

# Attachment to item number 5.1 -

Planning Report Traffic Impact Assessment Noise Report

# Park and Ride Facility at Midway Point

# Sorell Council

Development Application: Development Application - Tasman Highway and Fenton Street, Midway Point.pdf Plans Reference:P1 Date Received:13/10/2023

# Report Supporting a Planning Permit Application October 2023





Department of State Growth

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# 1. Introduction

The Department of State Growth (State Growth) propose to establish a park and ride facility at Midway Point. Under the Tasmanian Planning Scheme - Sorell (the planning scheme), the proposed car parking area associated with this proposal requires a planning permit from Sorell Council.

Other elements shown in the plans, including off-site bus stops, a walking / cycling track, parkiteer (bicycle parking shelter) and fencing are all exempt from a planning permit.

The location of the proposed development is shown below in Figure 1. The proposed plans are at Appendix A.



#### **FIGURE 1 LOCATION**

# 2. Purpose of this report

This report supports a planning permit application for the proposed park and ride facility. It demonstrates that the application complies with the applicable provisions of the planning scheme.

# 3. Strategic Rationale

The proposed park and ride facility is part of the South East Traffic Solution (SETS), a strategic program for improving Tasmania's road network, which is supported by all levels of government.

In terms of strategic alignment with Sorell Council, State Growth has consulted with Council regarding the SETS to ensure community concerns over traffic congestion on the Midway Point area are considered. Further, Objective I of the Sorell Council Strategic Plan 2019-2029 is to Facilitate Regional Growth. This objective includes an action to advocate for and support the delivery of the SETS.

# 4. Project Overview

### 4.1 Proposed Development

As shown in Figure 2, the proposed park and ride facility is adjacent and to the south of Fenton Street. Vehicular access/egress is via a new intersection on Fenton Street. There will be no bus stops in the facility, which will only be comprised of:

- 61 sealed car parking spaces (including 2 DDA [Disability Discrimination Act 1992] compliant spaces);
- 5 sealed motorcycle parking spaces;
- A parkiteer structure for bicycle storage;
- A sealed internal driveway;
- Two small retaining walls (both 0.4m high) adjacent the southern boundaries of 11 and 13 Fenton Street;
- Dual use footpath / cycle path (exempt from a planning permit see subsection 13.3 below);
- Fences and handrails adjacent the dual use footpath / cycle path (exempt from a planning permit see subsection 13.3 below); and
- A range of statutory and regulatory signs (exempt from a planning permit see subsection 13.6 below).



FIGURE 2: PROPOSED LAYOUT

### 4.2 Proposed Use

No new bus stops are proposed, the proposed park and ride facility will only be used for car / motorcycle and bicycle parking. It will operate along the same timelines as the following bus services:

- Weekdays:
  - o first bus departs Midway Point (Fenton St) at 6:08am to Hobart.
- 4 Park and Ride Facility at Midway Point

- o last bus arrives at Midway Point (Tasman Hwy) at 7:03pm from Hobart.
- Weekends/Public Holidays:
  - o first bus departs Midway Point (Fenton St) at 8:08am to Hobart.
  - o last bus arrives at Midway Point (Fenton St) at 7:06pm from Hobart.

In the future it may be possible for an additional bus service to arrive at Midway Point at 8.01pm. However, bus operations are unlikely to ever go beyond 10pm.

### 4.3 Construction Management

State Growth requires all contractors to prepare a Construction Quality Plan that includes an Environmental Management Plan (EMP), demonstrating compliance with best practice guidelines and relevant legislation and regulation. The EMP must be compliant with the State Growth's Road Construction Specifications. EMPs are reviewed and approved by State Growth prior to commencement of works to ensure the contractor has effectively identified, ascribed and accounted for construction related environmental risks, and has necessary systems and processes in place to effectively mitigate risk and respond to and report environmental incidents and emergency scenarios. Additionally, all construction contractors working for State Growth must be prequalified under a national prequalification system and have ISO 14001 certification. Erosion and sediment control is managed through the EMP. Weeds will also be managed by the contractor through the implementation of the EMP (see subsection 5.1.4 below).

Once a planning permit has been issued and a contract awarded, a Traffic Management Plan (TMP) will be prepared in accordance with State Growth's Traffic Control for Works on Roads Tasmanian Guidelines 2011. The TMP is not assessed under the planning permit process. The TMP will ensure that the project maintains a safe workplace for workers and to safely guide road users through work sites. The traffic management measures implemented by the TMP will also comply with Australian Standard – AS1742.3, Manual of uniform traffic control devices, Part 3: Traffic control for works on roads.

### 4.4 Construction Timing

Works are planned to commence in early 2024 and to be completed by late 2024.

# 5. No Significant Natural Values Onsite

#### 5.1.1 Vegetation Communities

A desktop review has been carried out and no vegetation communities listed as threatened under either the Nature Conservation Act 2002 or the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) were noted.

#### 5.1.2 Flora

A desktop review has been carried out and no species of flora listed under either the Tasmanian *Threatened* Species Protection Act 1995 or the EPBC Act are considered likely to be impacted in what is a highly disturbed urban area.

#### 5.1.3 Fauna

A desktop review has been carried out and no species of fauna listed under either the Tasmanian *Threatened* Species Protection Act 1995 or the EPBC Act are considered likely to be impacted in what is a highly disturbed urban area.

#### 5.1.4 Weeds

Weeds will be managed by the contractor through the implementation of the EMP. In order to prevent the spread of declared weeds within and from the municipality, construction machinery will be cleaned prior to first entry to the site as well as when leaving. Any weed material or contaminated soil will be removed from the site and disposed of appropriately to prevent the spread of weeds and diseases. Construction machinery will be cleaned in DPIWE 2004 Washdown Guidelines for Weed and Disease Control Edition 1.

# 6. Traffic Impact Assessment

The Traffic Impact Assessment at Appendix B demonstrates that the proposed park and ride facility complies with the applicable requirements of the Parking and Sustainable Transport Code (see subsection 13.10 below) and the Road and Railway Assets Code (subsection 13.12 below).

# 7. Dispersive Soils Management Plan

The Dispersive Soils Management Plan at Appendix C demonstrates that the proposed development complies with the applicable requirements of the Dispersive Soils Specific Area Plan (see subsection 13.13 below).

# 8. Noise Assessment

The Noise Assessment at Appendix D demonstrates that the proposed Vehicle Parking use complies with Clause 27.3.1 and Clause 29.3.1 of the planning scheme (see subsections 13.8 and 13.9 below). The noise assessment includes an analysis of noise sampling at the site, which indicates that noise emissions from cars utilising the proposed park and ride facility will not cause unreasonable loss of amenity for the adjacent residences.

# 9. External Lighting

The proposed plans at Appendix A show the location of the proposed lighting, which will operate in in accordance with Clause 3.1 "Basis of Design" and Clause 3.6 "Car Parks" in Australian Standard/New Zealand Standard AS/NZS 1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting – Performance and design requirements. This means the lights will operate without having an unreasonable overspill or loss of amenity to the nearby residences and demonstrates compliance with Clause 27.3.1 and Clause 29.3.1 of the planning scheme, (see subsections 13.8 and 13.9 below).

# **10.** Services

### 10.1 Stormwater

The new stormwater design is detailed in plans for the proposed roadworks and will convey stormwater runoff to the existing reticulated stormwater network. A gross pollutant trap has been incorporated into the new drainage line that will run east to west through the site. The existing DN300 stormwater line that runs parallel to the eastern boundary of 15 Fenton Street and then turns in a westerly direction along the northern boundary of the development site will be retained.

### 10.2 Water and Sewer

The existing water supply to the site including the water meter will be relocated to the east of the new vehicular access. Details of the relocation are provided on the drawings included in Appendix A.

Lowering the levels of the site in order to accommodate grades that comply with AS2890 Part 1: Off-street car parking results in the need to relocate a section of both the existing gravity sewer and sewer rising main that are located on the site. Details of the relocation works are provided on the drawings included in Appendix A.

# 11. No Heritage Impacts

### 11.1 Historic Heritage

The proposed development is not located on a property identified in the Tasmanian Heritage Register or the planning scheme's as being a heritage place.

### **11.2 Aboriginal Cultural Heritage**

Under the planning scheme, there are no identified Places of Archaeological Potential. This means there is no requirement to address Aboriginal Cultural Heritage matters in the planning permit application.

Nevertheless, it is worth noting that Aboriginal Heritage Tasmania (AHT) have advised that there is no known Aboriginal heritage recorded in the area of the proposed works (Record of Advice AHDR7402). In accordance with AHT's advice, if any Aboriginal heritage is found during works, the contractor will implement an Unanticipated Discovery Plan.

# **12.** Property Details

Address	Title Ref	PID	Authority	Landowner
None (large lot adjacent the Midland Highway)	179029/100	None	Acquired Road	The Crown (State Growth)
15 Fenton Street, Midway Point	82303/6	5900075	Local Government Authority	Sorell Council
None (small triangular parcel adjacent and to south of 15 Fenton St)	None	None	Road (type unknown)	Sorell Council
None (rectangular lot adjacent and to east of 15 Fenton St)	199953/1	None	Subdivision Road	Joseph Thompson (Sorell Council)

The properties listed in the table below will be impacted by the proposed works. Copies of the titles are at Appendix E.

# **13.** Planning Assessment

### 13.1 Planning Scheme

The applicable planning scheme is the Tasmanian Planning Scheme – Sorell.

### 13.2 Proposed Land Use

#### 13.2.1 Park and Ride Facility is Vehicle Parking

The permit application is for a park and ride facility, which only includes car and bicycle parking (there will be no onsite bus stops). Therefore, the proposed land use is Vehicle Parking. Under the planning scheme's Table 6.2 Use Classes, Vehicle Parking means:

• use of land for the parking of motor vehicles. Examples include single and multi-storey car parks.

#### 13.2.2 Dual Use Walking / Cycling Track is Minor Utilities

The proposed dual use walking / cycling track is Minor Utilities, which means use of land for utilities for local distribution or reticulation of services and associated infrastructure such as a <u>footpath</u>, <u>cycle path</u>, stormwater channel, water and sewer pipes, retention basin, telecommunication lines, gas pipelines or electricity substations and power lines up to but not exceeding 110kV.

However, it should be noted that the proposed dual use walking / cycling track is Minor Utilities is exempt from a planning permit under Clause 4.2.7.

### 13.3 Applicable Planning Exemptions

The table below demonstrates that the proposed dual use walking / cycling track is exempt from a planning permit.

Clause	Exemption	Effect of Exemption on Proposal
4.2.7	Minor infrastructure: provision, maintenance and modification of <u>footpaths</u> , <u>cycle paths</u> , playground equipment, seating, shelters, bus stops and bus shelters, street lighting, telephone booths, public toilets, post boxes, cycle racks, fire hydrants, drinking fountains, rubbish bins, public art, and the like by, or on behalf of, the Crown, a council or a state authority	The proposed dual use walking / cycling track (including hand rails and safety barriers), bus shelter (offsite) and parkiteer are all minor infrastructure and are exempt from a planning permit.
4.6.3	<ul> <li>Fences (including free-standing walls) within 4.5m of a frontage, if located in: <ul> <li>(a) the General Residential Zone, Inner Residential Zone, Low Density Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone, Central Business Zone, Commercial Zone or any particular purpose zone, and if not more than a height of: <ul> <li>i. 1.2m above existing ground level if the fence is solid; or</li> <li>ii. 1.8m above existing ground level, if the fence has openings above the height of 1.2m which provide a uniform transparency of at least 30% (excluding any posts or uprights);</li> </ul> </li> <li>(b) the Utilities Zone and adjoining a property in the General Residential Zone, Inner Residential Zone, Low Density Residential Zone or Village Zone and if not more than a height of: <ul> <li>i. 1.2m above existing ground level if the fence is solid; or</li> <li>i. 1.2m above existing a property in the General Residential Zone, Inner Residential Zone, Low Density Residential Zone or Village Zone and if not more than a height of: <ul> <li>i. 1.2m above existing ground level if the fence is solid; or</li> <li>i. 1.2m above existing ground level if the fence has openings above the height of 1.2m which provide a uniform transparency of at least 30% (excluding any post or upright);</li> </ul> </li> </ul></li></ul></li></ul>	<ul> <li>All new fences in the General Residential Zone and the Community Purpose Zone are exempt, including the:</li> <li>DDA compliant hand rails, which are 1.2m high; and</li> <li>Safety barriers, which are 0.8m high.</li> </ul>
	<ul> <li>(c) any other zone, or if located in the Utilities Zone and not adjoining a property in the General Residential Zone, Inner Residential Zone, Low</li> </ul>	

Dens not m	ity Residential Zone or Village Zone and if nore than a height of:	
i.	1.8m above existing ground level if adjoining public land; or	
ii.	<ol> <li>I m above existing ground level if not adjoining public land,</li> </ol>	
unless the requires a	e Local Historic Heritage Code applies and permit for the use or development.	

## 13.4 Zones

As shown in Figure 3 below, the proposal is located in the following zones:

- I. Community Purpose Zone; and
- 2. Open Space Zone.

Please note that the only parts of the development located in the General Residential Zone are the walking / cycling track and associated DDA compliant handrail and safety barrier, which are all exempt from a planning permit (see subsection 11.3 above).





### 13.5 Planning Overlays

The proposed development area is variously located in the:

- Airport Obstacle Limitation Area (see comments on Safeguarding of Airports Code in subsection 13.6 below); and
- Dispersive Soils Specific Area Plan, where the Dispersive Soils Specific Area Plan applies (see subsection 13.12 below).

### 13.6 Codes

The table below identifies the applicable codes and those which are not applicable.

Code	Comment
C1.0 Signs Code	All signs are either statutory or regulatory and are exempt
	from a permit under Table CI.4 Exempt Signs.
C2.0 Parking and Sustainable Transport	Applies – see subsection 13.10 below.
Code	
C3.0 Road and Railway Assets Code	Applies – see subsection 13.11 below.
C4.0 Electricity and Transmission	Not applicable.
Infrastructure Protection Code	
C5.0 Telecommunications Code	Not applicable.
C6.0 Local Historic Heritage Code	Not applicable.
C7.0 Natural Assets Code	Not applicable.
C8.0 Scenic Protection Code	Not applicable.
C9.0 Attenuation Code	Not applicable.
C10.0 Coastal Erosion Hazard Code	Not applicable.
CII.0 Coastal Inundation Hazard Code	Not applicable.
C12.0 Flood-Prone Area Hazards Code	Not applicable.
C13.0 Bushfire-Prone Areas Code	Not applicable under Clause C13.2.1, for the following
	reasons:
	• The permit application does not include subdivision; and
	• The proposed Vehicle Parking use is not categorised as
	a vulnerable use or a hazardous use.
CI4.0 Potentially Contaminated Land Code	Not applicable.
C15.0 Landslip Hazard Code	Not applicable.
C16.0 Safeguarding of Airports Code	Exempt under C16.4.1(a) because no buildings are
	proposed, which would exceed the AHD height specified for
	the site of the development in the relevant airport obstacle
	limitation area.

### 13.7 Requirement for a Planning Permit

The proposal requires a planning permit for the following reasons:

- the Vehicle Parking use is a Discretionary use in the:
  - Community Purpose Zone; and
  - Open Space Zone; and
- the proposal relies on compliance with various performance criteria, as detailed in the subsections below.

### 13.8 Community Purpose Zone

Most of the park and ride facility is in this zone. The assessment below demonstrates that the proposal is consistent with the zone's purpose and complies with the applicable standards.

#### 13.8.1 Purpose

Purpose	Assessment
27.1.1 To provide for key community facilities and services including health, educational, government, cultural and social facilities.	As the proposed park and ride facility is for the community, it is consistent with 27.1.1.
27.1.2 To encourage multi-purpose, flexible and adaptable social infrastructure.	The proposed park and ride is social infrastructure and does not conflict with 27.1.2.

#### 13.8.2 Use Standards

The following standards do not apply:

- 27.3.1 Non-residential use:
  - o A3 / P3 (the proposal is for a park and ride facility, not recreational facilities); and
  - A4/P4 (the park and ride will not attract commercial vehicles for deliveries etc).

### 27.3.1 Non-residential use

Objective: That non-residential use does not cause an unreasonable loss of amenity to residential zones.

Acceptable Solution	Performance Criteria
AI	PI
Hours of operation of a use, excluding Emergency Services, Hospital Services, Natural and Cultural Values Management, Passive Recreation or Utilities, within 50m of a General Residential Zone, Inner Residential Zone or Low Density Residential Zone, must be within the hours of:	Hours of operation of a use, excluding Emergency Services, Hospital Services, Natural and Cultural Values Management, Passive Recreation or Utilities, within 50m of a General Residential Zone, Inner Residential Zone or Low Density Residential Zone, must not cause an unreasonable loss of amenity to an adjacent residential use having regard to:
<ul> <li>(a) 8.00am to 8.00pm Monday to Friday;</li> <li>(b) 9.00am to 6.00pm Saturday; and</li> <li>(c) 10.00am to 5.00pm Sunday and public holidays.</li> </ul>	<ul><li>(a) the timing, duration or extent of vehicle movements; and</li><li>(b) noise, lighting or other emissions.</li></ul>

#### Assessment

The proposed park and ride facility is within 50m of the General Residential Zone and will be used before 8am. The proposal satisfies PI for the following reasons:

- (a) The park and ride facility will operate between the 6.08am Fenton St bus service and 7.06pm (current bus service) or 8.01pm (for a potential future bus service);
- (b) The Noise Assessment at Appendix D demonstrates that the proposed Vehicle Parking use will have no adverse noise impacts on the nearby General Residential Zone. The proposed plans at Appendix A show the location of the proposed lighting, which will operate in in accordance with Clause 3.1 "Basis of Design" and Clause 3.6 "Car Parks" in Australian Standard/New Zealand Standard AS/NZS I 158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting – Performance and design requirements.

A2	P2
External lighting for a use, excluding Natural	External lighting for a use, excluding Natural and
and Cultural Values Management, Passive	Cultural Values Management, Passive Recreation and
Recreation and Utilities and flood lighting of	Utilities and flood lighting of Sports and Recreation
Sports and Recreation facilities, on a site within	facilities, within 50m of a General Residential Zone,

50m of a General Residential Zone, Inner	Inner Residential Zone, and Low Density Residential	
Residential Zone, or Low Density Residential	Zone, must not cause an unreasonable loss of amenity	
Zone, must:	to the residential zones, having regard to:	
<ul> <li>(a) not operate between 9:00pm and 6:00am, excluding any security lighting; and</li> <li>(b) if for security lighting, must be baffled so that direct light does not extend into the adjoining property.</li> </ul>	<ul><li>(a) the level of illumination and duration of lighting; and</li><li>(b) distance to habitable rooms of an adjacent dwelling.</li></ul>	

#### Assessment

The proposed Vehicle Parking use will incorporate external lighting and is within 50m of the General Residential Zone. The proposal complies with A1 for the following reasons:

- (a) The proposed lighting will operate in in accordance with Clause 3.1 "Basis of Design" and Clause 3.6 "Car Parks" in Australian Standard/New Zealand Standard AS/NZS 1158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting Performance and design requirements. The lighting will operate, when necessary, between the 6.08am Fenton St bus service, and 7.06pm (current bus service) or 8.01pm (for a potential future bus service);
- (b) The proposed plans at Appendix A show the location of the proposed lighting. The closest light to a habitable room will be approximately 14m from the room at 13 Fenton Street.

#### 13.8.3 Development Standards

The following standards are not applicable:

- 27.4.1 Building height (the parkiteer is exempt see subsection 11.3 above);
- 27.4.2 Setback (the parkiteer is exempt see subsection 11.3 above);
- 27.4.3 Fencing (there is no fencing in this zone);
- 27.4.4 Outdoor storage areas (not proposed); and
- 27.5 Development Standards for Subdivision (not proposed).

#### 27.4.1 Building height

Objective: That building height:

(a) is compatible with the streetscape; and

(b) does not cause an unreasonable loss of amenity to adjoining residential properties.

Acceptable Solution	Performance Criteria
AI Building height must be not more than 10m.	<ul> <li>PI</li> <li>Building height must be compatible with the streetscape and character of development existing on established properties in the area, having regard to:</li> <li>(a) the topography of the site;</li> <li>(b) the height, bulk and form of existing buildings on the site and adjacent properties;</li> <li>(c) the bulk and form of proposed buildings;</li> <li>(d) the apparent height when viewed from the road and public places;</li> <li>(e) any overshadowing of adjoining properties or public places; and</li> <li>(f) the need to locate the building on the site.</li> </ul>

#### Assessment

The only buildings in this zone that require a planning permit are the two small retaining walls (both 0.4m high) adjacent the southern boundaries of 11 and 13 Fenton Street. As the proposed retaining walls are no more than 0.4m high, the proposal complies with A1.

27.4.2 Setback			
Objective: That building setback: (a) is compatible with the streetscape; and (b) does not cause an unreasonable loss of residential amenity to adjoining residential zones.			
Acceptable Solution	Performance Criteria		
AI	PI		
Buildings must have a setback from a frontage of:	Buildings must have a setback from a frontage that is compatible with the streetscape, having regard to:		
<ul> <li>(a) not less than 5m; or</li> <li>(b) not more or less than the maximum and minimum setbacks of the buildings on adjoining properties, whichever is the lesser.</li> </ul>	<ul> <li>(a) the topography of the site;</li> <li>(b) the setbacks of buildings on adjacent properties;</li> <li>(c) the height, bulk and form of existing and proposed buildings; and</li> <li>(d) the safety of road users.</li> </ul>		
Assessment Frontage means a boundary of a lot which abuts a road. The only buildings in this zone that require a planning permit are the two small retaining walls adjacent the southern boundaries of 11 and 13 Fenton Street. As the proposed retaining walls are more than 5m from a frontage, the proposal complies with A1(a).			
A2	P2		
Buildings must have a setback from side and rear boundaries adjoining a General Residential one, Inner Residential Zone or Low Density Residential Zone not less than:	Buildings must be sited to not cause an unreasonable loss of amenity to adjoining properties within a General Residential Zone, Inner Residential Zone or Low Density Residential Zone, having regard to:		
<ul><li>(a) 3m; or</li><li>(b) half the wall height of the building, whichever is the greater.</li></ul>	<ul> <li>(a) overshadowing and reduction in sunlight to habitable rooms and private open space of dwellings;</li> <li>(b) overlooking and reduction of privacy to adjoining properties; or</li> <li>(c) visual impacts caused by the apparent scale, bulk or proportions of the building when viewed from the adjoining property.</li> </ul>		

#### Assessment

The proposed retaining walls satisfy P2 for the following reasons:

- (a) Due to their location, the proposed retaining walls will not result in any overshadowing or reduction in sunlight to habitable rooms or private open space of the adjoining dwellings;
- (b) The proposed retaining walls will not result in any overlooking or reduction of privacy to adjoining properties; or
- (c) Due to their location and height (no more than 0.4m high), the proposed retaining walls will not result in any adverse visual impacts.

## 13.9 Open Space Zone

Only the western portion of the dual use walking/cycling path is located in this zone. The assessment below demonstrates that the proposal is consistent with the zone's purpose and complies with the applicable standards.

#### 13.9.1 Purpose

Purpose	Assessment
29.1.1 To provide land for open space purposes including for passive recreation and natural or landscape amenity.	As the proposed Vehicle Parking use is permissible in this zone, it does not conflict with 29.1.1.
29.1.2 To provide for use and development that supports the use of the land for open space purposes or for other compatible uses.	As the proposed Vehicle Parking use is permissible in this zone, it does not conflict with 29.1.2.

#### 13.9.2 Use Standards

The following standard does not apply:

• 29.3.1 Discretionary uses: A2 / P2 (the proposal is for a park and ride facility, not recreational facilities).

#### 29.3.1 Discretionary uses

Objective: That a use listed as Discretionary, does not cause an unreasonable loss of amenity to adjacent sensitive uses.

Acceptable Solution	Performance Criteria
AI Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor Accommodation, must be within the hours of:	PI Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor Accommodation, must not cause an unreasonable loss of amenity to adjacent sensitive uses having regard to:
<ul> <li>(a) 8.00am to 10.00pm if within 50m of a General Residential Zone, Inner Residential Zone or Low Density Residential Zone; or</li> <li>(b) 6.00am to midnight, otherwise.</li> </ul>	<ul><li>(a) the timing, duration or extent of vehicle movements; and</li><li>(b) noise, lighting or other emissions.</li></ul>

#### Assessment

The proposed park and ride facility is within 50m of the General Residential Zone and will be used before 8am. The proposal satisfies P1 for the following reasons:

- (a) The park and ride facility will operate between the 6.08am Fenton St bus service and 7.06pm (current bus service) or 8.01pm (for a potential future bus service);
- (c) The Noise Assessment at Appendix D demonstrates that the proposed Vehicle Parking use will have no adverse noise impacts on the nearby General Residential Zone. The proposed plans at Appendix A show the location of the proposed lighting, which will operate in in accordance with Clause 3.1 "Basis of Design" and Clause 3.6 "Car Parks" in Australian Standard/New Zealand Standard AS/NZS I 158.3.1:2005 Lighting for roads and public spaces Part 3.1: Pedestrian area (Category P) lighting – Performance and design requirements.

#### 13.9.3 Development Standards

The following standards are not applicable:

- 29.4.1 Building height, setback and siting: A4 / P4 (the proposal does not include any air extraction, pumps, refrigeration systems, compressors or generators);
- 29.4.2 Outdoor storage areas (not proposed); and
- 29.5 Development Standards for Subdivision (not proposed).

#### 29.4.1 Building height, setback and siting

Objective: That building bulk, height, form and siting:

- (a) is compatible with the streetscape;
- (b) does not cause unreasonable loss of amenity to adjacent properties;
- (c) respects the natural and landscape values of the site; and
- (d) minimises opportunities for crime and anti-social behaviour through setback of buildings.

Acceptable Solution	Performance Criteria
AI Building height must be not more than 10m.	<ul> <li>PI</li> <li>Building height must not cause an unreasonable loss of amenity to adjacent properties, having regard to: <ul> <li>(a) the topography of the site;</li> <li>(b) the height, bulk and form of existing buildings on the site and adjacent properties;</li> <li>(c) the bulk and form of proposed buildings;</li> <li>(d) the requirements of the proposed use;</li> <li>(e) sunlight to private open space and windows of habitable rooms of dwellings on adjoining properties;</li> <li>(f) the privacy of the private open space and windows of habitable rooms of dwellings on adjoining properties; and</li> <li>(g) any overshadowing of adjacent public places.</li> </ul> </li> </ul>

#### Assessment

The only building in this zone that requires a planning permit is a small retaining wall adjacent the eastern boundary of 13 Fenton Street, which is no more than 0.4m high and complies with A1.

A2	P2
<ul> <li>Buildings must have a setback from a frontage of:</li> <li>(a) not less than 5m; or</li> <li>(b) not more or less than the maximum and minimum setbacks of the buildings on adjoining properties, whichever is the adjoining properties.</li> </ul>	<ul> <li>Buildings must have a setback from a frontage that is compatible with the streetscape and minimises opportunities for crime and anti-social behaviour, having regard to:</li> <li>(a) providing small variations in building alignment to break up long building façades;</li> <li>(b) providing variations in building alignment to</li> </ul>
	<ul> <li>provide a forecourt or space for public use, such as outdoor dining or landscaping;</li> <li>(c) the avoidance of concealment spaces;</li> <li>(d) the ability to achieve passive surveillance; and</li> <li>(e) the availability of lighting.</li> </ul>

#### Assessment

Frontage means a boundary of a lot which abuts a road. The only building in this zone that requires a planning permit is a small retaining wall adjacent the eastern boundary of 13 Fenton Street. As the proposed retaining walls are more than 5m from a frontage, the proposal complies with A1(a).

A3	P3
Buildings must have a setback from side and rear boundaries adjoining a General Residential Zone, Inner Residential Zone or Low Density Residential Zone not less than:	Buildings must be sited to not cause an unreasonable loss of amenity to adjoining properties in a General Residential Zone, Inner Residential Zone or Low Density Residential Zone, having regard to:
<ul><li>(a) 3m; or</li><li>(b) half the wall height of the building, whichever is the greater.</li></ul>	<ul> <li>(a) overshadowing and reduction in sunlight to habitable rooms and private open space of dwellings;</li> <li>(b) overlooking and reduction of privacy of adjoining properties; or</li> <li>(c) visual impacts caused by the apparent scale, bulk or proportions of the building when viewed from the adjoining property.</li> </ul>

#### Assessment

The proposed retaining walls satisfy P2 for the following reasons:

- (a) Due to its location, the proposed retaining wall will not result in any overshadowing or reduction in sunlight to habitable rooms or private open space of the adjoining dwellings;
- (b) The proposed retaining wall will not result in any overlooking or reduction of privacy to adjoining properties; or
- (c) Due its location and height (no more than 0.4m high), the proposed retaining walls will not result in any adverse visual impact.

### 13.10 Parking and Sustainable Transport Code

This code applies to all use and development and there are no exemptions. The Traffic Impact Assessment at Appendix C of this report has been used to assist with the planning assessment for this Code. As the proposed development complies with the applicable standards, it complies with the purpose of the code, which is:

- C2.1.1 To ensure that an appropriate level of parking facilities is provided to service use and development.
- C2.1.2 To ensure that cycling, walking and public transport are encouraged as a means of transport in urban areas.
- C2.1.3 To ensure that access for pedestrians, vehicles and cyclists is safe and adequate.
- C2.1.4 To ensure that parking does not cause an unreasonable loss of amenity to the surrounding area.
- C2.1.5 To ensure that parking spaces and accesses meet appropriate standards.
- C2.1.6 To provide for parking precincts and pedestrian priority streets.

#### 13.10.1 Use Standards

The following use standards are not applicable:

• C2.5.1 Car Parking Numbers (under Table C2.1, there are no requirements for the proposed Vehicle Parking use to provide car parking spaces);

- C2.5.2 Bicycle Parking Numbers (under Table C2.1, there are no requirements for the proposed Vehicle Parking use to provide bicycle parking spaces);
- C2.5.3 Motorcycle Parking Numbers (under Clause C.2.2.2, there are no requirements for the proposed Vehicle Parking use to provide motorcycle parking bays);
- C2.5.4 Loading Bays (under Clause C.2.2.3, there are no requirements for the proposed Vehicle Parking use to provide loading bays); and
- C2.5.5 Number of Spaces within the General Residential and Inner Residential Zone because (the development area is not located in these zones).

#### 13.10.2 Development Standards

The following standards are not applicable:

- C2.6.3 Number of accesses for vehicles (the development area is not located in the Central Business Zone);
- C2.6.4 Lighting of parking areas within the General Business Zone and Central Business Zone (the development area is not located in these zones);
- C2.6.6 Loading bays (the planning scheme does not require loading bays for the Vehicle Parking use and none are proposed);
- C2.6.7 Bicycle parking and storage facilities within the General Business Zone and Central Business Zone (the development area is not located in these zones);
- C2.6.8 Siting of parking and turning areas (the development area is not located within the Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone or Central Business Zone).

C2.6.1 Construction of parking areas		
Objective: That parking areas are constructed to an appropriate standard.		
Acceptable Solution	Performance Criteria	
<ul> <li>AI</li> <li>All parking, access ways, manoeuvring and circulation spaces must: <ul> <li>(a) be constructed with a durable all weather pavement;</li> </ul> </li> <li>(b) be drained to the public stormwater system, or contain stormwater on the site; and</li> <li>(c) excluding all uses in the Rural Zone, Agriculture Zone, Landscape Conservation Zone, Environmental Management Zone, Recreation Zone and Open Space Zone, be surfaced by a spray seal, asphalt, concrete, pavers or equivalent material to restrict abrasion from traffic and minimise entry of water to the pavement.</li> </ul>	<ul> <li>PI</li> <li>All parking, access ways, manoeuvring and circulation spaces must be readily identifiable and constructed so that they are useable in all weather conditions, having regard to: <ul> <li>(a) the nature of the use;</li> <li>(b) the topography of the land;</li> <li>(c) the drainage system available;</li> <li>(d) the likelihood of transporting sediment or debris from the site onto a road or public place;</li> <li>(e) the likelihood of generating dust; and</li> <li>(f) the nature of the proposed surfacing.</li> </ul> </li> </ul>	
Assessment		

The Traffic Impact Assessment at Appendix B demonstrates that the proposal complies with AI.

#### C2.6.2 Design and layout of parking areas

Objective: That parking areas are designed and laid out to provide convenient, safe and efficient parking.		
Acceptable Solution	Performance Criteria	
<ul> <li>A1.1</li> <li>Parking, access ways, manoeuvring and circulation spaces must either: <ul> <li>(a) comply with the following:</li> <li>(i) have a gradient in accordance with Australian Standard AS 2890 - Parking facilities, Parts 1-6;</li> <li>(ii) provide for vehicles to enter and exit the site in a forward direction where providing for more than 4 parking spaces;</li> <li>(iii) have an access width not less than the requirements in Table C2.2;</li> <li>(iv) have car parking space dimensions which satisfy the requirements in Table C2.3;</li> <li>(v) have a combined access and manoeuvring width adjacent to parking spaces not less than the requirements in Table C2.3 where there are 3 or more car parking spaces;</li> <li>(vi) have a vertical clearance of not less than 2.1m above the parking surface level; and</li> <li>(vii) excluding a single dwelling, be delineated by line marking or other clear physical means; or</li> <li>(b) comply with Australian Standard AS 2890-Parking facilities, Parts 1-6.</li> </ul> </li> </ul>	<ul> <li>P1</li> <li>All parking, access ways, manoeuvring and circulation spaces must be designed and readily identifiable to provide convenient, safe and efficient parking, having regard to: <ul> <li>(a) the characteristics of the site;</li> <li>(b) the proposed slope, dimensions and layout;</li> <li>(c) useability in all weather conditions;</li> <li>(d) vehicle and pedestrian traffic safety;</li> <li>(e) the nature and use of the development;</li> <li>(f) the expected number and type of vehicles;</li> <li>(g) the likely use of the parking areas by persons with a disability;</li> <li>(h) the nature of traffic in the surrounding area;</li> <li>(i) the proposed means of parking delineation; and</li> <li>(j) the provisions of Australian Standard AS 2890.1:2004 - Parking facilities, Part 1: Off-street car parking and AS 2890.2 -2002 Parking facilities, Part 2: Off-street commercial vehicle facilities.</li> </ul> </li> </ul>	
<ul> <li>Parking spaces provided for use by persons with a disability must satisfy the following:</li> <li>(a) be located as close as practicable to the main entry point to the building;</li> <li>(b) be incorporated into the overall car park design; and</li> <li>(c) be designed and constructed in accordance with Australian/New Zealand Standard AS/NZS 2890.6:2009 Parking facilities, Offstreet parking for people with disabilities.</li> </ul>		

The Traffic Impact Assessment at Appendix B demonstrates that the proposal complies with A1.1 and AI.2.

### C2.6.3 Number of accesses for vehicles

**Objective:** That:

(a) access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses;

(b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and

(c) the number of accesses minimise impacts on the streetscape.

Acceptable Solution	Performance Criteria
AI	PI
The number of accesses provided for each frontage must:	The number of accesses for each frontage must be minimised, having regard to:
<ul> <li>(a) be no more than 1; or</li> <li>(b) no more than the existing number of accesses,</li> <li>whichever is the greater.</li> </ul>	<ul> <li>(a) any loss of on-street parking; and</li> <li>(b) pedestrian safety and amenity;</li> <li>(c) traffic safety;</li> <li>(d) residential amenity on adjoining land; and</li> <li>(e) the impact on the streetscape.</li> </ul>

### Assessment

The Traffic Impact Assessment at Appendix B demonstrates that the proposal complies with AI.

C2.6.5 Pedestrian access	
That pedestrian access within parking areas is pro	vided in a safe and convenient manner.
Acceptable Solution	Performance Criteria
<ul> <li>A1.1</li> <li>Uses that require 10 or more car parking spaces must:</li> <li>(a) have a 1m wide footpath that is separated from the access ways or parking aisles, excluding where crossing access ways or parking aisles, by: <ul> <li>a horizontal distance of 2.5m between the edge of the footpath and the access way or parking aisle; or</li> <li>protective devices such as bollards, guard rails or planters between the footpath and the access way or parking aisle; and</li> </ul> </li> <li>(b) be signed and line marked at points where pedestrians cross access ways or parking aisles.</li> </ul>	<ul> <li>PI</li> <li>Safe and convenient pedestrian access must be provided within parking areas, having regard to: <ul> <li>(a) the characteristics of the site;</li> <li>(b) the nature of the use;</li> <li>(c) the number of parking spaces;</li> <li>(d) the frequency of vehicle movements;</li> <li>(e) the needs of persons with a disability;</li> <li>(f) the location and number of footpath crossings;</li> <li>(g) vehicle and pedestrian traffic safety;</li> <li>(h) the location of any access ways or parking aisles; and</li> <li>(i) any protective devices proposed for pedestrian</li> <li>(j) safety.</li> </ul> </li> </ul>
A1.2 In parking areas containing accessible car parking spaces for use by persons with a disability, a footpath having a width not less than 1.5m and a gradient not steeper than 1 in 14 is required from those spaces to the main entry point to the building.	

#### Assessment

The Traffic Impact Assessment at Appendix B demonstrates that the proposal complies with A1.1 and A1.2.

### 13.11 Road and Railway Assets Code

This code applies because the proposal will increase the amount of vehicular traffic using an existing vehicle crossing. An assessment of the proposal against the code's applicable standards is provided below. This assessment relies on the Traffic Impact Assessment at Appendix B of this report. As the proposal meets the requirements of the applicable standards, it is consistent with the code's purpose, which is:

- C3.1.1 To protect the safety and efficiency of the road and railway networks; and
- C3.1.2 To reduce conflicts between sensitive uses and major roads and the rail network.

#### 13.11.1 Use Standards

The following acceptable solutions under clause C3.5.1. are not applicable:

- Al.I (because the road is a category I road);
- A1.2 (because the sites is not accessed from a category 1 road); and
- A1.3 (because the development does not affect the rail network).

#### C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

Objective: To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.

Acceptable Solution	Performance Criteria
AI.I	PI
For a category I road or a limited access road, vehicular traffic to and from the site will not require: (a) a new junction;	Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:
<ul><li>(b) a new vehicle crossing; or</li><li>(c) a new level crossing.</li></ul>	<ul> <li>(a) any increase in traffic caused by the use;</li> <li>(b) the nature of the traffic generated by the use;</li> <li>(c) the nature of the road;</li> </ul>
A1.2 For a road, excluding a category I road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.	<ul> <li>(d) the speed limit and traffic flow of the road;</li> <li>(e) any alternative access to a road;</li> <li>(f) the need for the use;</li> <li>(g) any traffic impact assessment; and</li> <li>(h) any advice received from the rail or road authority.</li> </ul>
A1.3	
For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.	
A1.4	
Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:	
(a) the amounts in Table C3.1; or	

(b) allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road.	
AI.5 Vehicular traffic must be able to enter and leave a major road in a forward direction.	
Assessment The Traffic Impact Assessment demonstrates that the proposal complies with A1.5 and satisfies P1	

#### 13.11.2 Development Standards

The following development standards are not applicable:

- C3.6.1 Habitable buildings for sensitive uses within a road or railway attenuation area
- C3.7.1 Subdivision for sensitive uses within a road or railway attenuation area

There are no other development standards.

### 13.12 Dispersive Soils Specific Area Plan (SAP)

As shown in Figure I, some of the proposed car parking spaces will be located in the Dispersive Soils overlay, which means that the Dispersive Soils SAP applies. The assessment below demonstrates that the proposal complies with this SAP's applicable standards. As it complies with these standards, it is reasonable to consider that the proposal meets the purposed of the code, which is:

• To minimise and/or mitigate adverse impacts from development on land that contains potentially dispersive soils.



FIGURE 4: DISPERSIVE SOILS SAP OVERLAY

#### 13.12.1 Use Standards

There are no use standards in this SAP.

#### **13.12.2 Development Standards**

The development standards for subdivision do not apply because subdivision is not proposed.

SOR-SI.7.1 Development on dispersive soils		
Objective: That buildings and works with the potential to disturb dispersive soil are appropriately located or managed:		
<ul><li>(a) to minimise the potential to cause erosion; and</li><li>(b) to reduce risk to property and the environment to an acceptable level.</li></ul>		
Acceptable Solution	Performance Criteria	
<ul> <li>A I</li> <li>Buildings and works must be for: <ul> <li>(a) works not involving the release of concentrated water or the disturbance of soils;</li> <li>(b) additions or alterations to an existing building, or the construction of a non-habitable building, provided the development area is not more than 100m<sup>2</sup>; or</li> <li>(c) forestry operations in accordance with a certified Forest Practices Plan.</li> </ul> </li> </ul>	<ul> <li>P1.1</li> <li>Building and works within a landslip hazard area must minimise the likelihood of triggering a landslip event and achieve and maintain a tolerable risk from landslip, having regard to:</li> <li>(a) the type, form, scale and intended duration of the development;</li> <li>(b) whether any increase in the level of risk from a landslip requires any specific hazard reduction or protection measures;</li> <li>(c) any advice from a State authority, regulated entity or a council; and</li> <li>(d) the advice contained in a landslip hazard report.</li> </ul>	
Assessment As demonstrated by the Dispersive Soils Management Plan at Appendix C, the proposal satisfies PI.		

# 14. Conclusion

As the proposed park and ride facility complies with the applicable provisions of the planning scheme, the permit application can be approved.

# pitt&sherry

# SETS – Midway Point Park & Ride Facility

Traffic Impact Assessment

Prepared for **Department of State Growth** 

Client representative Johan Jordaan

Date 18 September 2023

Rev01



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Appendix B —	Existing SIDRA Results
Appendix C —	Post Development SIDRA Results
Appendix D —	10-Years Post Development SIDRA Results

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#### **Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
00	Traffic Impact Assessment	LAL	RLR	RSM	30/05/2023
01	Traffic Impact Assessment (updated modelling)	LAL	RSM	RSM	18/09/2023

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# 1. Introduction

# 1.1 Background

The Sorell and Midway Point area in Tasmania's south has significant population growth leading to a greater capacity requirement of the road network. The Department of State Growth's (State Growth) South East Traffic Solution (SETS) aims to help maintain the livability of Sorell and the southern beaches by improving traffic flow through a more efficient and safer road network.

The proposed SETS route is shown in Figure 1 below. SETS is split into sections, including the Midway Point Intersection Solution, which is aimed at improving the flow of traffic through Midway Point through the installation of traffic signals giving the intersection greater capacity and lowering delays. Midway Point is on a small peninsula within the Sorell Council local government area.



Figure 1: Summary of SETS projects (Aerial source: Google Earth)

During community consultation undertaken as part of the Midway Point Intersection Solution, there was widespread feedback stating that the stakeholders would like to see increased public transport facilities including a "park & ride" facility. This facility would allow commuters to park their vehicle near the bus stop and then catch a bus directly into the city.

Following the feedback from the stakeholders, a park and ride development is proposed to be located to the north of the Tasman Highway, approximately 25m east of the Tasman Highway/ Penna Road signalised intersection.

Establishment of a park & ride facility at Midway Point has been included as a component of the Greater Hobart Park and Ride project which also involves the construction of park & ride facilities at Claremont and Rokeby.

# 1.2 Scope

This Traffic Impact Assessment (TIA) report has been prepared for the proposed park and ride development and has been prepared in accordance with State Growth's Publication *Traffic Impact Assessments (TIA) Guidelines* and the Tasmania Planning Scheme – Sorell (the Planning Scheme).

# 2. Existing conditions

# 2.1 Site location

Midway Point is a suburb on a small peninsula between Cambridge and Sorell. Access to Midway Point is provided by either the Tasman Highway or Penna Road, with the Tasman Highway providing the most direct route between Hobart, Midway Point, the Tasman Peninsula and the East Coast of Tasmania.

As discussed, the proposed park & ride facility is located to the north of the Tasman Highway, approximately 25m east of the Tasman Highway/ Penna Road signalised intersection. Access to the park & ride facility will be provided from Fenton Street, adjacent to the Fenton Street/ First Avenue intersection.

The park & ride facility site has a land use classification of 17.0 Community Purpose under the Planning Scheme. Surrounding land uses include 10.0 General Residential and 19.0 Open Space.

Figure 2 shows the location of the proposed park & ride facility in the local context.



Figure 2: Site Location (Aerial Source: Google Maps)

# 2.2 Surrounding road network

#### 2.2.1 Fenton Street

Fenton Street (shown in Figure 3 and Figure 4) is a two-way Council owned Local Road<sup>1</sup> configured with a single lane in each direction. Fenton Street terminates at a sign-controlled give-way T-intersection with Penna Road and provides access to many residential properties on the north side of the Tasman Highway in Midway Point.

Fenton Street is subject to the Tasmanian Urban Speed Limit of 50km/h and carries approximately 1,870<sup>2</sup> vehicles per day.



Figure 3: Fenton Street (facing east)



Figure 4: Fenton Street (facing west towards Penna Road)

#### 2.2.2 First Avenue

First Avenue (shown in Figure 5 and Figure 6) is a two-way Council owned Local Road<sup>1</sup> configured with a single lane in each direction. First Avenue terminates at a sign-controlled give-way T-intersection with Fenton Street and provides access to residential properties in Midway Point.

First Avenue is subject to the Tasmanian Urban Speed Limit of 50km/h and carries approximately 1,150<sup>2</sup> vehicles per day.

<sup>&</sup>lt;sup>1</sup> Based on theLIST Road Centrelines Transport Class

<sup>&</sup>lt;sup>2</sup> Traffic counts undertaken by pitt&sherry staff in September 2020 and assuming a growth rate of 2% and peak to daily ratio of 10%



Figure 5: First Avenue (facing east)



Figure 6: First Avenue (facing west)

#### 2.2.1 Penna Road

Penna Road (shown in Figure 7 and Figure 8) is a two-way Council owned Collector Road<sup>3</sup> that operates between the Tasman Highway and Shark Point Road. While Penna Road is generally configured with a single lane in each direction, on approach to the Penna Road/ Fenton Street and Tasman Highway/ Penna Road intersections, it widens to three lanes in the southbound direction and two lanes in the northbound direction.

Penna Road provides the primary connection between the properties located to the north of the Highway in Midway Point and the Tasman Highway.

Penna Road carries approximately 2,860<sup>4</sup> vehicles per day at its intersection with the Tasman Highway.



Figure 7: Penna Road at the approach to Tasman Highway (facing south (note metering signals present))



Figure 8: Penna Road (facing north)

<sup>&</sup>lt;sup>3</sup> Based on theLIST Road Centrelines Transport Class

<sup>&</sup>lt;sup>4</sup> Traffic counts undertaken by Matrix Traffic and Transport Data in August 2018 and assuming a growth rate of 2% and peak to daily ratio of 10%

#### 2.2.2 Tasman Highway

The Tasman Highway (shown in Figure 9 and Figure 10) is a State Growth owned Category 2 Highway. The Tasman Highway operates as the only Highway connecting Sorell, Midway Point and the various townships on the Tasmanian Peninsula and East Coast to Hobart.

Between the two causeways, the Highway has a posted speed limit of 60km/h and is configured with two 3.5m lanes in each direction. Additional left and right turn lanes are provided along the Tasman Highway at the Tasman Highway/ Penna Road intersection.

East and west of the intersection with Penna Road, the Tasman Highway carries approximately 21,009 vehicles per day and 18,109 vehicles per day<sup>5</sup> respectively.



Figure 9: Tasman Highway at Midway Point (facing east) (Image Source: Google Maps)



Figure 10: Tasman Highway at Midway Point (facing west) (Image Source: Google Maps)

### 2.3 Surrounding intersections

The following intersections are located in close proximity to the site:

- Fenton Street/ First Avenue (sign-controlled give-way T-intersection)
- Penna Road/ Fenton Street (sign-controlled give-way T-intersection); and
- Tasman Highway/ Penna Road (signalised 4-leg intersection).

### 2.4 Intersection operation

#### 2.4.1 Overview

For this traffic impact assessment, only the traffic operation at the Fenton Street/ First Avenue intersection has been assessed.

Although vehicles generated by the proposed development may travel through the Penna Road/ Fenton Street and Tasman Highway/ Penna Road intersections, these intersections have not been considered as these intersections have been upgraded as part of the SETS Midway Point Intersection Solution. As part of the Midway Point Intersection

<sup>&</sup>lt;sup>5</sup> Traffic counts sourced from State Growth's traffic data webpage

Solution, both the Penna Road/ Fenton Street and Tasman Highway/ Penna Road intersections have been designed to be able to accommodate the additional traffic generated by the proposed park & ride facility.

#### 2.4.2 Traffic volumes

It is expected that the users of the park & ride facility will be predominantly daily commuters travelling to and from the Hobart CBD. As such, the traffic generated is generally expected to be localised to a time period between 6:30am - 7:30am and 4:30pm - 5:30pm on weekdays.

Based on the expected operation of the park & ride facility stated above, pitt&sherry staff have undertaken traffic counts at the Fenton Street/ First Avenue intersection and Fenton Street Park access on Wednesday 16 September 2020 at the following times:

- AM Peak Hour 6:30am 7:30am; and
- PM Peak Hour 4:30pm 5:30pm.

As the traffic counts were completed in 2020, traffic volumes for 2023 have been calculated using a compounding growth rate of 2%.

A summary of the existing AM and PM peak hour traffic volumes are shown in Figure 11 and Figure 12.



Figure 11: Traffic Volumes: Existing AM Peak Hour



Figure 12: Traffic Volumes - Existing PM Peak Hour

#### 2.4.3 Traffic modelling software

The traffic operation of the Fenton Street/ First Avenue intersection has been assessed using SIDRA 8.0 modeling software. SIDRA rates the performance of the intersections based on the vehicle delay and the corresponding LOS. It is generally accepted that an intersection operates well if it is at LOS D or higher. Table 1 shows the criteria that SIDRA adopts in assessing the LOS.

#### Table 1: SIDRA Level of Service

105	Delay per Vehicle (secs)					
203	Signals Roundabout		Sign Control			
А	10 or less	10 or less	10 or less			
В	10 to 20	10 to 20	10 to 15			
С	20 to 35	20 to 35	15 to 25			
D	35 to 55	35 to 50	25 to 35			
E	55 to 80	50 to 70	35 to 50			
F	Greater than 80	Greater than 70	Greater than 50			

#### 2.4.4 Traffic modelling layout

The geometry of the Fenton Street/ First Avenue intersection used for the SIDRA traffic model was developed with reference to aerial photography obtained from the LISTmap and measurements gathered during the site visit undertaken on Wednesday 16 November 2022. The aerial photography and site visit informed the number, width and length of trafficable lanes and speed limits.

Figure 13 shows the intersection layout used within the SIDRA traffic model.



Figure 13: SIDRA Intersection Layout

#### 2.4.5 Traffic modelling results

A summary of the SIDRA results for the existing operation of the Fenton Street/ First Avenue intersection is provided in Table 2. Full results are presented in Appendix B.

Intersection	Approach	Peak	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
	East: Fenton Street		0.01	1	0	А
Fenton Street/ First	North: Frist Avenue	AM	0.02	5	1	А
Avenue	West: Fenton Street		0.01	4	0	А
	All Vehicles		0.02	4	1	А
	East: Fenton Street	PM	0.00	1	0	А
Fenton Street/ First	North: Frist Avenue		0.01	5	0	А
Avenue	West: Fenton Street		0.02	4	0	А
	All Vehicles		0.02	4	0	А

Table 2: Fenton Street/ First Avenue intersection - Existing 2023 Operation SIDRA Results

Based on the modelling results presented above, the Fenton Street/ First Avenue intersection currently operates well with minimal queues and delays on all approaches. The modelling results align with observations made on site.

## 2.5 Existing parking facilities

#### 2.5.1 Along Fenton Street

There is currently a gravel car parking area for the Fenton Street Park, located to the south of the Fenton Street/First Avenue intersection. Access to the car park is located approximately 10m east of the Fenton Street/First Avenue intersection.

The car park has 9 marked parking spaces with sufficient space for an additional 3-4 informal spaces.

# 2.6 Pedestrian and cycling facilities

As part of the SETS Midway Point Intersection Solution upgrades at the Penna Road/ Fenton Street and Tasman Highway/ Penna Road intersections, a 2.5m wide shared path was constructed provided along the north side of the Tasman Highway. This includes a new path through the park & ride facility site. A pedestrian/cycling crossing at Penna Road is also provided.

### 2.7 Public transport facilities

Indented DDA compliant bus bays are provided approximately 100m east of the Tasman Highway/ Penna Road intersection on both sides of the Highway. Additional bus bays are also provided along Penna Road, approximately 100m north of the Tasman Highway/ Penna Road intersection and along Fenton Street, approximately 80m east of the Penna Road/ Fenton Street intersection

Access between the bus stops is provided through the signalised pedestrian crossings across the Tasman Highway and Penna Road.

# 2.8 Road safety

State Growth have provided crash history data for Fenton Street in the vicinity of the First Avenue. The data provided was for the most recent 5-year period.

Based on a review of the crash data, it has been identified that only one crash has been recorded in the most recent 5 years period. The crash involved a vehicle hitting a parked vehicle and resulted in property damage only.

Based on the available crash history data, there does not appear to be any identified road safety issues.

# 3. Development proposal

As discussed, a park & ride facility is proposed to be located to the north of the Tasman Highway, approximately 25m east of the Tasman Highway/ Penna Road intersection.

The park & ride facility will provide 61 car parking spaces including 2 DDA compliant spaces. 5 motorcycle parking spaces will also be provided. Access to the facility will be provided via a 6.2m wide driveway from Fenton Street, adjacent to the Fenton Street/ First Avenue intersection.

The proposed park & ride facility will be connected to the bus stops by a DDA compliant 3.0m shared path and signalised pedestrian crossings at the upgraded Penna Road/ Tasman Highway intersection.

A 1.5m pedestrian path and zebra crossing is provided within the car park to allow pedestrians to cross.

The proposed park & ride facility will result in loss of the Fenton Street Park and its gravel car parking area.

Preliminary design plans for the proposed park & ride facility are included in Appendix A.

# 4. Transport assessment

### 4.1 Traffic Impact Assessment

#### 4.1.1 Traffic generation

As the park & ride facility is proposed to provide 61 car parking spaces and 5 motorcycle parking spaces, the anticipated traffic volumes from the proposed park & ride facility have been conservatively assumed to be 66 vehicles per hour during the peak hour in the prevailing direction (i.e. all spots filled with all vehicles travelling inbound during the AM peak hour and outbound during the PM peak hour).

#### 4.1.2 Post Development Traffic Volumes

Based on the above, the expected traffic volumes during the AM and PM peak hours immediately post development is shown in Figure 14 and Figure 15.





Figure 14: Traffic Volumes: Post Development AM Peak Hour

Figure 15: Traffic Volumes – Post Development PM Peak Hour

#### 4.1.3 Post Development Traffic Modelling Layout

As discussed, access to the facility will be provided from Fenton Street, adjacent to the Fenton Street/ First Avenue intersection. The geometry of the new Fenton Street/ Park & Ride facility access used for the SIDRA traffic model was developed with reference to the concept plans prepared. This traffic model was connected as a network to the Fenton Street/ First Avenue intersection traffic model.

Figure 16 shows the network layout used within the SIDRA traffic model.



Figure 16: SIDRA Layout for Fenton Street/ First Avenue intersection and Fenton Street/ Park & Ride Facility access

#### 4.1.4 Post Development Traffic Impact

A summary of the SIDRA results for the post development operation of the Fenton Street/ First Avenue intersection and the Fenton Street/ Park & Ride facility access is provided in Table 3. Full results are presented in Appendix C.

Intersection	Approach	Peak	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
	East: Fenton Street		0.01	1	0	А
Fenton Street/	North: Frist Avenue		0.03	5	1	А
First Avenue	West: Fenton Street		0.01	2	0	А
	All Vehicles	0.54	0.03	4	1	Α
	South: Park & Ride Access	AIVI	0.00	5	0	А
Fenton Street/	East: Fenton Street		0.04	1	0	А
Access	West: Fenton Street		0.03	2	1	А
	All Vehicles		0.04	1	1	Α
	East: Fenton Street		0.00	1	0	А
Fenton Street/	North: Frist Avenue		0.01	5	0	А
First Avenue	West: Fenton Street		0.05	1	0	А
	All Vehicles		0.05	1	0	Α
	South: Park & Ride Access	РМ	0.04	5	1	А
Fenton Street/	East: Fenton Street		0.01	0	0	А
Access	West: Fenton Street		0.02	0	0	А
	All Vehicles		0.04	3	1	Α

Table 3: Fenton Street/ First Avenue intersection and Fenton Street/ Park & Ride facility access – Post Development 2023 Operation SIDRA Results

Based on the modelling results presented above, both the Fenton Street/ First Avenue intersection and the Fenton Street/ Park & Ride facility access intersections are expected to continue to operate well post development with minimal queues and delays experienced on all approaches.

It is noted that due to the proximity of the Fenton Street/ Park & Ride facility access to the Fenton Street/ First Avenue intersection, there is queuing capacity for only one vehicle turning right into Fenton Street from the Fenton Street/ First Avenue intersection. A queue beyond 1 vehicle has the potential to block the Fenton Street/ Park & Ride facility access.

However, the SIDRA modelling results shows that the 95th percentile queue (queue that is not exceeded 95% of the time) is less than the available queue capacity and as such this is not expected to cause any operational issues at the intersections.

#### 4.1.5 10-Years Post Development Traffic Volumes

The traffic impact of the proposed development has been estimated for 10-years post development (2033).

The expected traffic volumes during the AM and PM peak hours 10-years post development are shown in Figure 17 and Figure 18.

It is noted that the traffic volumes for 2033 have been calculated using a compounding growth rate of 2% applied to the traffic volumes along Fenton Street and First Avenue. The growth rate has not been applied to the traffic volumes generated by the proposed park & ride facility as the facility is not expected to increase in size post completion.





Figure 17: Traffic Volumes: 10-Years Post Development AM Peak Hour

Figure 18: Traffic Volumes – 10-Years Post Development PM Peak Hour

A summary of the SIDRA results for the 10-years post development operation of the Fenton Street/ First Avenue intersection and the Fenton Street/ Park & Ride facility access is provided in Table 4. Full results are presented in Appendix D.

Table 4: Fenton Street/ First Avenue intersection and Fenton Street/ Park & Ride facility access – 10-Years Post Development 2033 Operation SIDRA Results

Intersection	Approach	Peak	Degree of Saturation	Average Delay (secs)	95 <sup>th</sup> Percentile Queue (m)	LOS
	East: Fenton Street		0.01	1	0	А
Fenton Street/	North: Frist Avenue		0.03	5	1	А
First Avenue	West: Fenton Street		0.01	2	0	А
	All Vehicles	0.54	0.03	4	1	А
	South: Park & Ride Access	AIVI	0.00	5	0	А
Fenton Street/	East: Fenton Street		0.04	0	0	А
Access	West: Fenton Street		0.03	2	1	А
	All Vehicles		0.04	1	1	А
	East: Fenton Street		0.00	1	0	А
Fenton Street/	North: Frist Avenue		0.01	5	0	А
First Avenue	West: Fenton Street		0.03	2	0	А
	All Vehicles		0.03	2	0	А
	South: Park & Ride Access	PIM	0.04	5	1	А
Fenton Street/	East: Fenton Street		0.01	0	0	А
Access	West: Fenton Street		0.03	0	0	А
	All Vehicles		0.04	2	1	А

Based on the modelling results presented above, both the Fenton Street/ First Avenue intersection and the Fenton Street/ Park & Ride facility access intersections are expected to continue to operate well 10-years post development with minimal queues and delays experienced on all approaches.

#### 4.1.6 Road Safety Impact

As discussed in Section 2.8 of this report, the existing crash history does not indicate a road safety issue in the vicinity of the proposed development.

Increased vehicular traffic generated by the proposed park & ride facility is not expected to increase the severity of crashes in the vicinity of the site.

### 4.2 Parking assessment

#### 4.2.1 Parking Provision

Table C2.1 does not have any requirements for the land use "vehicle parking" which applies to the proposed development.

#### 4.2.2 Site Access

The Planning Scheme – Table C2.2 Internal Access Way Widths for Vehicles specifies minimum widths for accesses and circulation roads based on the number of car parking spaces served. As the number of car parking spaces served is greater than 21, a minimum access width and road width of 5.5m is required.

As discussed, the park & ride facility access will have a width of approximately 6.2m and thus meets the Planning Scheme requirements.

Although the site circulation road varies in width, the minimum width of the circulation road is 6.0m. As such, the circulation road width meets the Planning Scheme requirements.

#### 4.2.3 Car Park Layout

The car parking layout has been reviewed against the Planning Scheme and the *Australian Standard AS/NZS2890.1:2004 Parking Facilities for Off-Street Car Parking* (Australian Standard). In order to determine the class of parking, Table 1.1 of the Australian Standard has been reviewed. An excerpt of Table 1.1 of the Australian Standard is shown below in Figure 19.

User class	Required door opening	Required aisle width	Examples of uses (Note 1)
0	Front door, first stop	Minimum for single manoeuvre entry and exit	Employee and commuter parking (generally, all-day parking)
IA	Front door, first stop	Three-point turn entry and exit into 90° parking spaces only, otherwise as for User Class 1	Residential, domestic and employee parking
2	Full opening, all doors	Minimum for single manoeuvre entry and exit	Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking)
3	Full opening, all doors	Minimum for single manoeuvre entry and exit	Short-term city and town centre parking, parking stations, hospital and medical centres
3A	Full opening, all doors	Additional allowance above minimum single manoeuvre width to facilitate entry and exit	Short term, high turnover parking at shopping centres
4	Size requirements are specified in AS/NZS 2890.6 (Note 2)		Parking for people with disabilities

#### TABLE 1.1

#### CLASSIFICATION OF OFF-STREET CAR PARKING FACILITIES

Figure 19: Table 1.1 of AS/NZS 2890.1:2004

Based on the above, the car park layout was assessed against User Class 1 requirements. The car parking layout for the DDA accessible car parking spaces has been reviewed against the *Australian Standard AS/NZS 2890.6:2009 Part 6: Off*street parking for people with disabilities (AS/NZS 2890.6:2009).

The dimensional requirements for both user classes are specified below in Table 5.

User	Feature	Requirement (Australian Standard)	Proposed
	Parking Space Width	2.4m	Minimum 2.4m
Car Parking Spaces	Parking Space Length	5.4m	5.4m
	Parking Aisle Width	6.2m	Minimum 6.2m
Motorovala Darking Spage	Parking Space Width	1.2m	1.2m
Motorcycle Farking Spaces	Parking Space Length	2.5m	2.5m
	Parking Space Width	2.4m	2.4m
DDA Accessible Barking	Parking Space Length	5.4m	5.4m
Spaces	Parking Aisle Width	5.8m	6.2m
	Shared Area	2.4m wide, 5.4m long	2.4m wide (min), 5.4m long (min)

Table 5: Car parking layout

Based on the above, the car and motorcycle parking spaces meet the requirements of the Australian Standard. The DDA accessible car parking spaces meet the requirements of AS/NZS 2890.6:2009.

## 4.3 Pedestrian path

As discussed, the proposed park & ride facility will be connected by a DDA compliant 3.0m shared path to the bus stops and signalised pedestrian crossings at the upgraded Penna Road / Tasman Highway intersection. A 1.5m pedestrian path and zebra crossing is provided with the car park to allow pedestrians to cross.

All pedestrian paths are in accordance with the Austroads Guide to Road Design Part 6A Paths for Walking and Cycling which require a minimum 1.5m wide pedestrian path and 3.0m shared path.

### 4.4 Sight Distance Assessment

The Safe Intersection Sight Distance (SISD) to the park & ride facility access has been assessed against the Austroads Guide to Road Design part 4A (AGRD4A): Unsignalised and Signalised Intersections. The SISD was measured from a point 5 metres back from the edge of the kerb in accordance with Figure 3.2 of AGRD4A.

The SISD requirements and the observed available sight distance at the proposed park & ride facility site access is shown in Table 6.

Direction of Vehicle Travel	Speed	Sight Distance Requirement	Available Sight Distance	Meets Requirements
Westbound on Fenton Street	50km/h	80m	<100m	Yes
Southbound on First Avenue	30km/h*	30m#	50m	Yes

Table 6: Sight Distance Assessment at Fenton Street/ Fenton Street Park & Ride Facility Access

\*Vehicles required to decelerate in order to negotiate First Avenue/ Fenton Street intersection. Speed determined based on geometry and observations on site.

#### <sup>#</sup>Calculated using interpolation

Based on the above, the sight distance in all directions from the proposed access meets the AGRD4A requirements for the travel speed.



# 5. Planning Scheme Assessment

## 5.1 Parking and sustainable transport code

#### 5.1.1 Use standards

The following use standards are not applicable:

- C2.5.1 Car Parking Numbers (under Table C2.1, there are no requirements for the proposed Vehicle Parking use to provide car parking spaces);
- C2.5.2 Bicycle Parking Numbers (under Table C2.1, there are no requirements for the proposed Vehicle Parking use to provide bicycle parking spaces);
- C2.5.3 Motorcycle Parking Numbers (under Clause C.2.2.2, there are no requirements for the proposed Vehicle Parking use to provide motorcycle parking bays);
- C2.5.4 Loading Bays (under Clause C.2.2.3, there are no requirements for the proposed Vehicle Parking use to provide loading bays); and
- C2.5.5 Number of Spaces within the General Residential and Inner Residential Zone because (the development area is not located in these zones).

#### 5.1.2 Development standards

The proposed development has been assessed against the Development Standards of the Planning Scheme's Parking and Sustainable Transport Code, shown below.

#### C2.6.1 Construction of parking areas

#### Objective:

That parking areas are constructed to an appropriate standard.

Accept	able Solution/ Performance Criteria	Comment
Accept	able Solution A1	Complies with Acceptable Solution A1
All parking, access ways, manoeuvring and circulation spaces must:		As the development is to be constructed with a durable all weather pavement and be drained to the public stormwater
a)	be constructed with a durable all weather pavement;	system, and contain stormwater on the site, it will comply with Acceptable Solution A1.
b)	be drained to the public stormwater system, or contain stormwater on the site; and	
c)	excluding all uses in the Rural Zone, Agriculture Zone, Landscape Conservation Zone, Environmental Management Zone, Recreation Zone and Open Space Zone, be surfaced by a spray seal, asphalt, concrete, pavers or equivalent material to restrict abrasion from traffic and minimise entry of water to the pavement.	

#### C2.6.2 Design and layout of parking areas

#### Objective:

That parking areas are designed and laid out to provide convenient, safe and efficient parking.

Accept	able Soli	ution/ Performance Criteria	Comment
Acceptable Solution A1.1		ution A1.1	Complies with Acceptable Solution A1.1
Parking, access ways, manoeuvring and circulation spaces must either:		ways, manoeuvring and circulation er:	As all parking, access ways, manoeuvring and circulation spaces proposed as part of the development comply with
a)	comply	with the following:	the requirements of AS2890.1 Parts 1-6, the proposed development complies with Acceptable Solution A1
	Ι.	have a gradient in accordance with Australian Standard AS 2890 - Parking facilities. Parts 1-6:	Complies with Assentable Solution A1.2
	ii.	provide for vehicles to enter and exit the site in a forward direction where providing for more than 4 parking spaces;	The accessible parking spaces are located close to the bus stops and incorporated into the overall car park design. As such, the proposed development complies with Acceptable Solution A1.2.
	iii.	have an access width not less than the requirements in Table C2.2;	
	iv.	have car parking space dimensions which satisfy the requirements in Table C2.3;	
	v.	have a combined access and manoeuvring width adjacent to parking spaces not less than the requirements in Table C2.3 where there are 3 or more car parking spaces;	
	vi.	have a vertical clearance of not less than 2.1m above the parking surface level; and	
	vii.	excluding a single dwelling, be delineated by line marking or other clear physical means; or	
b)	comply <i>Parking</i>	with Australian Standard AS 2890- facilities, Parts 1-6.	
Accept	able Solu	ution A1.2	
Parking disabilit	spaces p y must sa	provided for use by persons with a atisfy the following:	
a)	be locat entry po	ted as close as practicable to the main bint to the building;	
<li>b) be incorporated into the overall car park design; and</li>		rporated into the overall car park and	
c)	be design with Au AS/NZS street p	gned and constructed in accordance stralian/ New Zealand Standard S 2890.6:2009 Parking facilities, Off- arking for people with disabilities.	

#### C2.6.3 Number of accesses for vehicles

#### **Objective:**

That:

- access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses;
- b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and
- c) the number of accesses minimise impacts on the streetscape.

Acceptable Solution/ Performance Criteria	Comment
Acceptable Solution A1	Complies with Acceptable Solution A1
The number of accesses provided for each frontage must:	As no more than 1 access is proposed as part of the development, it complies with Acceptable Solution A1.
a) be no more than 1; or	
b) no more than the existing number of accesses,	
whichever is the greater.	

#### C2.6.4 Lighting of parking areas within the General Business Zone and Central Business Zone

#### **Objective:**

That parking and vehicle circulation roads and pedestrian paths within the General Business Zone and Central Business Zone, which are used outside daylight hours, are provided with lighting to a standard which:

- a) enables easy and efficient use;
- b) promotes the safety of users;
- c) minimises opportunities for crime or anti-social behaviour; and
- d) prevents unreasonable light overspill impacts.

Acceptable Solution/ Performance Criteria	Comment
Acceptable Solution A1 In car parks within the General Business Zone and Central Business Zone, parking and vehicle circulation roads and pedestrian paths serving 5 or more car parking spaces, which are used outside daylight hours, must be provided with lighting in accordance with Clause 3.1 "Basis of Design" and Clause 3.6 "Car Parks" in <i>Australian Standard/New Zealand Standard</i> <i>AS/NZS 1158.3.1:2005 Lighting for roads and public</i> <i>spaces Part 3.1: Pedestrian area (Category P) lighting</i> – <i>Performance and design requirements.</i>	<b>Not Applicable</b> As the proposed development is not located within the General Business Zone or within the Central Business Zone, this code is not applicable.

#### C2.6.5 Pedestrian access

#### **Objective:**

That pedestrian access within parking areas is provided in a safe and convenient manner.

Acceptable Solution/ Performance Criteria	Comment
<ul> <li>Acceptable Solution A1.1</li> <li>Uses that require 10 or more car parking spaces must: <ul> <li>a) have a 1m wide footpath that is separated from the access ways or parking aisles, excluding where crossing access ways or parking aisles, by:</li> <li>i. a horizontal distance of 2.5m between the edge of the footpath and the access way or parking aisle; or</li> <li>ii. protective devices such as bollards, guard rails or planters between the footpath and the access way or parking aisle; and</li> <li>b) be signed and line marked at points where</li> </ul> </li> </ul>	Complies with Acceptable Solution A1.1 As the proposed development includes raised pedestrian footpaths and signs and line marking for pedestrians, it complies with Acceptable Solution A1.1. Complies with Acceptable Solution A1.2 As footpaths from accessible parking spaces are greater than 1.5m wide and all footpaths are relatively flat, they comply with Acceptable Solution A1.2.
pedestrians cross access ways or parking aisles. Acceptable Solution A1.2 In parking areas containing accessible car parking spaces for use by persons with a disability, a footpath having a width not less than 1.5m and a gradient not steeper than 1 in 14 is required from those spaces to the main entry point to the building.	

#### C2.6.6 Loading bays

#### **Objective:**

That the area and dimensions of loading bays are adequate to provide safe and efficient delivery and collection of goods.

Acceptable Solution/ Performance Criteria	Comment
Acceptable Solution A1	Not Applicable
The area and dimensions of loading bays and access way areas must be designed in accordance with <i>Australian Standard AS 2890.2–2002, Parking facilities,</i> <i>Part 2: Off-street commercial vehicle facilities</i> , for the type of vehicles likely to use the site.	As no loading bays are provided as part of the proposed development, this code is not applicable.

#### C2.6.7 Bicycle parking and storage facilities within the General Business Zone and Central Business Zone

#### **Objective:**

That parking for bicycles are safe, secure and convenient, within the General Business Zone and Central Business Zone.

Accept	able Solution/ Performance Criteria	Comment	
Acceptable Solution A1		Not Applicable	
Bicycle parking for uses that require 5 or more bicycle spaces in Table C2.1 must:		As Table C2.1 does not require the provision of bicycle parking for the proposed development, this code is not	
a)	be accessible from a road, cycle path, bicycle lane, shared path or access way;	applicable. Whilst the proposed development is not required to provide	
b)	be located within 50m from an entrance;	bicycle parking, a bicycle storage facility with capacity for	
c)	be visible from the main entrance or otherwise signed; and	27 bikes will be provided. The bicycle parking will be accessible from the shared path that passes through the	
d)	be available and adequately lit during the times they will be used, in accordance with Table 2.3 of <i>Australian/New Zealand Standard</i> <i>AS/NZS 1158.3.1: 2005 Lighting for roads and</i> <i>public spaces - Pedestrian area (Category P)</i> <i>lighting - Performance and design</i> <i>requirements.</i>	site and is located in close proximity to the Tasman Highway/ Penna Road intersection where the bus stops are located. The bicycle storage facility is visible from the intersection and will be lit to ensure it can be accessed during hours of darkness.	

#### C2.6.8 Siting of parking and turning areas

#### **Objective:**

That the siting of vehicle parking and access facilities in an Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone, General Business Zone or Central Business Zone does not cause an unreasonable visual impact on streetscape character or loss of amenity to adjoining properties.

Acceptable Solution/ Performance Criteria	Comment	
Acceptable Solution A1 Within an Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone or General Business Zone, parking spaces and vehicle turning areas, including garages or covered parking areas must be located behind the building line of buildings, excluding if a parking area is already provided in front of the building line.	<b>Not Applicable</b> As the proposed development is note located within an Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone or General Business Zone, this code is not applicable.	
Acceptable Solution A2 Within the Central Business Zone, on-site parking at ground level adjacent to a frontage must: a) have no new vehicle accesses, unless an	<b>Not Applicable</b> As the proposed development is note located within the Central Business Zone, this code is not applicable.	
<ul><li>existing access is removed;</li><li>b) retain an active street frontage; and</li><li>c) not result in parked cars being visible from public places in the adjacent roads.</li></ul>		

# 5.2 Road and railway assets code

#### 5.2.1 Use standards

The proposed development has been assessed against the Use Standards of the Planning Scheme's Road and Railway Assets Code, shown below.

#### C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction

#### **Objective:**

To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.

Acceptable Solution/ Performance Criteria	Comment		
Acceptable Solution A1.1 For a category 1 road or a limited access road, vehicular traffic to and from the site will not require:	Acceptable Solution A1.1 and A1.3 not applicable, Complies with Acceptable Solution A1.5		
<ul> <li>a) a new junction;</li> <li>b) a new vehicle crossing; or</li> <li>c) a new level crossing.</li> </ul>	category 1 road or a limited access road and does not include any new junctions or rail network, Acceptable Solutions A1.1 and A1.3 are not appliable.		
Acceptable Solution A1.2 For a road, excluding a category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.	As vehicles can exit and enter the site in a forward direction to and from Fenton Street, it complies with Acceptable Solution A1.5. Satisfies Performance Criteria P1 in place of Acceptable Solution A1.2 and A1.4		
Acceptable Solution A1.3 For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority.	As the proposed development includes a new access and written consent has not been received from Council, it cannot comply with Acceptable Solution A1.2. As the traffic generated at the access increases by more than 40 vehicle movements per day, it cannot comply with Acceptable Solution A1.4		
Acceptable Solution A1.4	The proposed development does however satisfy		
<ul> <li>Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:</li> <li>a) the amounts in Table C3.1; or</li> <li>b) allowed by a licence issued under Part IVA of the Boads and lettics Act 1025 in respect to a</li> </ul>	<ul> <li>Performance Criteria P1 as follows:</li> <li>a) Based on the SIDRA modelling results presented in this report, the traffic generated by the proposed development is not expected to result in any safety or operational issues on the road network surrounding the site.</li> </ul>		
limited access road.	b) The proposed development is expected to generate predominantly light vehicle traffic which is already catered for on the surrounding road network.		
Vehicular traffic must be able to enter and leave a major road in a forward direction.	<ul> <li>c) Based on the observations made on site and SIDRA modelling results presented in this report, all intersections in the vicinity of the site currently operate well. Modelled intersections are also expected to</li> </ul>		
<b>Performance Criteria P1</b> Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle	continue to operate well post development and 10- years post development.		

crossing or level crossing or safety or efficiency of the road or rail network, having regard to:

- a) any increase in traffic caused by the use;
- b) the nature of the traffic generated by the use;
- c) the nature of the road;
- d) the speed limit and traffic flow of the road;
- e) any alternative access to a road;
- f) the need for the use;
- g) any traffic impact assessment; and
- h) any advice received from the rail or road authority.

- Fenton Street is subject to a 50km/h speed limit. This speed limit is expected to be consistent with the safe and efficient access to the proposed development.
- e) There are no alternative accesses from Fenton Street to the proposed development.
- f) The proposed development will ensure a suitable facility for people to park and catch a bus to the city.
- g) This TIA has been prepared for the proposed development and identifies that the proposed development is not expected to have any major impacts on the safety and operation of the surrounding road network.
- h) Council and the State Growth own and maintain the local road network in the vicinity of the site. No advice has been received from Council.

# 6. Conclusion

An assessment of the traffic impacts associated with the proposed Midway Point park & ride facility has been undertaken in accordance with the Department of State Growth's Publication *Traffic Impact Assessments (TIA) Guidelines* and the *Tasmanian Planning Scheme - Sorell*. The analysis and discussions presented within this report can be summarised as follows:

- The Fenton Street/ First Avenue intersection and the Fenton Street/ Park & Ride facility access are expected to continue to operate well post development and 10-years post development
- Increased vehicular traffic generated by the proposed park & ride facility is not expected to increase the severity
  of crashes in the vicinity of the site
- The site access and circulation road width meet the Planning Scheme requirements
- The car and motorcycle parking spaces meet the requirements of the Australian Standard
- The DDA accessible car parking spaces meet the requirements of AS/NZS 2890.6:2009; and
- The sight distance in all directions from the proposed access meets the AGRD4A requirements for the travel speed.

# pitt&sherry

# **Noise Assessment**

Midway Point Park and Ride

Prepared for Department of State Growth Client representative Sven Myer Date 24 August 2023

Rev00



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# 1. Introduction

This noise assessment has been prepared to support a planning permit application for a park and ride facility at Midway Point, adjacent to the Tasman Highway, just east of Penna Road. This noise assessment demonstrates that the proposal complies with the noise requirements of the Tasmanian Planning Scheme - Sorell.

The proposed facility will provide 66 sealed, demarcated parking spaces, bike storage, and associated civil and landscaping works. The development does not include construction of new bus stops. The facility is intended to serve existing nearby bus stops on the Tasman Highway and Fenton Street. The proposed site and surrounding area are shown in Figure 1 with the site layout shown in Figure 2 below.

The majority of the proposed site is zoned Community Purpose, with a small section on the western end zoned General Residential, and another small section on the north eastern end, zoned Open Space. The site immediately adjoins four residences to the north, one residence to the east and a church to the west. To the south the site adjoins the Tasman Highway. Currently the dominant noise source in the area is traffic noise from the Tasman Highway.



Figure 1 - Location Map



Figure 2 - Proposed Site Layout

# 2. Planning Scheme Requirements

Noise emissions for this activity are regulated under the Tasmanian Planning Scheme - Sorell. Noise levels for developments within a Community Purpose zone, adjacent to sensitive uses (such as residences or churches) are required to comply with Clause 29.3.1 Discretionary uses, reproduced below.

#### 29.3.1 Discretionary uses

Objective: That a use listed as Discretionary, does not cause an unreasonable loss of amenity to adjacent sensitive uses.

Acceptable Solution	Performance Criteria	
A1	P1	
<ul> <li>Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor</li> <li>Accommodation, must be within the hours of:</li> <li>(a) 8.00am to 10.00pm if within 50m of a General Residential Zone, Inner Residential Zone or Low Density Residential Zone; or</li> <li>(b) 6.00am to midnight, otherwise.</li> </ul>	<ul> <li>Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor Accommodation, must not cause an unreasonable loss of amenity to adjacent sensitive uses having regard to:</li> <li>(a) the timing, duration or extent of vehicle movements; and</li> <li>(b) noise, lighting or other emissions.</li> </ul>	

While the park and ride facility will be open to the public 24 hours a day, it is not expected to be significantly patronised outside of the hours in which busses arrive and depart. The park and ride facility will operate between the 6.08am Fenton Street bus service and 7.06pm (current bus service) or 8.01pm (for a potential future bus service). The acceptable solution is not met so the performance criteria must be addressed.

The planning scheme does not provide specific criteria for evaluating the impact of noise, so the guideline acoustic indicators in the Tasmanian Environmental Protection Policy (Noise) are applied.

# 3. Noise Sources

The most significant noise emissions will be generated by cars moving on the site. A sound power level of 77.5 dB(A) has been used for the car noise, based on the maximum allowable vehicle operating noise levels described in *Australian Design Rule 28/01 – External Noise of Motor Vehicles 2006*.

In addition, maximum noise level data for short duration noise peaks due to common car related 'events" such as car doors or boots being closed, car engines starting etc were sourced from the *SoundPLAN* reference library. Sound power levels for these events range between 94.1 and 98.4 dB(A). Due to the short duration of these events, they do not significantly affect the  $L_{eq}$  or "average" noise level over an extended period of time.

# 4. Onsite Noise Monitoring

Onsite noise monitoring was conducted at the rear of 5 Fenton Street from the 30<sup>th</sup> of August till the 14<sup>th</sup> of September 2019, as part of the Tasman Highway Midway Point Intersection Solution project which involved the installation of traffic signals at the Tasman Highway/Penna Road intersection and duplication of the Tasman Highway across Midway Point. Noise levels at this location are indicative of the ambient noise experienced at the nearest residences on the northern and eastern boundaries of the proposed site which are dominated by traffic noise from the Tasman Highway. Traffic Noise modelling conducted for this project predicted minimal changes in noise levels in this area, as a result of the upgrade project, so this data remains valid for the purpose of characterising the acoustic environment around the proposed park and ride.

Figure 3 below shows the results of the noise logging. The noise levels follow a typical daily pattern for urban areas, reducing to low levels overnight in response to lower traffic volumes.  $L_{eq}$  is the continuous equivalent noise level, which is a logarithmic average of varying noise levels over a particular period of time.  $L_{90}$  is the background noise level, which is the noise level that is exceeded 90% of the time during a particular period of time.  $L_{max}$  is the maximum noise level.

The largest  $L_{max}$  during the logging period was 92 dB(A), with the  $L_{90,1hr}$  background levels varying between 24 and 56 dB(A) and the  $L_{eq,1hr}$  varying between 36 and 66 dB(A). During the early morning period of 6am to 7am, the  $L_{eq,1hr}$  was 55.2 dB(A). The  $L_{max}$  values recorded during this time period ranged from 65 to 80.5 dB(A).



Figure 3 - Noise Logger Results

# 5. Predicted Noise Emissions Levels

The worst case predicted levels of noise emissions from the site, were calculated at the residence most exposed to noise from the carpark (13 Fenton Street). The greatest noise impact would potentially occur between 6am and 7am, when noise from cars in the car park might disrupt the sleep of nearby residents. It was assumed that during this time period, 2 cars parked simultaneously in the parking bays immediately adjoining the boundary of the property. The noise level at the nearest façade of the house, was calculated taking into account noise attenuation due to distance, and shielding by the rear fence which is a solid timber fence, nominally 1.8m high. The calculation methodology used is in accordance with the Tasmanian *Noise Measurement Procedures Manual*, 2008.

The predicted noise levels are an  $L_{eq}$  of 42.5 dB(A) and an  $L_{max}$  of 63.4 dB(A). These values are lower than the EPP acoustic indicator levels of 45 dB(A) and 65 dB(A) for  $L_{eq}$  and  $L_{max}$  respectively, for avoiding sleep disturbance of residents in bedrooms with open windows.

As noted above the existing  $L_{eq,1hour}$  for the 6am to 7am is 55.2 dB(A). If the predicted worst case noise from the cars of 42.5 dB(A) is logarithmically added to this noise level, the new combined noise level is 55.4 dB(A), which is a negligible change. The predicted  $L_{max}$  of 63.4 dB(A) is lower than the existing range of  $L_{max}$  values of 65 to 80.5 dB(A), which already occur as a result of highway traffic.

On this basis it may be concluded that noise emissions from cars utilising the proposed park and ride facility will not cause unreasonable loss of amenity for the adjacent residences.

# 6. Planning Scheme Assessment

On the basis of the noise assessment the following planning scheme assessment demonstrates that the proposed Vehicle Parking use complies with the requirements of Clauses 27.3.1 and 29.3.1 of the planning scheme:

#### 27.3.1 Non-residential use

Objective: That non-residential use does not cause an unreasonable loss of amenity to residential zones.

Acceptable Solution	Performance Criteria
<ul> <li>A1</li> <li>Hours of operation of a use, excluding Emergency</li></ul>	<ul> <li>P1</li> <li>Hours of operation of a use, excluding Emergency Services,</li></ul>
Services, Hospital Services, Natural and Cultural	Hospital Services, Natural and Cultural Values Management,
Values Management, Passive Recreation or Utilities,	Passive Recreation or Utilities, within 50m of a General
within 50m of a General Residential Zone, Inner	Residential Zone, Inner Residential Zone or Low Density
Residential Zone or Low Density Residential Zone,	Residential Zone, must not cause an unreasonable loss of
must be within the hours of: <li>(a) 8.00am to 8.00pm Monday to Friday;</li> <li>(b) 9.00am to 6.00pm Saturday; and</li> <li>(c) 10.00am to 5.00pm Sunday and public holidays.</li>	amenity to an adjacent residential use having regard to: <li>(a) the timing, duration or extent of vehicle movements; and</li> <li>(b) noise, lighting or other emissions.</li>

#### Assessment

The proposed Vehicle Parking use (park and ride facility) is within 50m of the General Residential Zone and will be used before 8am. In terms of potential noise impacts, the proposal satisfies P1 for the following reasons:

- (a) Taking into account the timing, duration and extent of vehicle movements, the noise assessment concludes that unreasonable loss of amenity will not occur.
- (b) The noise levels predicted meet the requirements of the Tasmanian EPP (Noise), therefore, unreasonable loss of amenity will not occur.

#### 29.3.1 Discretionary uses

Objective: That a use listed as Discretionary, does not cause an unreasonable loss of amenity to adjacent sensitive uses.

Acceptable Solution	Performance Criteria	
<ul> <li>A1</li> <li>Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor</li> <li>Accommodation, must be within the hours of:</li> <li>(a) 8.00am to 10.00pm if within 50m of a General Residential Zone, Inner Residential Zone or Low</li> </ul>	P1 Hours of operation for a use listed as Discretionary, excluding Emergency Services or Visitor Accommodation, must not cause an unreasonable loss of amenity to adjacent sensitive uses having regard to: (a) the timing, duration or extent of vehicle movements; and	
<ul><li>(b) 6.00am to midnight, otherwise.</li></ul>	(b) noise, lighting or other emissions.	

#### Assessment

The proposed Vehicle Parking use (park and ride facility) is within 50m of the General Residential Zone and will be used before 8am. In terms of potential noise impacts, the proposal satisfies P1 for the following reasons:

(a) Taking into account the timing, duration and extent of vehicle movements, the noise assessment concludes that unreasonable loss of amenity will not occur.

(b) The noise levels predicted meet the requirements of the Tasmanian EPP (Noise), therefore, unreasonable loss of amenity will not occur.

# 7. Construction Noise

Construction works on the site will be carried out during normal working hours of 7AM to 5PM Monday to Friday using conventional civil construction techniques and equipment. Appropriate precautions will be taken to limit the generation of excessive noise. No unusually loud plant or equipment (such as pile driving or blasting) is expected to be required. Noise emissions generated during construction are not expected to be significantly louder than the level of traffic noise normally experienced in the area.

# 8. Conclusion

The predicted noise emissions from the proposed Vehicle Parking use complies with the noise impact requirements of Clauses 27.3.1 P1 and 29.3.1 P1 of the planning scheme.

On the basis of this noise assessment, it may be concluded that nearby residents are unlikely to experience any loss of amenity or environmental harm as a result of the noise emissions from the proposed use.



### Midway Point Park and Ride Noise Assessment

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