

Traffix Group

130 Reservoir Road, Wauran Ponds

Greater Geelong Planning Scheme Amendment
C395,

Traffic Engineering Evidence Statement to Planning Panels Victoria

Date of Statement: 6 November 2019

Date of Inspection: 2 November 2019

Prepared For the Proponent: Boral Recycling Pty Ltd

Instructed By: White & Case

Reference: G27589A-01A

**IN THE MATTER OF AMENDMENT C395 TO THE GREATER GEELONG PLANNING SCHEME
RELATING TO 130 RESERVOIR ROAD, WAURN PONDS.**

STATEMENT TO PLANNING PANELS VICTORIA BY JASON LEE WALSH, TRAFFIC ENGINEER

Greater Geelong Planning Scheme Amendment C395,

at

130 Reservoir Road, Waur Ponds

Our Reference: G27589A-01A

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1. Introduction

I have been instructed by White & Case on behalf of Boral Recycling Pty Ltd to undertake a traffic engineering and transport assessment of the proposed Greater Geelong Planning Scheme Amendment C395, with particular attention to the potential urban development of the subject land at 130 Reservoir Road, Waur Ponds.

In the course of preparing this statement, I inspected the subject site on 2 November 2019, reviewed background documents, and assessed the broad strategic traffic and transport matters associated with the potential urban development of the site.

My qualifications and experience to undertake the following assessment are set out in Appendix A.

2. Background Information

2.1. City of Greater Geelong Settlement Strategy (2018)

The City of Greater Geelong prepared a Settlement Strategy which provides a framework to deliver housing in the municipality to the year 2036. The Settlement Strategy was adopted at a Council meeting on the 9th October 2018.

An excerpt of the Housing Framework Plan from the Settlement Strategy is shown at Figure 1. The subject site is located just outside the indicative settlement boundary to the west of the Armstrong Creek Growth Area, and to the south west of the Waurn Ponds Key Development Area.

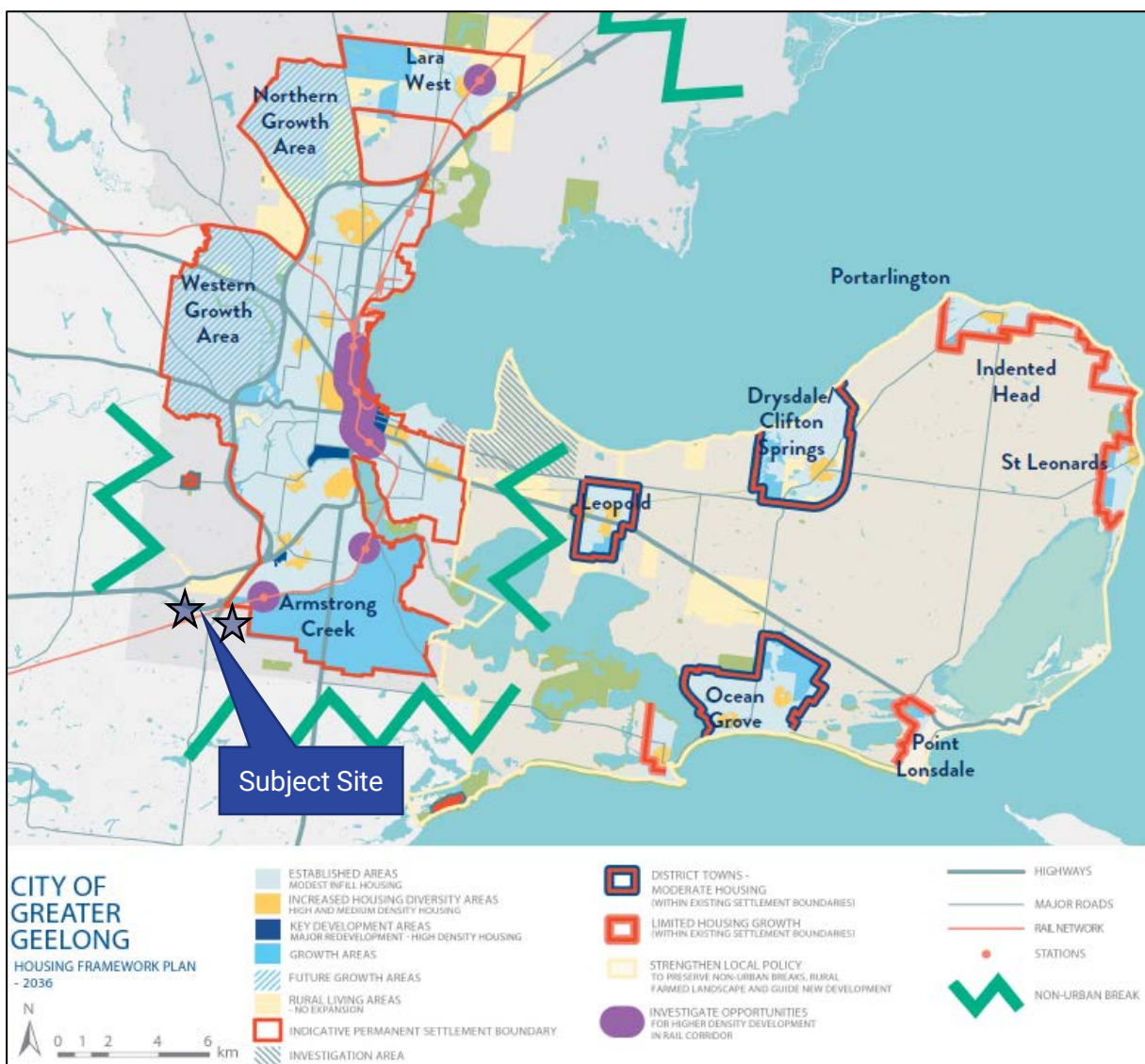


Figure 1: City of Greater Geelong Housing Framework Plan (2036)

In relation to transport, the Settlement Strategy within the chapter for Managing Future Growth states:

Critical to delivering more sustainable communities is increasing the usage of active and public transport modes.

It is important walking, cycling and public transport infrastructure is delivered early so residents have the opportunity to establish sustainable transport habits as soon as they move in.

The Settlement Strategy also adopts a principle to increase the role of urban consolidation as part of Geelong's overall housing supply, including investigating a 'rail corridor precinct' approach to infill opportunities at a number of existing stations, one of which is Waur Ponds Station.

2.2. Northern Geelong and Western Geelong Growth Areas (2019)

The City of Greater Geelong has prepared a Framework Plan for the Northern and Western Geelong Growth Areas, which was adopted by Council in March 2019. The purpose of this Framework Plan is to guide the long-term population growth for Geelong in these greenfield areas.

An excerpt of the Framework Plan for the Northern and Western Geelong Growth Areas showing the western component is shown at Figure 2. The subject land is located approximately 6.5km south of the southern boundary (Barwon River) of the Western Geelong Growth Area.

The northern growth area is 2,090 hectares and is envisioned to accommodate around 17,000 dwellings, employment land, a sub regional activity centre and a series of neighbourhood centres. The GTA modelling report estimates the northern growth area will generate in the order of 210,000 movements per day.

The western growth area is 3,241 hectares and is envisioned to accommodate around 23,000 dwellings, a sub regional activity centre and a series of neighbourhood centres. The GTA modelling report estimates the western growth area will generate in the order of 270,000 movements per day.

An important pillar of the Framework Plan is the establishment of the 'clever and creative corridor', which is proposed as a tree-lined boulevard style transit corridor that prioritises public transport, walking and cycling between the activity centres and public infrastructure, as well as between the northern and western growth areas.

The corridor is intended to initially be used by a rapid bus service within a dedicated central median, with the ultimate configuration determined through exploration of developing transport technologies as the growth areas become occupied.

The Framework Plan identifies a series of transport related works that should be implemented to support residential growth.

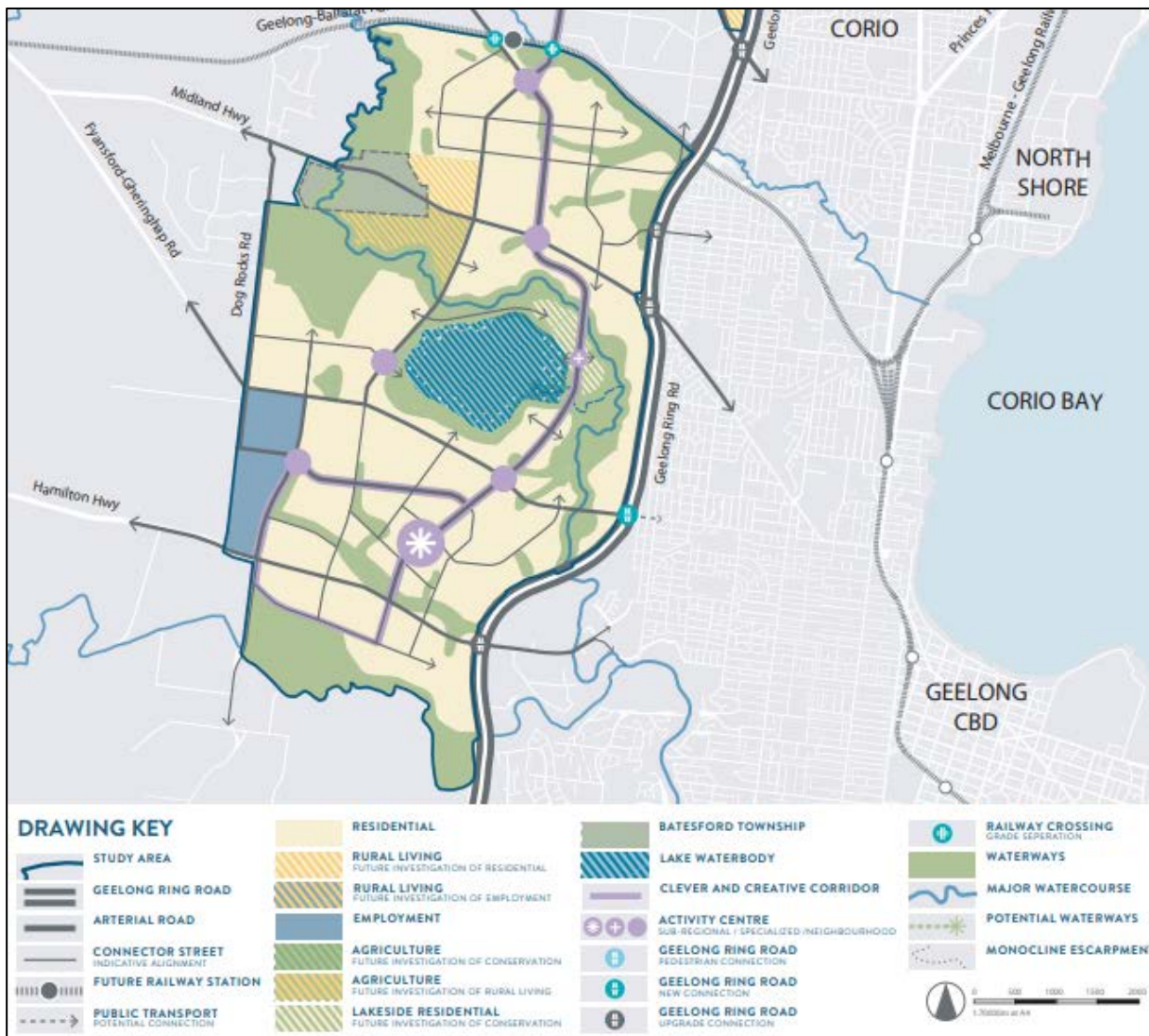


Figure 2: Western Geelong Growth Area Framework Plan

2.3. Planning Scheme Amendment

Planning Scheme Amendment C395 to the Greater Geelong Planning Scheme proposes to implement the City of Greater Geelong Settlement Strategy, and the Northern and Western Geelong Growth Areas Framework Plan into the Planning Scheme.

3. Subject Land – 130 Reservoir Road, Waurn Ponds

3.1. Existing Conditions

The subject land is of an irregular shape and is loosely bound by McPherson Road / Waurn Ponds Drive and the Warrnambool- Geelong rail line to the north, Princes Freeway and Ghazepore Road to the east, Mt Duneed Road and Reservoir Road to the south, and Bogans Lane and Draytons Road to the west. The locality of the land is presented at Figure 3.

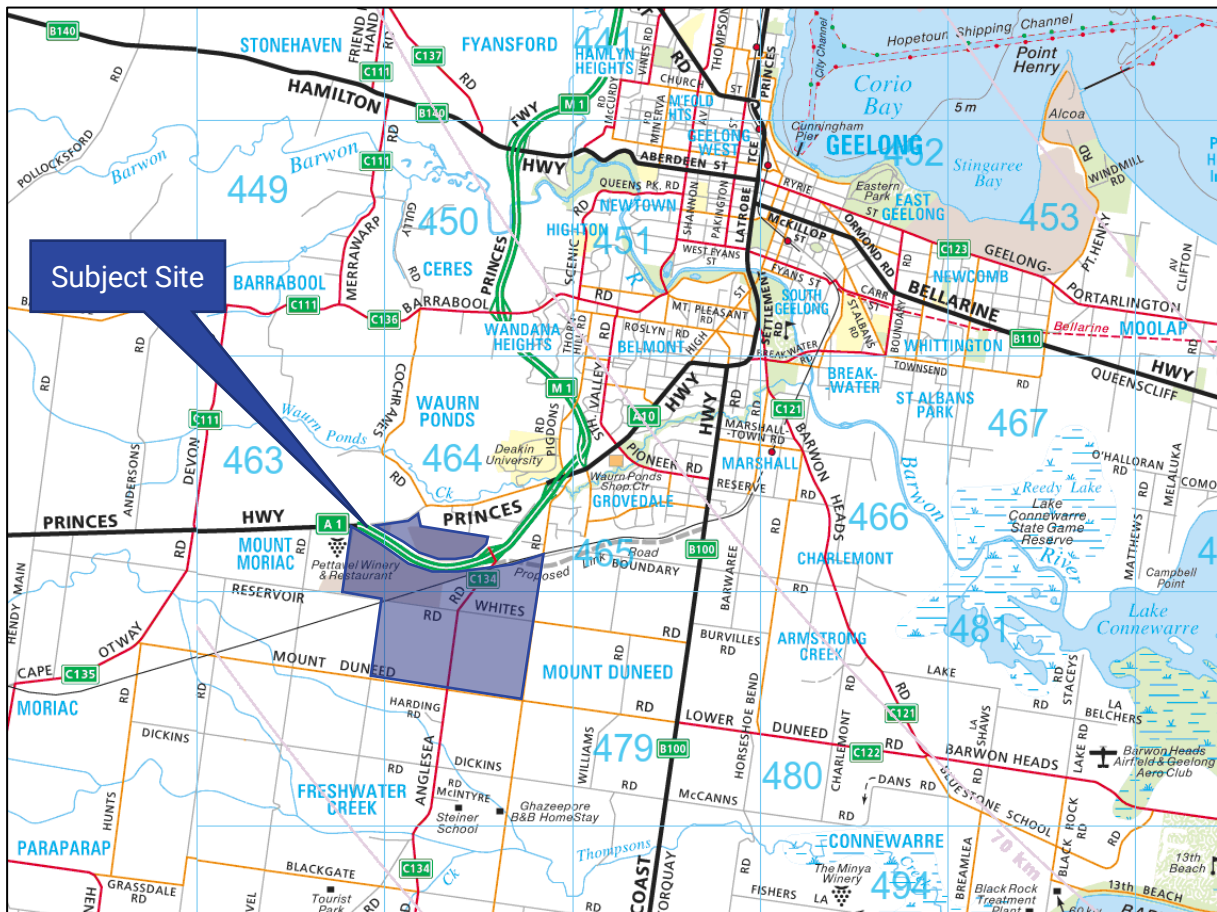


Figure 3: Locality Plan

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The subject land has an area of approximately 1,020 hectares. The northern portion of the land is bisected in an east-west alignment by the Geelong Ring Road, and also bisected diagonally by the Geelong-Warrnambool rail line. There are also a number of existing road reservations that separate the land parcel. These include Anglesea Road in a north-south alignment, Reservoir Road / Whites Road in an east-west alignment.

The site has an existing underpass at each of the railway line and the Geelong Ring Road.

An aerial photograph of the site and its surrounds is shown at Figure 4.



Figure 4: Aerial Photograph

Source: Nearmap

Boral has operated the northern portion of the land as a quarry and cement manufacturing facility for more than 50 years. The cement manufacturing component is located on the northern side of Reservoir Road.

The primary accesses to the quarry and cement facility are from Reservoir Road, between Anglesea Road and the railway crossing. Secondary (service accesses) are available from Draytons Road, McPherson Road, and the roundabout interchange of the Geelong Ring Road and Baanip Boulevard. There is no direct access to Anglesea Road or the Geelong Ring Road.

There are also farming type accesses to Mt Duneed Road, Ghazeeport Road and Anglesea Road.

The subject site is zoned 'Special Use Zone (SUZ7)' under the Greater Geelong Planning Scheme.

Land uses within the immediate area surrounding the site are generally farming land or rural living residential land. However, to the immediate east for the northern portion of the land, across Ghazeepore Road, is the Armstrong Creek Growth Area. More specifically, the Armstrong Creek West Precinct and the Western Industrial Precinct.

The Waurn Ponds Town Centre and Deakin University are located approximately 2km to the north, and Waurn Ponds Railway Station is located approximately 500 metres to the east.

3.2. Road Network

A summary of the existing road network in the vicinity of the site is provided at Table 1.

Table 1: Road Network Existing Conditions Summary

Road	Responsible Authority	Road Classification ¹	Configuration	Speed Limit
Reservoir Rd	Council	Collector Road – Rural (Cat 3)	Sealed, 1 traffic lane each direction, 18m road reserve	60-100km/h
Anglesea Rd	VicRoads	Arterial Road (Road Zone Cat 1)	Sealed, 1 traffic lane each direction, 20m road reserve at the southern end broadening to the north	80km/h
McPherson Rd	Council	Local Road – Rural (Cat 2)	Unsealed, approximate 7m carriageway, 20m road reserve	Default rural 100km/h
Waurn Ponds Dr	Council	Local Road – Rural (Cat 2)	Sealed, 1 traffic lane each direction, 39m road reserve (approx.)	80km/h
Luggs Rd	Council	Local Road – Rural (Cat 2)	Sealed, approximate 6m carriageway	Default rural 100km/h
Draytons Rd	Council	Local Road – Rural (Cat 2)	Unsealed, approximate 6.8m carriageway	Default rural 100km/h
Baanip Blvd	VicRoads	Arterial Road (Road Zone Cat 1)	Sealed, 1 traffic lane each direction	80km/h
Whites Rd	Council	Local Road – Rural (Cat 2)	Unsealed, approximate 8.9m carriageway	Default rural 100km/h
Mt Duneed Rd	VicRoads	Arterial Road	Sealed, 1 traffic lane each direction	90km/h

¹ The road classification for Council managed roads is based on the City of Greater Geelong Municipal Public Road Register.

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Bogans Lane	Council	Local Road – Rural (Cat 2)	Unsealed, approximate 7m carriageway	Default rural 100km/h
Ghazepore Rd	Council	Main Distributor – Urban (Cat 4)	Sealed, 1 traffic lane each direction	60km/h
Geelong Ring Rd	VicRoads	Freeway	Divided road with 2 traffic lanes each direction	100km/h

Photographs of the surrounding road network are provided in Figure 5 to Figure 10.



Figure 5: Reservoir Road (view east)



Figure 6: Reservoir Road (view west)



Figure 7: Anglesea Road (view north)



Figure 8: Anglesea Road (view south)



Figure 9: Draytons Road (view north)



Figure 10: Whites Road (view east)

3.3. Pedestrian and Cyclists

There is existing bicycle and pedestrian infrastructure near the freeway interchange with Anglesea Road. This includes an off-road shared path along both sides of Princes Highway (Geelong Ring Road), and on-road bicycle lanes along Baanip Boulevard and Anglesea Road.

The existing bicycle facilities provide a route to a number of key locations in the nearby area including Waurn Ponds Shopping Centre, Deakin University (Waurn Ponds Campus) and Waurn Ponds Railway Station via an underpass of the Geelong Ring Road and connection via Hams Road.

An excerpt of the City of Greater Geelong Walking and Cycling Shared Paths Map with the additional existing infrastructure discussed above is shown at Figure 11.



Figure 11: Nearby Bicycle and Pedestrian Network

3.4. Development Potential

The site has an area of approximately 1,020 hectares.

The site, if developed for urban purposes, is likely to include uses similar to the northern and western growth areas, including residential, employment and activity centres.

4. Transport Considerations

4.1. Planning Policy

The State Planning Policy Framework sets objectives to locate urban growth close to transport corridors and services and provide efficient and effective infrastructure to create sustainability benefits.

Under Land Use and Transport Planning, a strategy is to develop integrated and accessible transport networks to connect people to jobs and services.

At a local level the following policies are relevant to the provision of transport.

Municipal Strategic Statement – Clause 21

Clause 21.02 of the Geelong Planning Scheme identifies the following objectives and associated strategies in relation to transport:

21.02 2. City of Greater Geelong Sustainable Growth Framework

Council will:

- *Strive to develop a comprehensive network of accessible public transport.*
- *Deliver safe, accessible linkages within and between towns that encourage walking, cycling and the use of alternative modes of transport.*
- *Work with others to generate sustainable solutions to freight and people movement.*
- *Look to the future when planning for and designing infrastructure.*

21.08-2 Transport

Objectives

- *To develop a safe, accessible, equitable and efficient traffic, transport and freight network.*

Strategies

- *Facilitate the development of Geelong Railway Station as Geelong's principal public transport hub.*
- *Improve transport links, particularly public transport links, between existing and new residential areas, employment nodes and activity centres.*
- *Enhance the industrial and business transport linkages between industrial areas and activity centres and road, rail and port infrastructure.*

4.2. Geelong Transport Characteristics

The City of Geelong's community statistics reveal that in 2016, car as driver (68.6%) was the predominant mode of travel to / from work. Trains were used by 3.7% of the population, whilst buses were used by only 1.5% of the population.

The data also reveals that 83% of employees within the municipality of Geelong reside in Geelong, with a large proportion of this expected to be employment within the CAD area.

A Clever and Creative Future is a Geelong endorsed community document. It sets goals to achieve its vision by 2047, with one of those goals to have 50% of journeys to work made by public, transport, walking or cycling.

This suggests that any new communities need to be provided with good accessibility to sustainable transport modes from the on-set of development to establish good travel behaviour. Importantly, based on the place of employment for Geelong residents, good transport accessibility to the CAD is essential.

4.3. Potential Traffic Generation

The subject land is approximately half the size of the western growth area, which is modelled to generate in the order of 210,000 movements per day.

For the purposes of this assessment, and in consideration of the comparative size to the western growth area, it is reasonable to presume the site may generate in the order of 100,000 traffic movements per day.

4.4. Site Transport Accessibility

4.4.1. Public Transport

Rail

Stations along the Geelong line between North Shore Station and Waurn Ponds Station are on average approximately 3 kilometres apart.

Funding is committed for the duplication of the Geelong rail line between Geelong and Waurn Ponds Station, including an upgrade of Waurn Ponds Station.

The Geelong-Warrnambool rail line diagonally bisects the western portion of the land.

If Boral's land was rezoned, a logical extension of the duplication of the rail line from Waurn Ponds would allow development of a new train station in the western portion of the site, which would be around 3 kilometres from Waurn Ponds Station. This spacing is consistent with other stations along the line.

The station would also be located approximately at the centroid of the land affording public transport accessibility to all future residents.

In my view, rail transport is the most important mode for future development, as it is currently the most used of the public transport modes, and has the highest carrying capacity. It also would connect the subject land with the Geelong CAD, where there is the highest level of employment within the municipality.

To this end, comparatively development of the land would provide the best opportunity for Council to meet its aspiration to increase the modal share of sustainable transport modes.

Buses

The current bus accessibility to the subject land is virtually non-existent. This is not unexpected given the nature of the use of the land. The nearest bus routes are 41 and 42, which travel between Geelong Station and Deakin University, via Waurn Ponds Station using Ghazeepore Road.

If Boral's land was to be developed for residential purposes, I am of the view the existing road network could be upgraded to be bus capable, and bus services could be established or existing services re-routed to service the subject land.

4.4.2. Roads

The subject land has excellent access to the existing road network, with a number of roads bisecting the broader land parcel. This provides a variety of access opportunities. Most importantly, the site has convenient access to the Geelong Ring Road, and Surf Coast Highway via Baanip Boulevard.

In greenfield areas, planning principles apply development of a one mile grid for arterial roads, with connector roads often spaced at 800 metre centres to supplement the arterial network. The road network within the area of the subject land is largely already in place to foster development of the one mile grid arterial network.

My firm has prepared a concept sketch to illustrate a possible arterial / collector road network, attached as Appendix B. The network shows and would benefit from:

- Provision of land to widen the reservation of Reservoir Road / Whites Road, between Bogans Lane and Ghazeepore Road, to 40 metres, and construction of the road to urban standards.
- Construction of Mount Duneed Road, single carriageway to an arterial standard.
- Provision of land to widen the reservation of Anglesea Road to 40 metres, between Mount Duneed Road and Baanip Boulevard, and construction of the road to urban standards.
- Provision of land to widen the reservation of Ghazeepore Road to 40 metres between Mount Duneed Road and Baanip Boulevard, and construction of the road to urban standards.
- Realignment of the northern section of Bogans Lane to offset the intersection with Reservoir Road from the existing level crossing.
- Construction of Bogans Lane, single carriageway to an arterial standard.
- Construction of Draytons Road to a connector standard.
- Upgrade of the existing Geelong Ring Road rest areas to an interchange.
- Formalisation of the interchange access at Baanip Boulevard to allow access to the northern portion of the subject land.
- Construction of a new arterial connecting the Anglesea Road / Baanip Boulevard interchange with Reservoir Road to the west of the land, via an overpass or underpass (where the rest areas would be upgraded to an interchange).

4.4.3. Bicycles / Pedestrians

Development of the land will provide the opportunity to connect into the existing shared path infrastructure to allow easy access to destinations such as Waurn Ponds Station, Waurn Ponds Shopping Centre and Deakin University.

4.5. Summary

Based on the above assessment, I am of the view that there are no transport related issues that should preclude the future rezoning of the subject land for urban development.


To this end, the indicative settlement boundary could be extended to include the subject land.

5. Conclusions

Having undertaken a traffic engineering and transport assessment of Greater Geelong Planning Scheme Amendment C395,, I am of the opinion that:

1. The subject land is well placed to provide for future rail and bus accessibility.
2. The subject land is well placed to connect to existing bicycle and pedestrian infrastructure.
3. The existing road network provides the opportunity to allow future development of an appropriate road network to accommodate development of the land.
4. There are no transport issues that would preclude the future urban rezoning of the land.
5. From a transport perspective, the settlement boundary could be extended to include the subject land.

I have made all the inquiries that I believe are desirable and appropriate and there are no matters of significance I regard as relevant, have been withheld from the Panel.



JASON LEE WALSH
DIRECTOR
TRAFFIX GROUP
6 November 2019



Appendix A

Experience and Qualifications

Name

Jason Lee Walsh - Director, Traffix Group Pty Ltd

Address

Suite 8, 431 Burke Road

GLEN IRIS

VICTORIA 3146

Qualifications

My educational qualifications and membership of professional associations are as follows:-

- Bachelor of Civil Engineering, Monash University
- Bachelor of Science, Monash University
- Member, Victorian Planning & Environmental Law Association

Experience

I have over 20 years experience in Traffic Engineering including,

- 1995-2000 at Turnbull Fenner (now Traffix Group), including short term placements at the cities of Bayside and Whittlesea,
- 2000-2011 at Grogan Richards Pty Ltd (now Cardno),
- 2011-present at Traffix Group.

Areas of Expertise

- Car parking and Traffic.
- Traffic advice and assessment of land uses and development proposals to planning authorities, government agencies, corporations and developers (including major residential, retail, food and drink, commercial, industrial, institutional and mixed use projects).
- Preparation and presentation of evidence before VCAT and Panels.

Expertise to Prepare this Assessment

My experience and expertise over the past 20 years, including involvement with varied forms of developments, qualifies me to comment on the traffic implications of the proposed development.

Instructions

I was instructed by White & Case on behalf of Boral Recycling Pty Ltd to undertake a traffic engineering and transport assessment of Greater Geelong Planning Scheme Amendment C395, with particular attention to the subject land at 130 Reservoir Road, Waurn Ponds.

Facts, Matters and Assumptions Relied Upon

- Greater Geelong Planning Scheme.
- The City of Greater Geelong Settlement Strategy, dated October 2018.
- The Northern and Western Geelong Growth Areas Framework Plan, dated March 2019.
- NWGGA Road and Rail Planning Investigations, prepared by AECOM, dated 5 September 2017.
- Movement and Access Report, prepared by GTA, dated June 2019.
- Armstrong Creek West Precinct Structure Plan, dated September 2012.
- Site inspection.
- Relevant experience.

Documents Taken into Account

See above.

Identity of Persons Undertaking Work

Jason Walsh as per the evidence statement.

Brent Chisholm (Senior Traffic Engineer, Traffix Group) assisted with preparation of the evidence report.

Summary of Opinions

See Conclusions section of the evidence statement.



Appendix B

Potential Road Network

130 Reservoir Road, Waurn Ponds

Traffic Engineering Evidence Statement to Planning Panels Victoria

