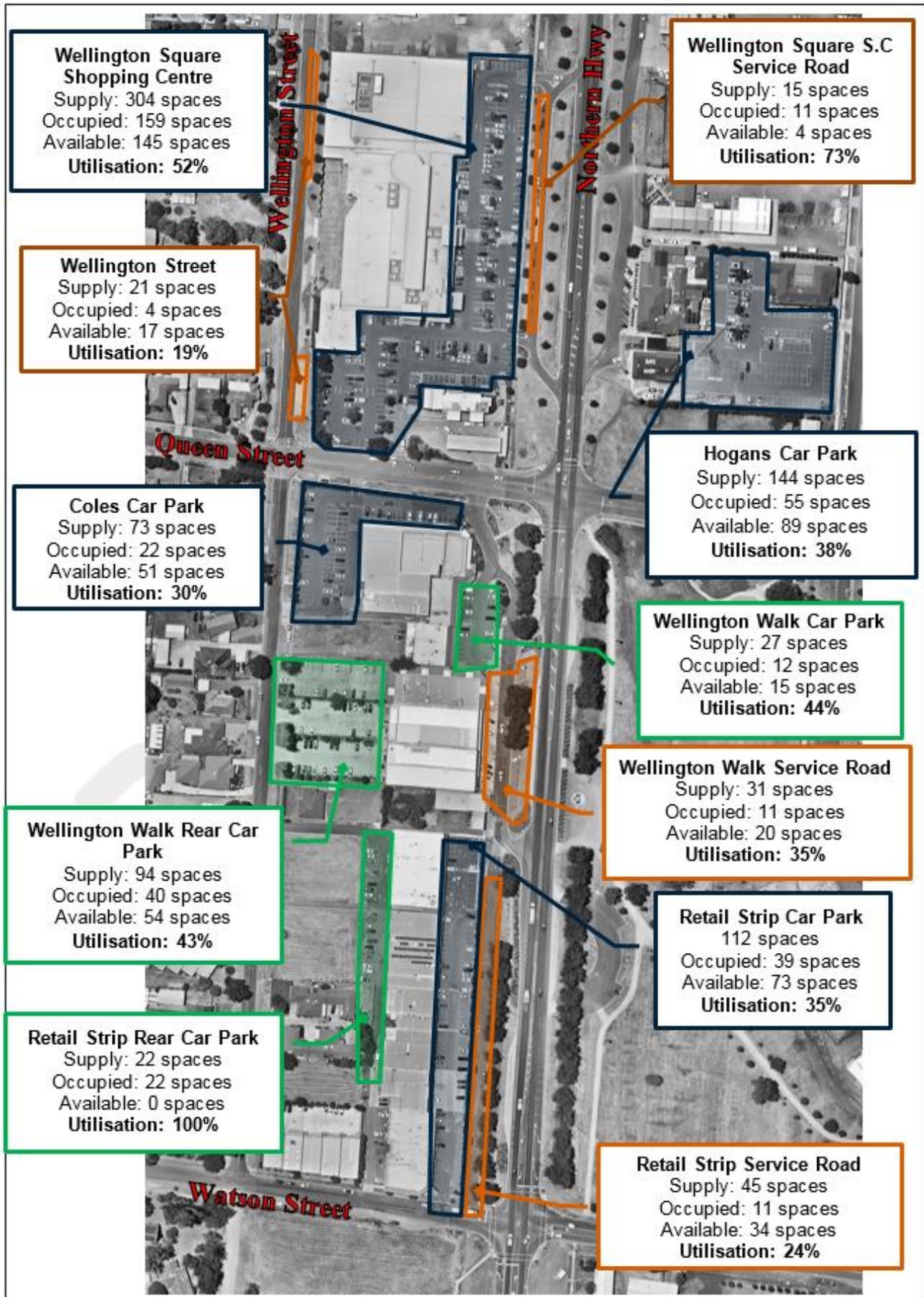


Figure 9-3 Existing Car Parking Occupancy – 11am Saturday 19<sup>th</sup> December 2015

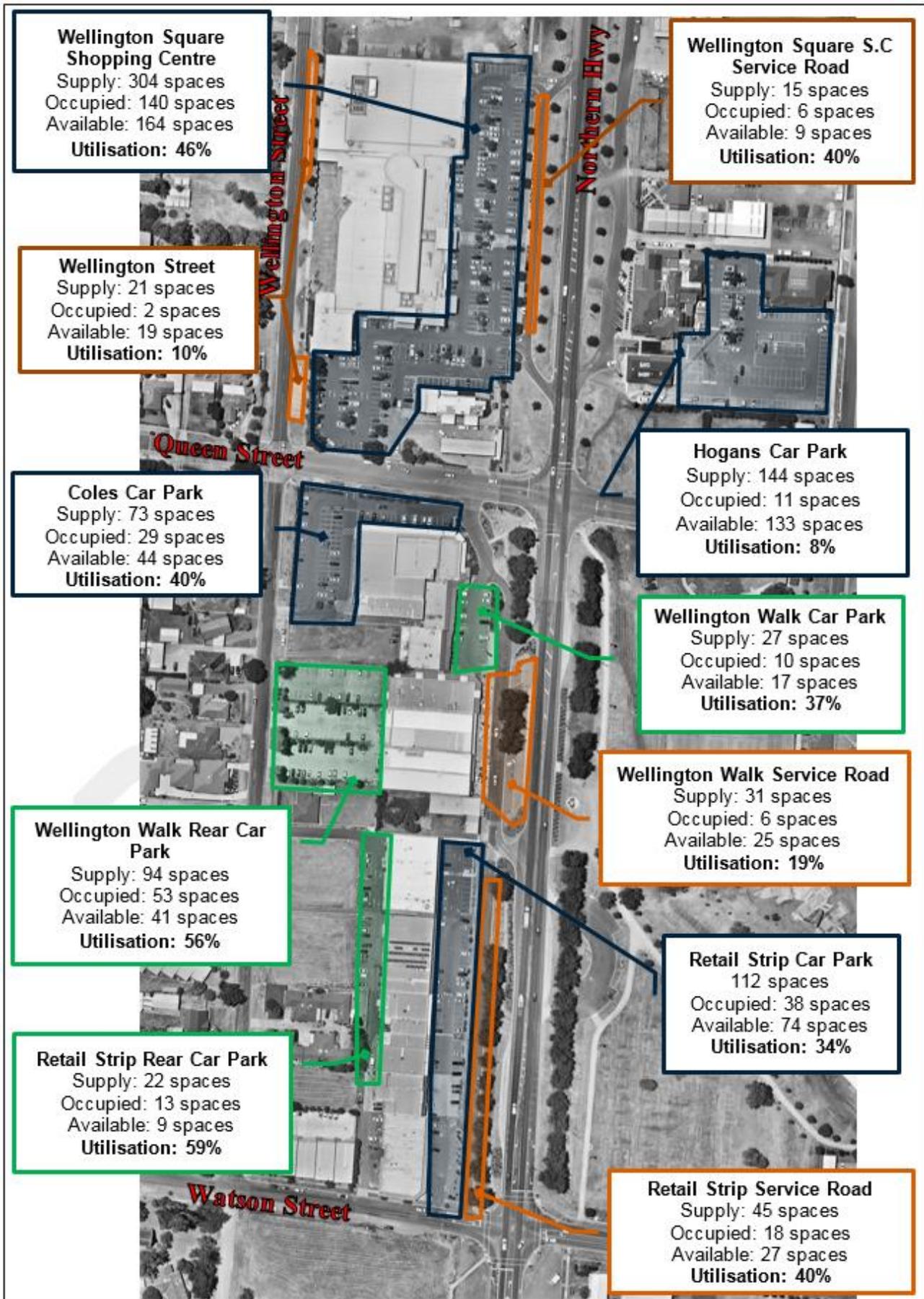
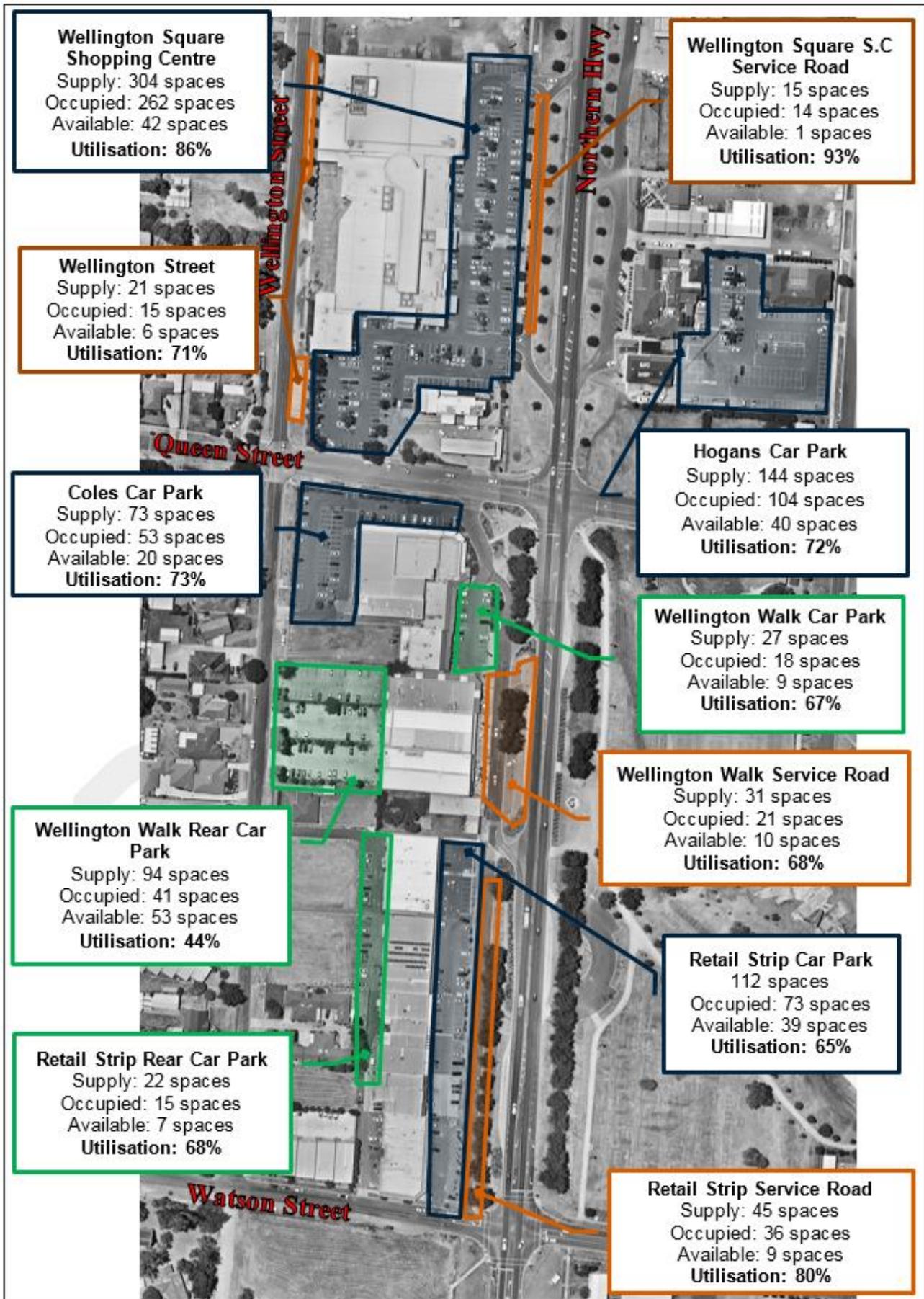


Figure 9-4 Existing Car Parking Occupancy – 11am Saturday 12<sup>th</sup> February 2016



## 10 Conclusions

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Based on the findings and discussion contained within this report, the following conclusions are made:

- > Site visits observations indicate that transport infrastructure, in particular pedestrian foot paths and connections; bicycle provision and connections, and traffic access controls are currently provided in an ad hoc manner throughout the town centre, and would benefit from the rationalisation and improvement as the area develops;
- > Several foot path connections have not yet been constructed and present gaps in the existing pedestrian network. The standard of construction of the existing paths also varies widely throughout the study area;
- > The access to the retail strip parking and service roads presents an environment which is less than ideal for pedestrian access, with pedestrian movements conflicting with a number of vehicle turning movements;
- > Limited end-of-trip bike parking facilities are provided in the Town Centre. The bicycle path network is essentially limited to the Northern Highway, which does not provide dedicated bicycle provisions further afield;
- > The overarching road hierarchy of the Wallan Town Centre is centred on the Northern Highway which essentially bisects the study area, with the surrounding local roads yet to fulfil any higher order Connector Road function;
- > The layout of the service roads, in particular these which front the retail strip parking between Watson Street and Queen Street, result in access arrangements which are undesirable for motorists and pedestrians; and
- > The Transport Integration Act seeks to achieve the development of sustainable and integrated transport systems. In this regard, for new development within the Wallan Town Centre, a high level of land use and transport integration encouraging users to seek a range of modes should be sought.

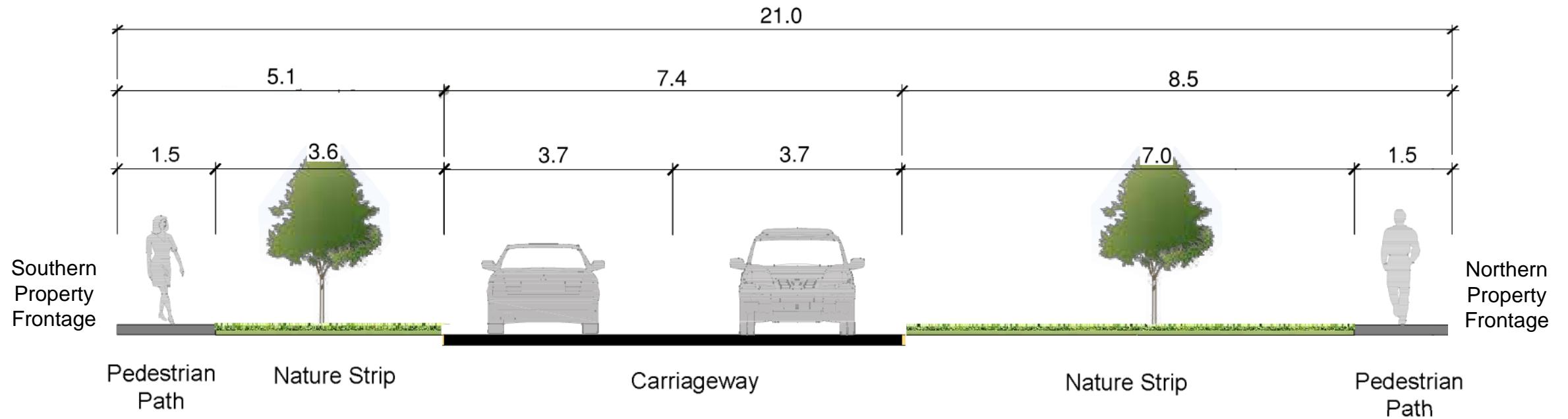
Wallan Town Centre Access and  
Movement Plan

APPENDIX

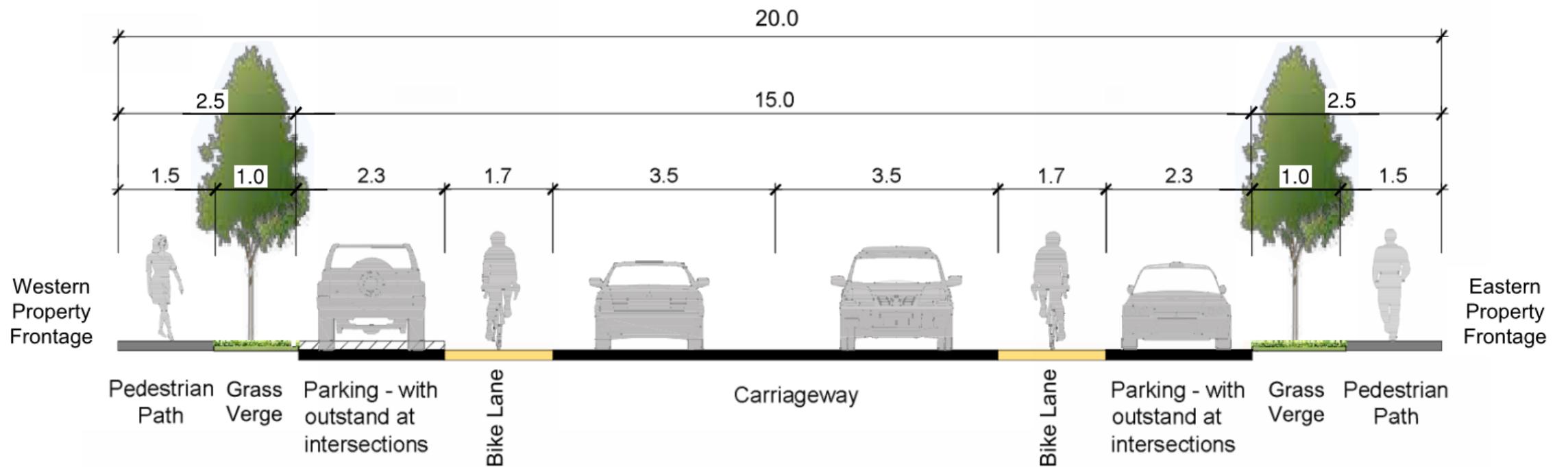
B

INDICATIVE ROAD CROSS SECTIONS

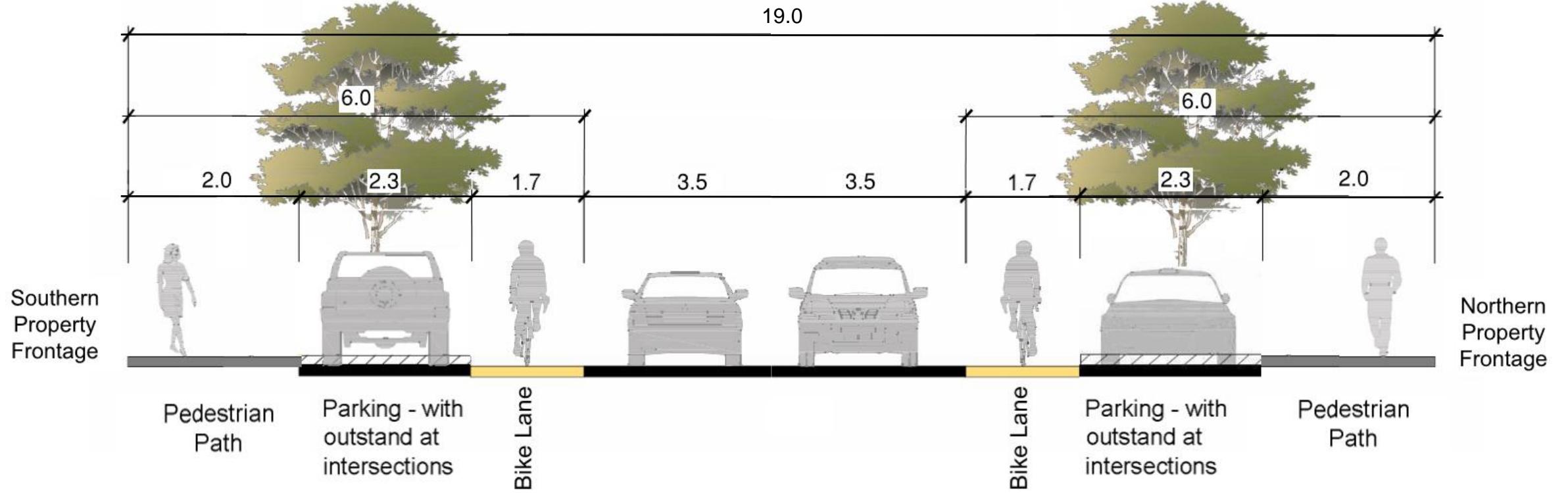
## DUKE STREET INDICATIVE CROSS SECTION



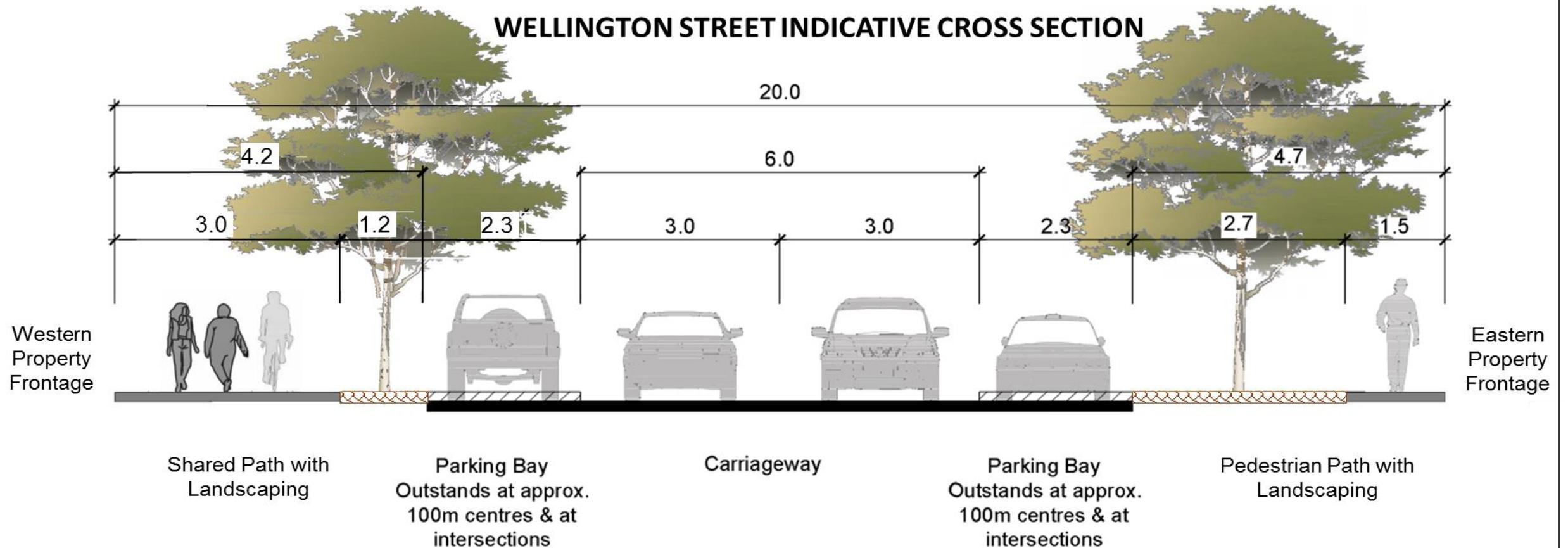
## WINDHAM STREET INDICATIVE CROSS SECTION



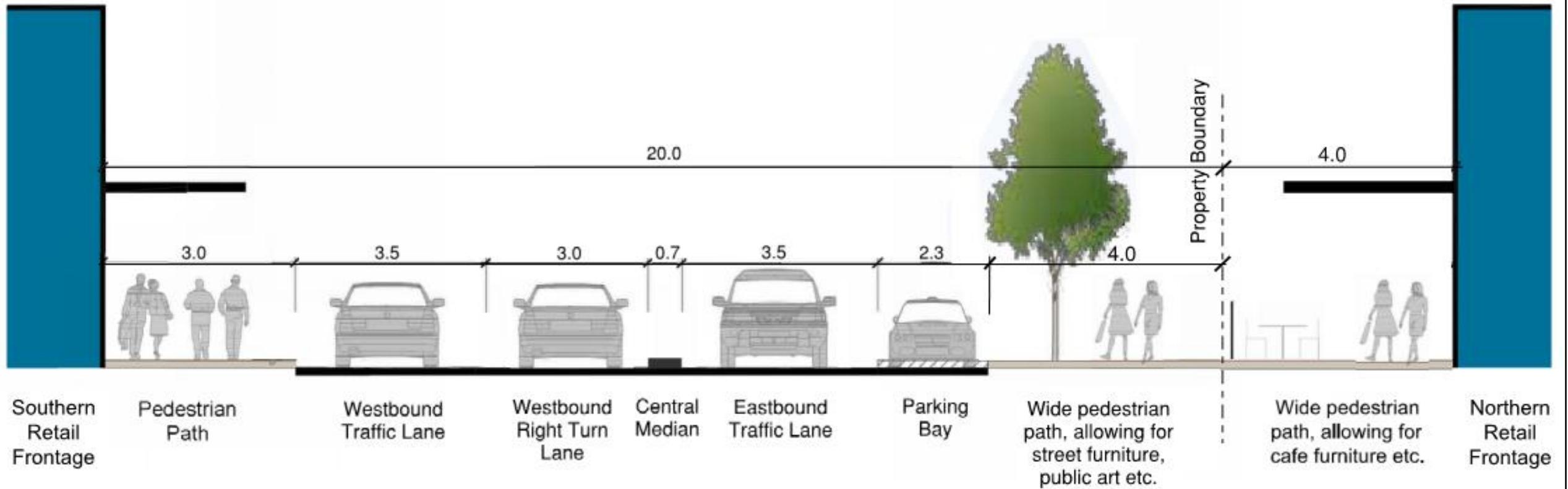
## WATSON STREET (WEST OF NORTHERN HIGHWAY) INDICATIVE CROSS SECTION



## WELLINGTON STREET INDICATIVE CROSS SECTION



## QUEEN STREET (BETWEEN HIGH STREET & WELLINGTON STREET INDICATIVE CROSS SECTION



## QUEEN STREET (BETWEEN WELLINGTON STREET & STANLEY STREET INDICATIVE CROSS SECTION

