

File: 22/32
Date: 28 October 2022

EPO Developments Pty Ltd
C/- Town Planning Alliance
PO Box 7657
EAST BRISBANE QLD 4169

Attention: Mr Brendan Ferris

Dear Brendan

**Decision Notice –approval (with conditions)
Material Change of Use & Reconfiguring a Lot
Lots 1 & 4 on RP850853, 2 and 8 Mill Street, Goondiwindi**

We wish to advise that on 28 October 2022 a decision was made to approve the material change of use and reconfiguring a lot development application for “*Business Activities*” – “*Food and Drink Outlet*” (Drive Through Restaurant) and Reconfiguring a Lot (Boundary Realignment) and Easement Giving Access to a Constructed Road at Lots 1 & 4 on RP850853, 2 and 8 Mill Street, Goondiwindi. In accordance with the *Planning Act 2016*, please find attached Council’s Decision Notice for the application.

Please read the conditions carefully as these include actions which must be undertaken **prior to the commencement of the use** as well as requirements for the ongoing operation of the use.

All conditions are required to be either complied with or bonded prior to the commencement of the use. Please note **Conditions 31 & 35**, which requires a letter to be submitted to Council prior to commencement of the use or submission of the survey plan, whichever comes first, outlining and demonstrating compliance with each condition.

The applicant is required to **notify Council in writing of the date of the commencement** of the use, within fourteen (14) business days of commencement.

If you require any further information, please contact Council’s Manager of Planning Services, Mrs Ronnie McMahon, on (07) 4671 7400 or rmcmahon@grc.qld.gov.au, who will be pleased to assist.

Yours faithfully



Carl Manton
Chief Executive Officer
Goondiwindi Regional Council

Decision Notice approval

Planning Act 2016 section 63

Council File Reference: 22/32
Council Contact: Mrs Ronnie McMahon
Council Contact Phone: (07) 4671 7400

28 October

Applicant Details: EPO Developments Pty Ltd
C/- Town Planning Alliance
PO Box 7657
EAST BRISBANE QLD 4169

Attention: Mr Brendan Ferris

The development application described below was properly made to Goondiwindi Regional Council on 19 August 2022.

Applicant details

Applicant name: EPO Developments Pty Ltd C/- Town Planning Alliance
Applicant contact details: Attention: Brendan Ferris
PO Box 7657, East Brisbane Qld 4169
(07) 3361 9999
eda@tpalliance.com.au

Application details

Application number: 22/32
Approval sought: Development Permit
Details of proposed development: "Business Activities" – "Food and Drink Outlet" (Drive Through Restaurant) and Reconfiguring a Lot (Boundary Realignment) and Easement Giving Access to a Constructed Road

Location details

Street address: 2 & 8 Mill Street, Goondiwindi
Real property description: Lots 1 & 4 on RP850853

Decision

Date of decision: 28 October 2022
Decision details: Approved in full with conditions. These conditions are set out in Attachment 1 and are clearly identified to indicate whether the assessment manager or a concurrence agency imposed them.

Details of the approval

The application is not taken to be approved (a deemed approval) under section 64(5) of the *Planning Act 2016*.

The following approvals are given:

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
Development assessable under the planning scheme, superseded planning scheme, a temporary local planning instrument, a master plan or a preliminary approval which includes a variation approval - building work assessable under the planning scheme - plumbing or drainage work - material change of use - reconfiguring a lot - operational work	N/A	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Carrying out building work (assessable under the <i>Building Act 1975</i>)	Schedule 9, part 1	<input type="checkbox"/>	<input type="checkbox"/>
Development on airport land if the land use plan for the airport land states the development is assessable development - building work - plumbing or drainage work - material change of use (consistent with the land use plan) - reconfiguring a lot - operational work	Schedule 10, part 1, division 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Making a material change of use on airport land that is inconsistent with the land use plan for the airport land	Schedule 10, part 1, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use for a brothel	Schedule 10, part 2, division 2	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work for the clearing of native vegetation	Schedule 10, part 3, division 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use on contaminated land	Schedule 10, part 4, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for an environmentally relevant activity	Schedule 10, part 5, division 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for aquaculture	Schedule 10, part 6, division 1, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work that is completely or partly in a declared fish habitat area	Schedule 10, part 6, division 2, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
Carrying out operational work that is the removal, destruction or damage of a marine plant	Schedule 10, part 6, division 3, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work that is constructing or raising waterway barrier works	Schedule 10, part 6, division 4, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use for a hazardous chemical facility	Schedule 10, part 7, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Development on a local heritage place (other than a Queensland heritage place) - building work assessable under the <i>Building Act 1975</i> - building work assessable under the planning scheme - plumbing or drainage work - material change of use - reconfiguring a lot - operational work	Schedule 10, part 8, division 1, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Development on or adjoining a Queensland heritage place - building work assessable under the <i>Building Act 1975</i> - building work assessable under the planning scheme - plumbing or drainage work - material change of use - reconfiguring a lot - operational work	Schedule 10, part 8, division 2, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Development interfering with koala habitat in koala habitat areas outside koala priority areas	Schedule 10, part 10, division 3, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Development interfering with koala habitat in koala habitat areas for extractive industries in key resource areas	Schedule 10, part 10, division 4, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work for reconfiguring a lot, if the reconfiguration is also assessable development	Schedule 10, part 12, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Development in a priority port's master planned area that the port overlay for the master planned area states is assessable development - building work - plumbing or drainage work - material change of use - reconfiguring a lot - operational work	Schedule 10, part 13, division 4, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
Development on strategic port land if the land use plan for the strategic port land states the development is assessable development - building work - plumbing or drainage work - material change of use (consistent with the land use plan) - reconfiguring a lot - operational work	Schedule 10, part 13, division 5, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Making a material change of use on strategic port land that is inconsistent with the land use plan	Schedule 10, part 13, division 5, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Reconfiguring a lot under the <i>Land Title Act 1994</i>	Schedule 10, part 14, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a tourist activity or sport and recreation activity in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 2, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a residential care facility in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 3, subdivision 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a community activity, other than a residential care facility, in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 3, subdivision 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for indoor recreation in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 4, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a biotechnology industry in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 6, subdivision 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a service station in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 6, subdivision 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for an urban activity other than a biotechnology industry or service station in the SEQ regional landscape and rural production area or the SEQ rural living area	Schedule 10, part 16, division 6, subdivision 2	<input type="checkbox"/>	<input type="checkbox"/>

	Planning Regulation 2017 reference	Development Permit	Preliminary Approval
<p>Making a material change of use of premises for two or more of the following:</p> <ul style="list-style-type: none"> (i) a community activity (ii) indoor recreation (iii) a sport and recreation activity (iv) a tourist activity (v) an urban activity, <p>in the SEQ regional landscape and rural production area or the SEQ rural living area</p>	Schedule 10, part 16, division 7, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Carrying out operational work that is tidal works or work carried out completely or partly in a coastal management district	Schedule 10, part 17, division 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work that involves taking, or interfering with, water	Schedule 10, part 19, division 1, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
<p>Development for removing quarry material from a watercourse or lake</p> <ul style="list-style-type: none"> - building work assessable under the <i>Building Act 1975</i> - building work assessable under the planning scheme - plumbing or drainage work - material change of use - reconfiguring a lot - operational work 	Schedule 10, part 19, division 2, subdivision 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Carrying out operational work that is the construction of a dam or relates to a dam.	Schedule 10, part 19, division 3, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work for construction of a new category 2 or 3 levee or for modification of an existing category 2 or 3 levee	Schedule 10, part 19, division 4, subdivision 1	<input type="checkbox"/>	<input type="checkbox"/>
Carrying out operational work that is high impact earthworks in a wetland protection area	Schedule 10, part 20, division 2	<input type="checkbox"/>	<input type="checkbox"/>
Making a material change of use of premises for a wind farm	Schedule 10, part 21, division 1	<input type="checkbox"/>	<input type="checkbox"/>

Conditions

This approval is subject to the conditions in Attachment 1.

Further development permits

Please be advised that the following development permits are required to be obtained before the development can be carried out:

1. Building Approval
2. Plumbing Compliance Permit

Properly made submissions

Not applicable—No part of the application required public notification.

Referral agencies for the application

The referral agencies for this application are:

For an application involving	Name of referral agency	Advice agency or concurrence agency	Address
<p>As per Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1 (10.9.4.1.1.1) of the PR:</p> <p><i>Development application for an aspect of development stated in schedule 20 that is assessable development under a local categorising instrument or section 21, if—</i></p> <p>(a) <i>the development is for a purpose stated in schedule 20, column 1 for the aspect; and</i></p> <p>(b) <i>the development meets or exceeds the threshold—</i></p> <p style="padding-left: 40px;">(i) <i>for development in local government area 1—stated in schedule 20, column 2 for the purpose; or</i></p> <p style="padding-left: 40px;">(ii) <i>for development in local government area 2—stated in schedule 20, column 3 for the purpose; and</i></p> <p>(c) <i>for development in local government area 1—the development is not for an accommodation activity or an office at premises wholly or partly in the excluded area</i></p> <p><i>However, if the development is for a combination of purposes stated in the same item of schedule 20, the threshold is for the combination of purposes and not for each individual purpose</i></p>	Department of State Development, Infrastructure, Local Government and Planning	Concurrence Agency	<p>Department of State Development, Infrastructure, Local Government and Planning, Post: PO Box 825, Visit: 128 Margaret Street, TOOWOOMBA QLD 4350</p> <p>ToowoombaSARA@dsdilgp.qld.gov.au</p> <p>Ph: (07) 4616 7307</p>

For an application involving	Name of referral agency	Advice agency or concurrence agency	Address
<p>As per Schedule 10, Part 9, Division 4, Subdivision 2, Table 1, Item 1 (10.9.4.2.1.1) of the PR:</p> <p><i>Development application for reconfiguring a lot that is assessable development under section 21, if—</i></p> <p>(a) <i>all or part of the premises are within 25m of a State transport corridor; and</i></p> <p>(b) <i>1 or more of the following apply—</i></p> <p>(i) <i>the total number of lots is increased;</i></p> <p>(ii) <i>the total number of lots adjacent to the State transport corridor is increased;</i></p> <p>(iii) <i>there is a new or changed access between the premises and the State transport corridor;</i></p> <p>(iv) <i>an easement is created adjacent to a railway as defined under the Transport Infrastructure Act, schedule 6; and</i></p> <p><i>the reconfiguration does not relate to government supported transport infrastructure</i></p>	<p>Department of State Development, Infrastructure, Local Government and Planning</p>	<p><i>Concurrence Agency</i></p>	<p>Department of State Development, Infrastructure, Local Government and Planning, Post: PO Box 825, Visit: 128 Margaret Street, TOOWOOMBA QLD 4350</p> <p>ToowoombaSARA@dsdilgp.qld.gov.au</p> <p>Ph: (07) 4616 7307</p>

For an application involving	Name of referral agency	Advice agency or concurrence agency	Address
<p>As per Schedule 10, Part 9, Division 4, Subdivision 2, Table 3, Item 1 (10.9.4.2.3.1) of the PR:</p> <p><i>Development application for reconfiguring a lot that is assessable development under section 21, if—</i></p> <p>(a) <i>all or part of the premises are—</i></p> <p style="padding-left: 20px;">(i) <i>adjacent to a road (the relevant road) that intersects with a State-controlled road; and</i></p> <p style="padding-left: 20px;">(ii) <i>within 100m of the intersection; and</i></p> <p>(b) <i>1 or more of the following apply—</i></p> <p style="padding-left: 20px;">(i) <i>the total number of lots is increased;</i></p> <p style="padding-left: 20px;">(ii) <i>the total number of lots adjacent to the relevant road is increased;</i></p> <p style="padding-left: 20px;">(iii) <i>there is a new or changed access between the premises and the relevant road; and</i></p> <p><i>the reconfiguration does not relate to government supported transport infrastructure</i></p>	Department of State Development, Infrastructure, Local Government and Planning	Concurrence Agency	<p>Department of State Development, Infrastructure, Local Government and Planning, Post: PO Box 825, Visit: 128 Margaret Street, TOOWOOMBA QLD 4350</p> <p>ToowoombaSARA@dsdilgp.qld.gov.au</p> <p>Ph: (07) 4616 7307</p>
<p>As per Schedule 10, Part 9, Division 4, Subdivision 2, Table 4, Item 1 (10.9.4.2.4.1) of the PR:</p> <p><i>Development application for a material change of use, other than an excluded material change of use, that is assessable development under a local categorising instrument, if all or part of the premises—</i></p> <p>(c) <i>are within 25m of a State transport corridor; or</i></p> <p>(d) <i>are a future State transport corridor; or</i></p> <p>(e) <i>are—</i></p> <p style="padding-left: 20px;">(i) <i>adjacent to a road that intersects with a State-controlled road; and</i></p> <p><i>within 100m of the intersection</i></p>	Department of State Development, Infrastructure, Local Government and Planning	Concurrence Agency	<p>Department of State Development, Infrastructure, Local Government and Planning, Post: PO Box 825, Visit: 128 Margaret Street, TOOWOOMBA QLD 4350</p> <p>ToowoombaSARA@dsdilgp.qld.gov.au</p> <p>Ph: (07) 4616 7307</p>

Approved plans and specifications

Copies of the following plans and reports are enclosed.

Drawing Number	Title	Date
DA01, Rev. B	Prop. Site Plan	03.08.2022
DA02, Rev. A	Prop. Floor Plan	03.08.2022
DA03, Rev. A	Building Elevations & Perspectives	03.08.2022
DA04, Rev. A	Building Elevations & Perspectives	03.08.2022
DA05, Rev. B	Site Perspectives	03.08.2022
DA08, Rev. B	Subdivision Plan	03.08.2022
2205200 SD-02	Schematic Design – Landscape Plan	11-08-2022
2205200 SD-03	Indicative Planting Palette & Landscape Sections	11-08-2022
22100 Report	Environmental Noise Impact Report	12.08.2022
BE220369-RP-TIA-01	Traffic Impact Assessment	12.08.2022
BE220369-RP-CSMP-00	Conceptual Stormwater Management Plan	11.08.2022

Currency period for the approval

This development approval will lapse at the end of the period set out in section 85 of *Planning Act 2016* OR

- [For material change of use] This approval lapses if the first change of use does not happen within (insert period).
- [for reconfiguring a lot] This approval lapses if a plan for the reconfiguration that, under the *Land Title Act 1994*, is required to be given to a local government for approval is not given within (insert period)

Rights of appeal

The rights of an applicant to appeal to a tribunal or the Planning and Environment Court against a decision about a development application are set out in chapter 6, part 1 of the *Planning Act 2016*. For certain applications, there may also be a right to make an application for a declaration by a tribunal (see chapter 6, part 2 of the *Planning Act 2016*).

Appeal by an applicant

An applicant for a development application may appeal to the Planning and Environment Court against the following:

- the refusal of all or part of the development application
- a provision of the development approval
- the decision to give a preliminary approval when a development permit was applied for
- a deemed refusal of the development application.

An applicant may also have a right to appeal to the Development tribunal. For more information, see schedule 1 of the *Planning Act 2016*.

Attachment 5 is an extract from the *Planning Act 2016* that sets out the applicant's appeal rights and the appeal rights of a submitter.

To stay informed about any appeal proceedings which may relate to this decision visit:
<https://planning.dsdmip.qld.gov.au/planning/our-planning-system/dispute-resolution/pe-court-database>.

Attachment 4 is a Notice about decision - Statement of reasons, in accordance with section 63 (5) of the Planning Act 2016.

If you wish to discuss this matter further, please contact Council's Manager of Planning Services, Mrs Ronnie McMahon, on 07 4671 7400.

Yours Sincerely



Carl Manton
Chief Executive Officer
Goondiwindi Regional Council

cc Department of State Development, Infrastructure, Local Government and Planning,
PO Box 825,
TOOWOOMBA QLD 4350

ToowoombaSARA@dsdilgp.qld.gov.au

enc Attachment 1—Assessment manager and concurrence agency conditions

- Department of State Development, Infrastructure, Local Government and Planning response dated 6 October 2022 (2209-30756 SRA)

Attachment 2—Approved Plans & Documents
Attachment 3—Infrastructure Charges Notice
Attachment 4—Notice about decision – Statement of reasons
Attachment 5—*Planning Act 2016* Extracts



ATTACHMENTS

Attachment 1 – Assessment Manager’s Conditions

Attachment 2 – Approved Plans

Attachment 3 – Infrastructure Charges Notice

Attachment 4 – Notice about decision - Statement of reasons

Attachment 5 – *Planning Act 2016* Extracts

Planning Act 2016 appeal provisions

Planning Act 2016 lapse dates



Attachment 1 – Assessment Manager's Conditions



Assessment Manager's Conditions

Description:	<ul style="list-style-type: none"> • <i>"Business Activities" – "Food and Drink Outlet" (Drive Through Restaurant) and Reconfiguring a Lot (Boundary Realignment) and Easement Giving Access to a Constructed Road</i>
Development:	Material Change of Use & Reconfiguring a Lot – Development Permit
Applicant:	EPO Developments Pty Ltd C/- Town Planning Alliance
Address:	2 and 8 Mill Street, Goondiwindi
Real Property Description:	Lots 1 & 4 on RP850853
Council File Reference:	22/32

GENERAL CONDITIONS																																					
1.	Approval is granted for the purpose of a Material Change of Use for: <ul style="list-style-type: none">• “Business Activities” – “Food and Drink Outlet” (Drive Through Restaurant) as defined in the Goondiwindi Region Planning Scheme 2018 (Version 2).																																				
2.	Approval is granted for the purpose of Reconfiguring a Lot for: <ul style="list-style-type: none">• Boundary Realignment (2 lots into 2 lots); and• Easement giving access to a constructed road.																																				
3.	All conditions must be complied with or bonded prior to the commencement of the use, unless specified in an individual condition.																																				
4.	Except where changed by conditions of this approval, the development shall be in accordance with supporting information supplied by the applicant with the development application including the following plans and reports: <table><tr><th>Drawing Number</th><th>Title</th><th>Date</th></tr><tr><td>DA01, Rev. B</td><td>Prop. Site Plan</td><td>03.08.2022</td></tr><tr><td>DA02, Rev. A</td><td>Prop. Floor Plan</td><td>03.08.2022</td></tr><tr><td>DA03, Rev. A</td><td>Building Elevations & Perspectives</td><td>03.08.2022</td></tr><tr><td>DA04, Rev. A</td><td>Building Elevations & Perspectives</td><td>03.08.2022</td></tr><tr><td>DA05, Rev. B</td><td>Site Perspectives</td><td>03.08.2022</td></tr><tr><td>DA08, Rev. B</td><td>Subdivision Plan</td><td>03.08.2022</td></tr><tr><td>2205200 SD-02</td><td>Schematic Design – Landscape Plan</td><td>11-08-2022</td></tr><tr><td>2205200 SD-03</td><td>Indicative Planting Palette & Landscape Sections</td><td>11-08-2022</td></tr><tr><td>22100 Report</td><td>Environmental Noise Impact Report</td><td>12.08.2022</td></tr><tr><td>BE220369-RP-TIA-01</td><td>Traffic Impact Assessment</td><td>12.08.2022</td></tr><tr><td>BE220369-RP-CSMP-00</td><td>Conceptual Stormwater Management Plan</td><td>11.08.2022</td></tr></table> <p>Please note these plans are not approved Building Plans.</p>	Drawing Number	Title	Date	DA01, Rev. B	Prop. Site Plan	03.08.2022	DA02, Rev. A	Prop. Floor Plan	03.08.2022	DA03, Rev. A	Building Elevations & Perspectives	03.08.2022	DA04, Rev. A	Building Elevations & Perspectives	03.08.2022	DA05, Rev. B	Site Perspectives	03.08.2022	DA08, Rev. B	Subdivision Plan	03.08.2022	2205200 SD-02	Schematic Design – Landscape Plan	11-08-2022	2205200 SD-03	Indicative Planting Palette & Landscape Sections	11-08-2022	22100 Report	Environmental Noise Impact Report	12.08.2022	BE220369-RP-TIA-01	Traffic Impact Assessment	12.08.2022	BE220369-RP-CSMP-00	Conceptual Stormwater Management Plan	11.08.2022
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5.	<p>Complete and maintain the approved development as follows:</p> <ul style="list-style-type: none"> (i) Generally in accordance with development approval documents; and (ii) Strictly in accordance with those parts of the approved development which have been specified in detail by Council unless Council agrees in writing that those parts will be adequately complied with by amended specifications. <p>All development shall comply with any relevant provisions in the <i>Goondiwindi Region Planning Scheme 2018 (Version 2)</i>, Council's standard designs for applicable work and any relevant Australian Standard that applies to that type of work.</p> <p>The development approval documents are the material contained in the development application, approved plans and supporting documentation including any written and electronic correspondence between applicant, Council or any relevant Agencies during all stages of the development application assessment processes.</p>
6.	<p>The developer shall contact Council's Engineering Department to ensure the correct specifications are obtained for all civil works prior to commencement of any works onsite.</p>
7.	<p>It is the developer's responsibility to obtain all other statutory approvals required prior to the commencement of the use.</p>
OPERATION OF THE USE	
8.	<p>The proposed activities shall be operated generally between the hours of:</p> <p>(a) 10:00am and 10:00pm, Monday to Sunday.</p>
9.	<p>Loading and unloading shall occur between the hours of:</p> <p>(a) 7:00am and 6:00pm, Monday to Friday.</p> <p>No loading and unloading is to occur on Sundays and Public Holidays.</p>
ESSENTIAL SERVICES	
10.	<p>Prior to the issue of a building approval or submission to Council of the Plan of Survey, whichever comes first, the development shall be connected to Council's reticulated water supply system, in accordance with Schedule 6.2 Planning Scheme Policy 1 – Land Development Standards in the <i>Goondiwindi Region Planning Scheme 2018</i>, to the satisfaction of and at no cost to Council.</p> <p>The developer shall provide all necessary water infrastructure to enable the development and both lots to be serviced to relevant engineering standards and to the satisfaction of Council.</p>

11.	<p>Prior to the issue of a building approval or submission to Council of the Plan of Survey, whichever comes first, the development shall be connected to Council's reticulated sewerage system, in accordance with Schedule 6.2 Planning Scheme Policy 1 – Land Development Standards in the Goondiwindi Region Planning Scheme 2018, to the satisfaction of and at no cost to Council.</p> <p>The developer shall provide all necessary sewer infrastructure to enable the development to be serviced to relevant engineering standards and to the satisfaction of Council.</p>
	<p>PUBLIC UTILITIES</p>
12.	<p>The development shall be connected to an adequate electricity and telecommunications supply system, at no cost to Council.</p>
	<p>ROADS AND VEHICLES</p>
13.	<p>The proposed access to Mill Street, from the edge of the existing bitumen to the property boundary, shall be constructed to a commercial standard generally in the location shown in on the approved plans. The crossover must be constructed in accordance with the approved Traffic Impact Assessment and in accordance with Schedule 6.2.1 – Standard Drawing in Schedule 6.2 – Planning Scheme Policy 1 – Land Development Standards of the Goondiwindi Region Planning Scheme 2018, to the satisfaction of and at no cost to Council.</p> <p>Crossovers shall be constructed prior to the commencement of the use.</p> <p>The developer shall contact Council's Engineering Department to ensure the correct specifications are obtained for all civil works prior to commencement of any works onsite.</p> <p>A qualified Council Officer may inspect construction works at the request of the development to ensure compliance with this condition."</p>
14.	<p>Twenty-one (21) sealed and delineated car parking spaces shall be supplied on site. This area shall be constructed in accordance with Schedule 6.2 – Planning Scheme Policy 1 – Land Development Standards of the <i>Goondiwindi Region Planning Scheme 2018 (Version 2)</i>, to the satisfaction of and at no cost to Council.</p> <p>Car parking areas shall be constructed prior to the commencement of the use.</p> <p>The developer shall contact Council's Engineering Department to ensure the correct specifications are obtained for all civil works prior to commencement of any works onsite.</p> <p>A qualified Council Officer may inspect construction works at the request of the developer to ensure compliance with this condition.</p>
15.	<p>Provide loading bay facilities for a Heavy Rigid Vehicle in the location generally shown on the Approved Plans and in accordance with the approved Traffic Impact Assessment that are designed in accordance with Australian Standard 2890.2 – Off-street Commercial Vehicle Facilities.</p>

LANDSCAPING														
16.	<p>Landscaping shall be provided in accordance with Schedule 6.3 – Planning Scheme Policy 1 – Land Development Standards of the Goondiwindi Region Planning Scheme 2018, generally in accordance with the Approved Landscape Plan.</p> <p>All landscaping and tree plantings are to be planted and maintained to the satisfaction of a qualified Council Officer. A bond for the amount of \$9,872 is to be submitted prior to the issue of a building approval for the maintenance of landscaping.</p> <p>If the landscaping complies with Schedule 6.3 – Planning Scheme Policy 1 – Land Development Standards of the Goondiwindi Region Planning Scheme 2018, the applicant will be advised in writing that the bond is accepted. The bond holding time starts from the acceptance of works. Council must be contacted by the applicant to request an inspection of the landscaping as soon as possible after completion of planting and payment of bond. The bond shall be returned in accordance with the following schedule if the landscaping meets the criteria:</p> <table><tr><th>Time from acceptance of landscaping works</th><th>Criteria</th><th>Bond Refund / Reduction</th></tr><tr><td>9 months – From acceptance of works</td><td>Landscaping conforms to requirements, is established and maintained. Adequate provision for on-going watering and growth. Any/all replacement plants are provided.</td><td>50%</td></tr><tr><td>18 months – From acceptance of works</td><td>Landscaping is well established (as a guide >50% full growth depending on species). All replacement plants are established. The landscaping intent is being achieved.</td><td>25%</td></tr><tr><td>24 months – From acceptance of works</td><td>Landscaping is fully established, or within 80% depending on species.</td><td>25%</td></tr></table> <p>After the required bond holding time has passed, a refund of bond monies will only be considered upon a written request from the person who paid the bond once the required bond holding time has been completed.</p> <p>A qualified Council Officer may inspect landscaping plantings to ensure compliance with this condition and acceptance of the works.</p> <p>Council will hold the funds in trust for a maximum of three years, at which time should work not be carried out and maintained to Council's satisfaction, the bond will be used by Council to have the works performed unless an extension of time is requested by the land owner or applicant and approved by Council.</p> <p>To clarify, bonds can only be refunded upon a written request from the person who paid the bond upon the works being satisfactorily maintained for the required bond holding time."</p>		Time from acceptance of landscaping works	Criteria	Bond Refund / Reduction	9 months – From acceptance of works	Landscaping conforms to requirements, is established and maintained. Adequate provision for on-going watering and growth. Any/all replacement plants are provided.	50%	18 months – From acceptance of works	Landscaping is well established (as a guide >50% full growth depending on species). All replacement plants are established. The landscaping intent is being achieved.	25%	24 months – From acceptance of works	Landscaping is fully established, or within 80% depending on species.	25%
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24 months – From acceptance of works	Landscaping is fully established, or within 80% depending on species.	25%												

	STORMWATER
17.	<p>Prior to the commencement of the use, the site shall be adequately drained and all stormwater shall be disposed of generally in accordance with the approved Conceptual Stormwater Management Plan to a legal point of discharge in accordance with Schedule 6.2 – Planning Scheme Policy 1 – Land Development Standards of the <i>Goondiwindi Region Planning Scheme 2018 (Version 2)</i>, to the satisfaction of and at no cost to Council.</p> <p>Any increase in volume, concentration or velocity of stormwater from the site shall be channelled to lawful points of discharge or to other storage or dispersal arrangements which all must be agreed to in writing by Council.</p> <p>There shall be no change in direction or increase in the volume, concentration or velocity in any overland flow from the site to any adjoining properties unless agreed in writing by Council and the owners of any adjoining properties affected by these changes.</p> <p>The stormwater disposal system shall be designed to include appropriate pollution control devices or methods to ensure no contamination or silting or waterways.</p>
18.	<p>Stormwater shall not be allowed to pond on the site during the development process and after development has been completed unless the type and size of ponding has been agreed in writing by Council.</p> <p>No ponding, concentration or redirection of stormwater shall occur on adjoining properties unless specifically agreed to in writing by Council and the owners of any adjoining properties affected by these changes.</p>
	EARTHWORKS AND EROSION CONTROL
19.	<p>Any filling or excavation shall be undertaken in accordance with Schedule 6.2 – Planning Scheme Policy 1 – Land Development Standards of the <i>Goondiwindi Region planning Scheme 2018 (Version 2)</i> or to other relevant engineering standards to the satisfaction of and at no cost to Council.</p> <p>Excavation or filling within 1.5 metres of any site boundary is battered or retained by a wall that does not exceed 1 metre in height.</p>
20.	<p>All works associated with the development must be carried out in a manner that minimises erosion and controls sediment. Best practice erosion and sediment control measures shall be in place at the location of all works prior to work commencing and remain until work is completed in accordance with Schedule 6.2 – Planning Scheme Policy 1 – Land Development Standards of the <i>Goondiwindi Region Planning Scheme 2018 (Version 2)</i> to the satisfaction of and at no cost to Council.</p> <p>Control procedures are to be established to ensure sediment from the site is not deposited off site. The developer shall ensure no increase in any silt loads or contaminants in overland flow from the site during the development process and after development has been completed.</p>

AVOIDING NUISANCE	
21.	At all times while the use continues, the development shall be conducted in accordance with the provisions of the <i>Environmental Protection Act 1994</i> (the Act) and all relevant regulations and standards under that Act. All necessary licences under the Act shall be obtained and shall be maintained at all times while the use continues.
22.	<p>At all times while the use continues, lighting of the site, including any security lighting, shall be such that the lighting intensity does not exceed 8.0 lux at a distance of 1.5 metres from the site at any property boundary.</p> <p>All lighting shall be directed or shielded so as to ensure that no glare directly affects nearby properties, motorists or the operational safety of the surrounding road network.</p>
23.	At all times while the use continues it shall be operated in such a manner as to ensure that no nuisance shall arise to adjoining premises as a result of dust, noise, lighting, odour, vibration, rubbish, contaminants, stormwater discharge or siltation or any other potentially detrimental impact.
21.	<p>At all times while the use continues, provision must be made on site for the collection of general refuse in covered waste containers with a capacity sufficient for the use.</p> <p>Waste receptacles shall be placed in a screened area. The site must maintain a general tidy appearance.</p>
22.	The operator shall be responsible for mitigating any complaints arising from on-site operations.
23.	<p>Construction works must occur so they do not cause unreasonable interference with the amenity of adjoining premises.</p> <p>The site must be kept in a clean and tidy state at all times during construction.</p>
24.	At all times while the use continues, any air conditioned equipment shall be acoustically screened to ensure noise levels do not exceed 5 dB(A) above the background noise level measured at the boundaries of the subject site.
DEVELOPER'S RESPONSIBILITIES	
25.	Any alteration or damage to roads and/or public infrastructure that is attributable to the progress of works or vehicles associated with the development of the site shall be repaired to Council's satisfaction or the cost of repairs paid to Council.
26.	All contractors and subcontractors shall hold current, relevant and appropriate qualifications and insurances to carry out the works.

27.	All costs reasonably associated with the approved development, unless there is specific agreement by other parties to meet these costs, shall be met by the developer.
28.	At all times while the use continues, all requirements of the conditions of the development approval must be maintained.
COMMENCEMENT OF USE	
29.	<p>At its discretion, Council may accept bonds or other securities to ensure completion of specified development approval conditions or Council may accept cash payments for Council to undertake the necessary work to ensure completion of specified development approval conditions.</p> <p>It may be necessary for Council to use such bonds for the completion of outstanding works without a specific timeframe agreed.</p> <p>The decision to accept bonds or other securities to satisfy a condition will be that of Council, not the applicant.</p>
30.	<p>Council must be notified in writing of the date of the commencement of the use within 14 days of commencement.</p> <p>This Material Change of Use approval will lapse if the use has not commenced within six years of the date the development approval takes effect, in accordance with the provisions contained in sections 85(i)(a) of the <i>Planning Act 2016</i>.</p> <p>Section 86 of the <i>Planning Act 2016</i> sets out how an extension to the period of approval can be requested.</p>
31.	A letter outlining and demonstrating that conditions have been, or will be, complied with shall be submitted to Council and approved by a relevant Officer of Council prior to commencement of the use at each relevant stage. Council Officers may require a physical inspection to confirm that all conditions have been satisfied to relevant standards.
BEFORE PLANS WILL BE ENDORSED	
32.	<p>The developer shall submit a detailed Plan of Survey, prepared by a licensed surveyor, for the endorsement of Council. In accordance with Schedule 18 of the <i>Planning Regulations 2017</i>.</p> <p>The relevant Council Fee for endorsement of the Plan of Survey (currently \$195; subject to change). "</p>

33.	<p>All outstanding rates and charges shall be paid to Council prior to the submission to Council of the Plan of Survey.</p> <p>At its discretion, Council may accept bonds or other securities by way of bank guarantee or cash, to ensure completion of specified development approval conditions to expedite the endorsement of the Plan of Survey.</p> <p>It may be necessary for Council to use such bonds for the completion of outstanding works without a specific timeframe agreed.</p> <p>The decision to accept bonds or other securities to satisfy a condition will be that of Council, not the applicant."</p>
34.	<p>The developer shall provide any easements required for the development to the requirements of Council. Easement documents shall be registered with the Plan of Survey or the developer shall give Council an appropriate undertaking in writing that the easement documents shall be lodged as required.</p> <p>A duly executed copy of any title and easement documents shall be submitted to Council once sealed.</p>
35.	<p>A letter outlining and demonstrating that conditions have been complied with shall be submitted to Council prior to the submission to Council of the Plan of Survey. Council officers may require a physical inspection to confirm that all conditions have been satisfied to relevant standards.</p> <p>The approval will lapse if a plan for the reconfiguration is not given to the local government within the following period, in accordance with the provisions contained in section 85(1)(b) of the Planning Act 2016:</p> <p>(a) If no period is stated – 4 years after the approval starts to have effect.</p> <p>Section 86 of the Planning Act 2016 sets out how an extension to the period of approval can be requested.</p>

	PLEASE READ CAREFULLY - NOTES AND ADVICE
	<p><i>When approval takes effect</i></p> <p>This approval takes effect in accordance with section 85 of the <i>Planning Act 2016</i>.</p> <p><i>When approval lapses</i></p> <p>This Material Change of Use approval will lapse if the change of use has not occurred within the following period, in accordance with the provisions contained in section 85(i)(a) of the <i>Planning Act 2016</i>.</p> <p>(a) If no period stated – 6 years after the approval starts to have effect.</p> <p>The Reconfiguring a Lot approval will lapse if a plan for the reconfiguration is not given to the local government within the following period, in accordance with the provisions contained in section 85(1)(b) of the <i>Planning Act 2016</i>:</p> <p>(a) If no period stated – 4 years after the approval starts to have effect.</p> <p>Section 86 of the <i>Planning Act 2016</i> sets out how an extension to the period of approval can be requested.</p>
	<p>Infrastructure charges as outlined in the Infrastructure Charges Notice included in Attachment 3 shall be paid prior to the commencement of the use.</p>
	<p>This approval in no way removes the duty of care responsibility of the applicant under the <i>Aboriginal Cultural Heritage Act 2003</i>. Pursuant to Section 23(1) of the <i>Aboriginal Cultural Heritage Act 2003</i>, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage (the “cultural heritage duty of care”).</p>
	<p>This approval in no way authorises the clearing of native vegetation protected under the <i>Vegetation Management Act 1999</i>.</p>
	<p>The approved development does not authorise any deviation from the applicable Australian Standards nor from the application of any laws, including laws covering work place health and safety.</p>



Attachment 2 – Approved Plans





PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION

RPD:

LOT 1 & 4 on RP850853
PARISH: GOONDIWINDI
COUNTY: MARSH
COUNCIL: GOONDIWINDI REGIONAL

DEVELOPMENT ASSESSMENT

- OVERALL SITE AREA - 6,544m²
- PROP. LOT 1 - 2,599m²
- PROP. LOT 2 - 3,945m²
INCLUDES ACCESS EASEMENT
- LANDSCAPED AREA - 4,793m²
- BLDG SITE COVER - 3.5%
INCLUDES ALL ROOFED AREAS

IMPERVIOUS AREAS

- PRE SITE DEVELOPMENT - 0m²
(INCLUDES BUILDING ROOFED AREAS)
- POST SITE DEVELOPMENT - 1,751m²
(INCLUDES BUILDING ROOFED AREAS)

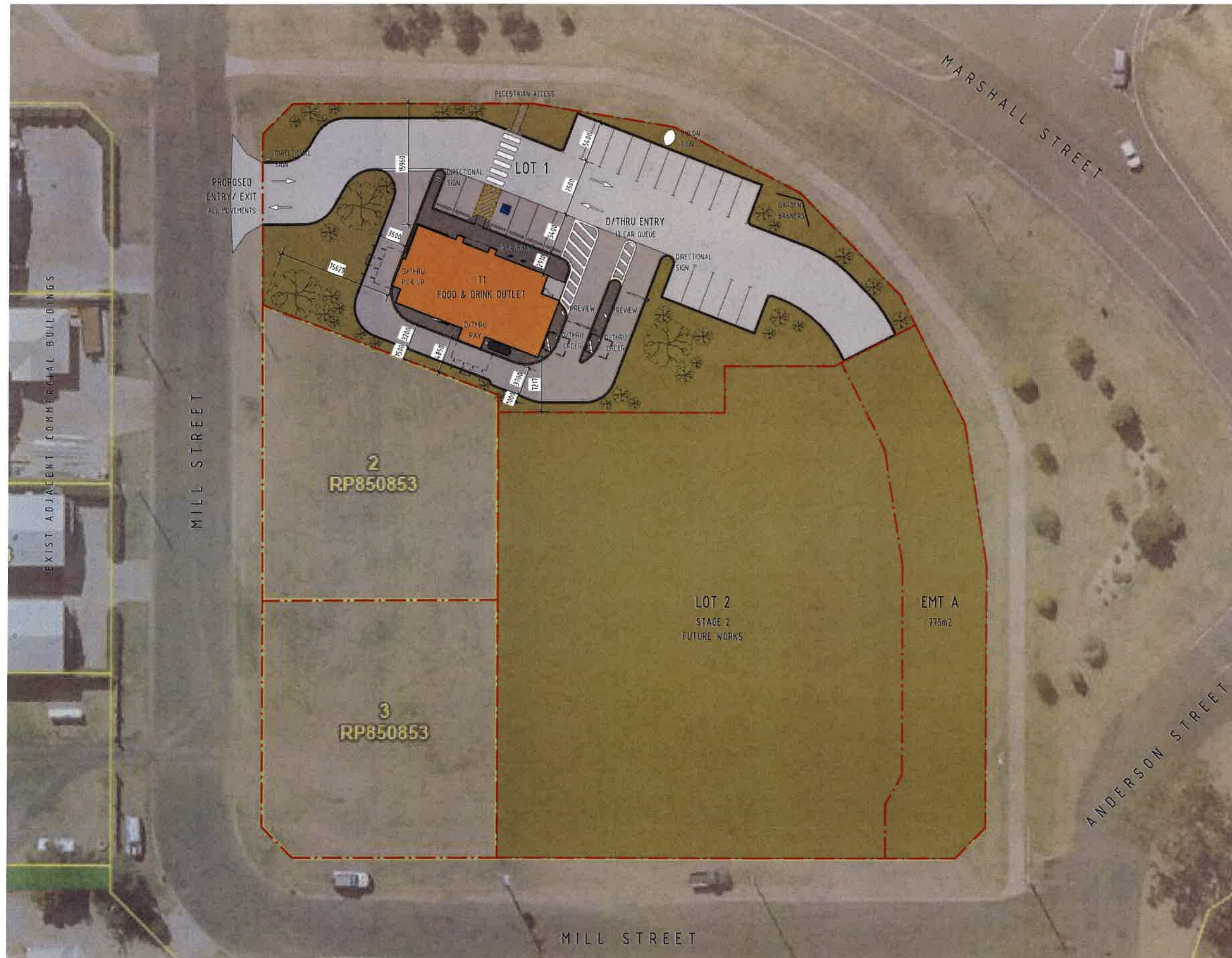
BUILDING AREAS - (GFA)

- T1 FOOD & DRINK - 225m²
(INCLUDES REFUSE AREA - 10m²)

CAR PARKING

- PARKING REQUIRED - 15
(TO BE CONFIRMED)
- PARKING PROVIDED - 21

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 22/132
Dated: 28/10/2022
Signed: Carl Martin
Print Name: Carl Martin
(Under Delegation) ASSESSMENT MANAGER



VERVE SCHEDULES DISCLAIMER:
1. ALL SCHEDULES SHOULD BE CHECKED WITH THE REMAINDER OF THE DRAWING SET.
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3. ANY DISCREPANCIES IN SCHEDULES SHOULD BE IDENTIFIED TO THE AUTHOR NOTED.
4. ALL AREAS ARE GROSS AREAS, UNLESS NOTED OTHERWISE.

CONSULTING ENGINEER



commercial / industrial / retail
fast food restaurant design
travel centre / service stations
project concept to completion

Rev	Date	Drn	Description	Appr
P1	01/07/2022	JN	PRELIMINARY ISSUE	
P2	10/07/2022	JN	ISSUE FOR APPROVAL	
P3	20/07/2022	JN	ISSUE FOR APPROVAL	
P4	02/08/2022	JN	ISSUE FOR APPROVAL	
A	03/08/2022	JN	ISSUE FOR APPROVAL	
B	03/08/2022	JN	ISSUE FOR APPROVAL	

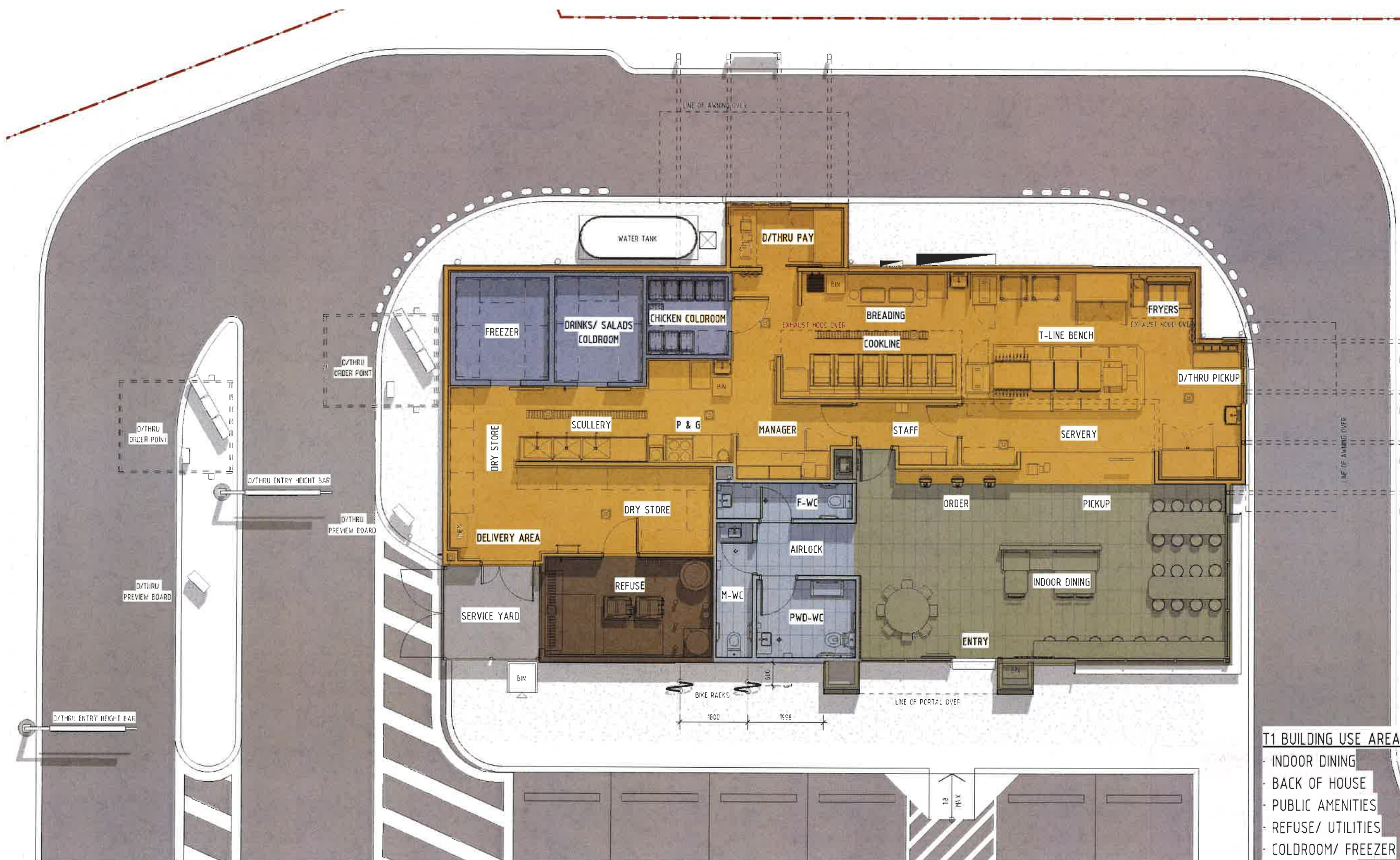
Project Description
PROPOSED QUICK SERVICE RESTAURANT
2 MILL STREET, GOONDIWINDI QLD 4390
Scale: A1
Date: JUL 2022
Drawn: JN
Approved By: GN

Drawing Title
PROP. SITE PLAN
Job Number - Drawing Number
22092 DA01
Revision
B



PRELIMINARY

THIS DRAWING IS NOT
FOR CONSTRUCTION



T1 BUILDING USE AREAS	
INDOOR DINING	- 50m ²
BACK OF HOUSE	- 118m ²
PUBLIC AMENITIES	- 18m ²
REFUSE/ UTILITIES	- 14m ²
COLDROOM/ FREEZER	- 20m ²
SERVICE YARD	- 5m ²
AREA USE TOTAL	- 225m ²

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VERVE
13 MILL STREET, GOONDIWINDI QLD 4390
07 4390 1313
www.vervegroup.com.au

Rev	Date	By	Description	Appr
P1	07.07.2022	JN	PRELIMINARY ISSUE	
P2	15.07.2022	JN	ISSUE FOR APPROVAL	
P3	20.07.2022	JN	ISSUE FOR APPROVAL	
P4	02.08.2022	JN	ISSUE FOR APPROVAL	
A	03.08.2022	JN	ISSUE FOR APPROVAL	

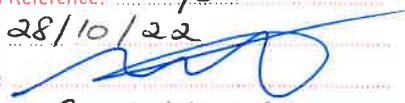
Project Description
PROPOSED QUICK SERVICE RESTAURANT
2 MILL STREET, GOONDIWINDI QLD 4390
Scale: 1:50
Date: JUL 2022
Drawn: JN
Approved: GN

Drawing Title	Job Number - Drawing Number	Revision
PROP. FLOOR PLAN	22092 DA02	A

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

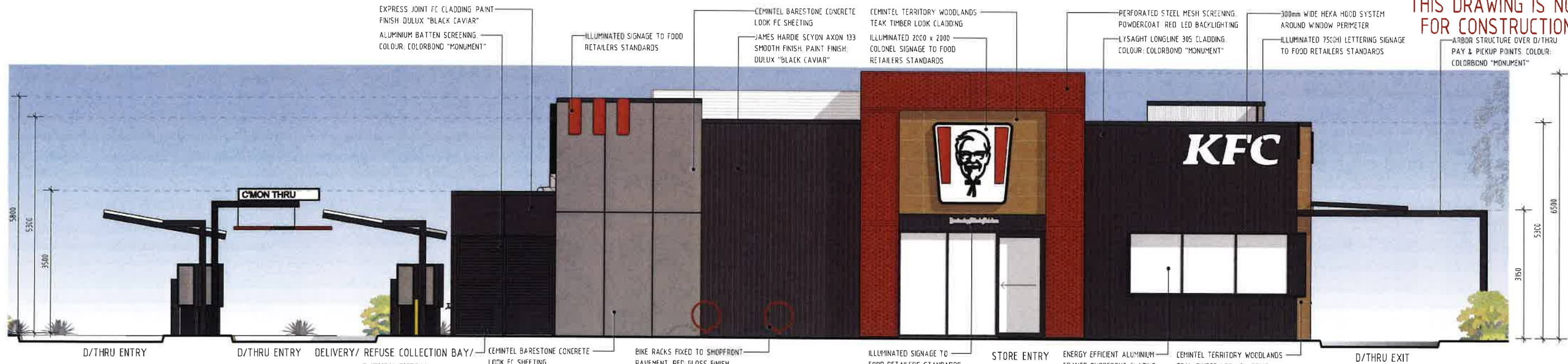
Dated: 28/10/22

Signed: 

Print Name: Carl Manton

(Under Delegation) ASSESSMENT MANAGER

PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION



1 DA ELEVATION - NORTH
1:50

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

Dated: 28/10/22

Signed: *Carl Manton*

Print Name: Carl Manton
(Under Delegation) ASSESSMENT MANAGER



2 DA ELEVATION - EAST
1:50

ALL EXTERNAL MATERIALS & FINISHES
SHOWN INDICATIVE ONLY AND SUBJECT
TO FINAL TENANT STANDARDS

ALL DIMENSIONS MEASURED FROM FINISHED
GROUND LEVEL UNLESS NOTED OTHERWISE

ALL LANDSCAPING SHOWN INDICATIVE ONLY



3 PERSPECTIVE 1



4 PERSPECTIVE 2

VERVE SCHEDULES DISCLAIMER:

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CONSULTING ENGINEER



commercial / industrial / retail

fast food restaurant design

travel centre / service stations

project concept to completion

VERVE BUILDING DESIGN & CONSTRUCTION
10/22/2022
10/22/2022
10/22/2022
10/22/2022

Revision and approvals

Rev	Date	By	Description
P1	07-07-2022	JM	PRELIMINARY ISSUE
P2	10-07-2022	JM	ISSUE FOR APPROVAL
P3	26-07-2022	JM	ISSUE FOR APPROVAL
A	03-08-2022	JM	ISSUE FOR APPROVAL

Project Description

PROPOSED QUICK SERVICE RESTAURANT

2 MILL STREET, GOONDIWINDI QLD 4390

Scale: (B1)
1:50

Date: JUL 2022

Approved By: GM

Drawing Title

BUILDING ELEVATIONS & PERSPECTIVES

Job Number - Drawing Number

22092 DA03

Revision

A

PRELIMINARY
THIS DRAWING FOR CONSTRUCTION

CEMENTEL BARESTONE CONCRETE
LOOK FC SHEETING

ILLUMINATED 2000 x 2000 COLONEL
SIGNAGE TO FOOD RETAILERS STANDARDS

LYSAGHT LONGLINE 305 CLADDING
COLOUR: COLORBOND "MONUMENT"

ARBOR STRUCTURE OVER D/THRU PAY & PICKUP
POINTS. COLOUR: COLORBOND "MONUMENT"

WATER TANK. POWDERCOAT FINISH TO
MATCH ADJACENT WALL CLADDING

ILLUMINATED 750(H) LETTERING SIGNAGE
TO FOOD RETAILERS STANDARDS

CEMENTEL BARESTONE CONCRETE
LOOK FC SHEETING

EXPRESS JOINT FC CLADDING PAINT
FINISH DULUX "BLACK CAVIAR"

5000
5300
3150

D/THRU PICKUP POINT

ENERGY EFFICIENT ALUMINIUM
FRAMED GLAZING

CEMENTEL TERRITORY WOODLANDS
TEAK TIMBER LOOK CLADDING

D/THRU PAY POINT

PERFORATED METAL SCREENING
POWDERCOAT FINISH. SEPARATE INTEGRITY

3500
5800


D/THRU ORDER POINT

D/THRU ORDER POINT

Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

Dated: 28/10/22

Signed: 

Print Name: Eamonn O'Mahony

(Under Delegation) ASSESSMENT MANAGER

ALL LANDSCAPING SHOWN INDICATIVE ONLY

Architectural elevation drawing of the West side of a KFC restaurant building. The drawing includes the following annotations:

- Materials and Finishes:**
 - ILLUMINATED SIGNAGE TO FOOD RETAILERS STANDARDS
 - CEMENTEL TERRITORY WOODLANDS TEAK TIMBER LOOK CLADDING
 - ILLUMINATED 750H: LETTERING SIGNAGE TO FOOD RETAILERS STANDARDS
 - CEMENTEL BARESTONE CONCRETE LOCK FC SHEETING
 - CEMENTEL TERRITORY WOODLANDS TEAK TIMBER LOOK CLADDING
 - EXPRESS JOINT FC FEATURE AWNING. PAINT FINISH: "RED BOX"
 - BETTER TILES 90x300mm MATT BLACK TILE
 - 390mm WIDE HEKA HOOD SYSTEM AROUND WINDOW PERIMETER
 - ENERGY EFFICIENT ALUMINIUM FRAMED SHOPFRONT GLAZING
 - PERFORATED METAL SCREENING. POWDERCOAT FINISH: "DURATEC INTENSITY FLAME"
- Dimensions:**
 - 6500
 - 5300
 - 3150
 - 3500
- Functional Labels:**
 - D/THRU PICKUP POINT
 - D/THRU PAY POINT
 - LOW HEIGHT PLANTING TO LANDSCAPED AREAS
 - ARBOR STRUCTURE OVER D/THRU PAY & PICKUP POINTS. COLOUR: COLORBOND "MONUMENT"
- Other Annotations:**
 - 2 DA ELEVATION - WEST
 - 1:50

An architectural rendering of a KFC restaurant building. The building is a single-story structure with a dark brown and tan color scheme. It features the KFC logo prominently on the facade. There are two drive-thru lanes, each with a sign that reads "D/THRU PICKUP". A car is shown in the left drive-thru lane. The building has a flat roof and large windows. The surrounding area includes some landscaping and a clear sky.

3 PERSPECTIVE 3

An architectural rendering of a KFC restaurant building. The building is a single-story structure with a dark brown facade and a large KFC logo on the left side. A drive-thru lane is visible on the left, with a car parked at the 'D/THRU PICKUP' station. Another drive-thru lane is visible on the right, with a car parked at the 'D/THRU PAY POINT' station. The building has a flat roof with a small sign on top. The surrounding area includes a parking lot, some landscaping, and a clear blue sky.

4 PERSPECTIVE 4

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imagine create deliver

このように、 \mathcal{H} の基底を $\{e_1, e_2, \dots, e_n\}$ とし、 \mathcal{H} の任意のベクトル x を $x = \sum_{i=1}^n \langle x, e_i \rangle e_i$ と表すことができる。このとき、 \mathcal{H} の内積は $\langle x, y \rangle = \sum_{i=1}^n \langle x, e_i \rangle \langle y, e_i \rangle$ と表すことができる。

Project Description	PROPOSED QUICK SERVICE RESTAURANT	
2 MILL STREET, GOONDIWINDI QLD 4390		
Scale	A1 1 : 50	Date JUL 2022
Drawn IN	Approved By CW	

Job Number - Drawing Number	Revision
22092 DA04	A

PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION



1 SITE PERSPECTIVE 1



2 SITE PERSPECTIVE 2

ALL EXTERNAL MATERIALS & FINISHES
SHOWN INDICATIVE ONLY AND SUBJECT
TO FINAL TENANT STANDARDS

ALL DIMENSIONS MEASURED FROM FINISHED
GROUND LEVEL UNLESS NOTED OTHERWISE

ALL LANDSCAPING SHOWN INDICATIVE ONLY

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 22/32
Dated: 28/10/22
Signed: *Carl Martin*
Print Name: Carl Martin
(Under Delegation) ASSESSMENT MANAGER

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CONSULTING ENGINEER



commercial / industrial / retail
fast food restaurant design
travel centre / service stations
project concept to completion

VERVE
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Rev	Date	By	Description	Appr
P1	07.07.2022	JN	PRELIMINARY ISSUE	
P2	18.07.2022	JN	ISSUE FOR APPROVAL	
P3	21.07.2022	JN	ISSUE FOR APPROVAL	
A	03.08.2022	JN	ISSUE FOR APPROVAL	
B	03.08.2022	JN	ISSUE FOR APPROVAL	

Project Description
PROPOSED QUICK SERVICE RESTAURANT
2 MILL STREET, GOONDIWINDI QLD 4390

Drawing Title
PROP. SITE PERSPECTIVES
Scale (BA1)
Date: JUL 2022
Approved By: JN
Job Number - Drawing Number
22092 DA05
Revision
B



RPD:

LOT 1 & 4 on RP850853

PARISH: GOONDIWINDI

COUNTY: MARSH

COUNCIL: GOONDIWINDI REGIONAL

SCHEDULE OF LOT AREAS

LOT 1 AREA - 2,599m²

• LOT 2 AREA - 3,945m²

INCLUDES ACCESS EASEMENT A

EASEMENT A - 775m²


BURDENS LOT 2
IN FAVOUR OF LOT 1



GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

Dated: 28/10/22

Signed: 

Print Name: Carl Martin
(Under Delegation) ASSESSMENT MANAGER

VERVE SCHEDULES DISCLAIMER:

- VERVE SCHEDULES DISCLAIMER:**
1. ALL SCHEDULES SHOULD BE CHECKED WITH THE REMAINDER OF THE DRAWING SET.
 2. SCHEDULED RATES AND AREAS ARE INTENDED FOR ASSISTANCE ONLY. NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF QUANTITIES.
 3. ANY DISCREPANCIES IN SCHEDULES SHOULD BE IDENTIFIED TO THE AUTHOR NOTED.
 4. ALL AREAS ARE GROSS AREAS, UNLESS NOTED OTHERWISE.

CONSULTING ENGINEER



- commercial / industrial / retail
- fast food restaurant design
- travel centre / service stations
- project concept to completion

Revision and approvals			
#	Date	By	Description
P1	02-07-2022	JM	PRELIMINARY ISSUE
R0	01-15-2022	JM	SKECH ISSUE
A	03-08-2022	JM	ISSUE FOR APPROVAL
B	03-08-2022	JM	ISSUE FOR APPROVAL

Project Description	Appr
PROPOSED QUICK SERVICE RESTAURANT	
2 MILL STREET, GOONDIWINDI QLD 4390	
Scale: @A1 1 : 250	Date JUL 2022
Drawn	Approved By

Drawing Title:	SUBDIVISION PLAN
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Job Number - Drawing Number	Revision
22092 DA08	B




SCHEMATIC DESIGN - LANDSCAPE PLAN

2 MILL ST GOONDIWINDI

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

Dated: 28/10/22

Signed: 

Print Name: Carl Manton
(Under Delegation) ASSESSMENT MANAGER

TREES



SHRUBS & GROUNDCOVERS



PLANTING PALETTE

SPECIES	COMMON NAME
TREES	
HARPULLIA pendula	Tulipwood
XANTHOSTEMON chrysanthus	Golden Trumpet Tree

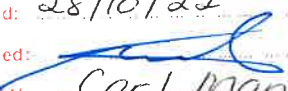
SHRUBS & GROUNDCOVERS

MICHELIA figo	Port Wine Magnolia
SYZGIUM australe	Lilly Pilly Hedge
IXORA 'Pink Malay'	Pink Malay Ixora
GAZANIA rigens	Treasure flower
LIRIOPE Just Right	Liriope Just Right

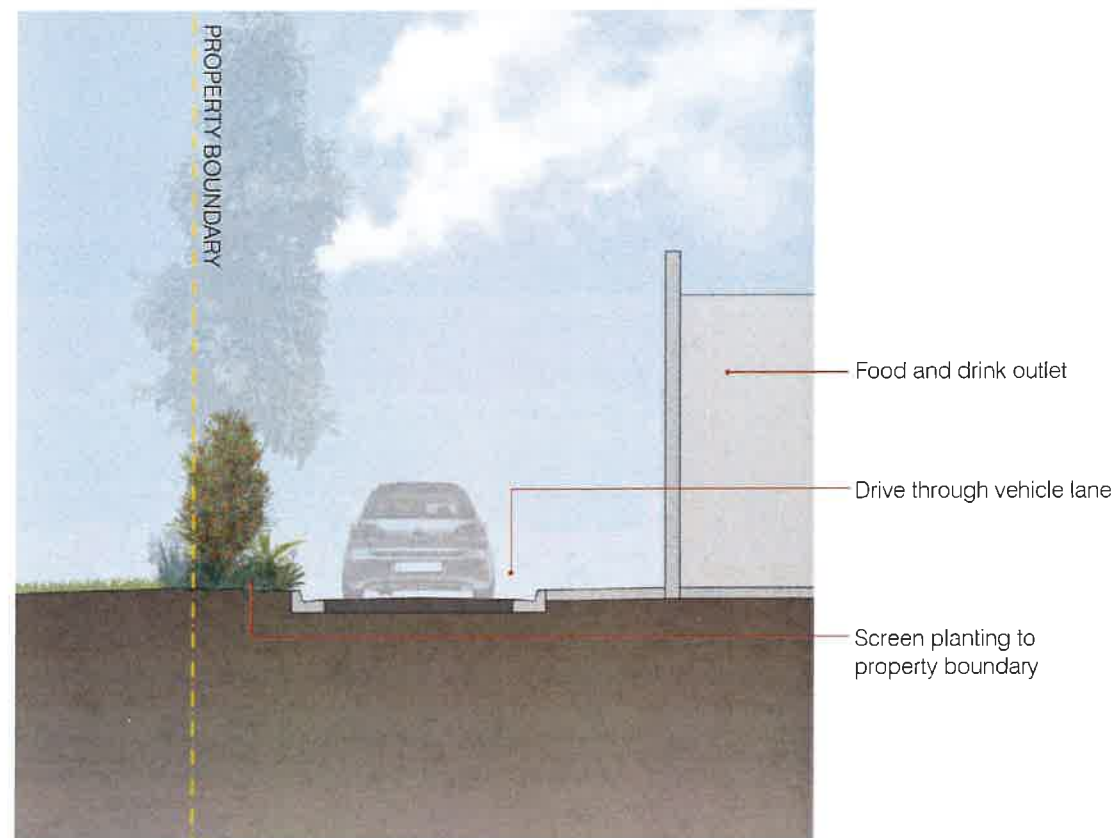
GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

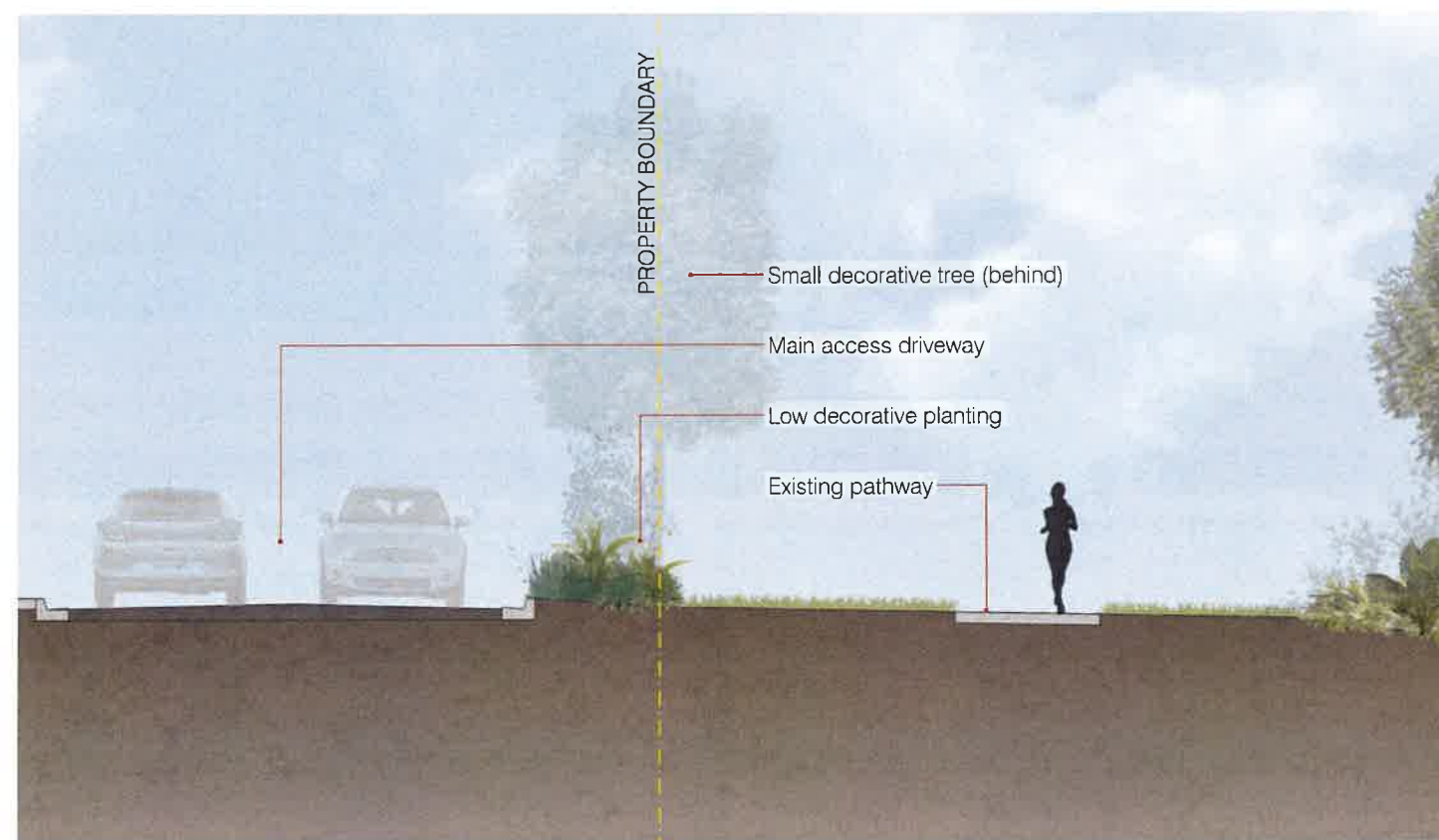
Dated: 28/10/22

Signed: 

Print Name: Carl Manton
(Under Delegation) ASSESSMENT MANAGER



SECTION A-A
SCALE: 1:50 @ A1: 1:100 @ A3



SECTION B-B
SCALE: 1:50 @ A1: 1:100 @ A3

INDICATIVE PLANTING PALETTE + LANDSCAPE SECTIONS

2 MILL ST GOONDIWINDI

Proposed Food and Drink Outlet Development
2 Mill Street, Goondiwindi
(Lot 1 & 4 on RP850853)

ENVIRONMENTAL NOISE IMPACT REPORT

GOONDIWINDI REGIONAL COUNCIL

Approved Plan referred to in Council's Decision Notice

Council Reference: 22/32

Dated: 28/10/22

Signed: 

Print Name: Carl Manton

(Under Delegation) ASSESSMENT MANAGER

Prepared for

EPO Developments Pty Ltd

12 August 2022

crgref: 22100 Report

1.0 INTRODUCTION

This report is in response to a request from EPO Developments Pty Ltd for an environmental noise impact assessment of proposed food and drink outlet development on Mill Street in Goondiwindi.

In undertaking the assessment, background noise measurements were conducted, noise modelling was undertaken, and predictions of onsite commercial activity noise emissions were produced. Based upon the predicted noise impact levels, recommendations regarding acoustic treatment to the development have been provided.

2.0 DESCRIPTION OF THE DEVELOPMENT

The site is described as 2 Mill Street, Goondiwindi (Lots 1 & 4 on RP85053). The site is bounded by Marshall Street to the north (a Main Roads controlled road), Anderson Street to the east, and Mill Street to the south and west. Industrial premises are located across Mill Street to the west, and to the northwest across Marshall Street, and a park to the southeast across Anderson Street. The Jolly Swagman Motor Inn is located across Mill Street to the south, with the Best Western Ascot Lodge Motor Inn on Phar Lap Court to the north of Marshall Street. The subject site and all nearby lots are within the Centre Zone (Highway Commercial Precinct). The topography of the site and surrounding is generally flat. For site location refer to Appendix A.

The proposal is to construct a food and drink outlet (including drive-through facility) to the northwestern corner of the site. Carparking is proposed to the north-north-east and east of the building, with driveway access via two new crossovers off Mill Street to the west and southeast. Delivery / refuse collection bays are located on the eastern side of the building. For the development plan refer to Appendix B.

Proposed onsite commercial activities have been assessed at the nearest potentially affected noise sensitive receivers. The nearest assessed offsite noise sensitive receivers include the Jolly Swagman Motor Inn (1 Anderson Street, Goondiwindi, Lots 5 & 6 on RP850853), and the Best Western Ascot Lodge Motor Inn (2 Phar Lap Court, Goondiwindi, Lot 3 on SP158276).

The Centre Zone (Highway Commercial Precinct) anticipates food and drink outlets, large format stores and showrooms, service and low impact industry. Short term accommodation is anticipated, *“where they are compatible with surrounding land uses and do not interfere with the predominantly commercial intent of the precinct”*.

Given the proposed food and drink outlet is an anticipated use in the Centre Zone (Highway Commercial Precinct), and that the Code states short term accommodation is anticipated where it does not interfere with the commercial intent of the precinct, we submit that any future proposed accommodation uses would be designed to allow for operation of the proposed commercial premises. It is also noted that parts of the vacant land are affected by a Transport Noise Corridor, and would require treatment to meet requirements under the Queensland Mandatory Policy 4.4 *“Buildings in a Transport Noise Corridor”*. Typically, short term accommodation has air-conditioned habitable space, and a central recreation space that could be shielded to external noise sources, including roads and offsite commercial premises. Given these considerations, we have not assessed noise impacting future potential short term accommodation.

3.0 AMBIENT NOISE SURVEY

3.1 Instrumentation

The following equipment was used to record ambient noise levels in the locale.

- Rion NC 73 Calibrator; and
- BSWA Sound Level Meter Logger.

All instrumentation used in this assessment hold current calibration certificate from a certified NATA calibration laboratory.

3.2 Background Measurement Methodology

A logger was located along the northeastern boundary of the Jolly Swagman Motor Inn. The location was chosen to reflect the acoustical environment of the nearest noise sensitive uses to the subject site, and for equipment security. The microphone was in a free-field location, approximately 1.4m above ground. Refer to Figure 2 in Appendix A for the logger location.

The logger was set to record noise statistics in 15-minute blocks continually between Friday 15/07/2022 and Thursday 21/07/2022. The measurement session was cut short by 24 hours, due to bad weather that occurred on the Thursday and Friday. Daily weather observations were obtained from the Bureau of Meteorology's website at the Stanthorpe and Texas weather stations. Weather conditions during the noise monitoring period were fine. A severe weather warning was issued for Thursday 21/07/2022 afternoon, which was the reason the logger was collected on the Thursday rather than the Friday.

All measurements were conducted generally in accordance with Australian Standard AS 1055 "*Acoustics-Description and measurement of environmental noise*". The operation of the sound level logging equipment was field calibrated before and after the measurement session with no significant drift from the reference signal recorded.

3.3 Background Measurement Results

Table 1 below presents the Rating Background noise levels (RBLs) calculated from the logger. The RBL for each period was calculated in accordance with the methodology detailed in the QLD EPA guideline “*Planning for noise control*”. Graphical presentation of the measured noise levels is presented in the Appendix C.

Time Period	Rating Background Level, SPL dB(A)
7am to 6pm	42
6pm to 10pm	42
10pm to 7am	40

Table 1: Rating Background noise levels calculated from measured background noise levels.

The logger data was affected by distant mechanical plant that was not evident during installation of equipment, therefore, we have applied evening and night background noise levels stated in AS1055.2 – 1997 “*Acoustics-Description and measurement of environmental noise*” for “Noise area category R2 Areas with low density transportation”, as follows:

Time Period	Applied Background Noise Level dB(A)
7am to 6pm	42
6pm to 10pm	40
10pm to 7am	35

Table 2: Background noise levels applied in this assessment.

4.0 NOISE ASSESSMENT CRITERION

As the Goondiwindi Region Planning Scheme has no specific requirements for acoustical assessment, we have applied the requirements of the Environmental Protection Act 1994, and the subordinate Environmental Protection (Noise) Policy 2019.

Section 6 of the Environmental Protection (Noise) Policy 2019 provides the following framework for environmental values to be enhanced or protected:

6 Environmental values

The environmental values to be enhanced or protected under this policy are—

- (a) the qualities of the acoustic environment that are conducive to protecting the health and biodiversity of ecosystems; and
- (b) the qualities of the acoustic environment that are conducive to human health and wellbeing, including by ensuring a suitable acoustic environment for individuals to do any of the following—
 - (i) sleep;
 - (ii) study or learn;
 - (iii) be involved in recreation, including relaxation and conversation; and
- (c) the qualities of the acoustic environment that are conducive to protecting the amenity of the community.

Section 9 of the Environmental Protection (Noise) Policy 2019 provides the following framework for management intent for noise:

9 Management intent for noise

- (1) This section states the management intent for an activity involving noise that affects, or may affect, an environmental value to be enhanced or protected under this policy.

Note—

See section 35 of the *Environmental Protection Regulation 2019*.

- (2) To the extent it is reasonable to do so, noise must be dealt with in a way that ensures—
 - (a) the noise does not have any adverse effect, or potential adverse effect, on an environmental value under this policy; and
 - (b) background creep in an area or place is prevented or minimised.
- (3) Despite subsection (2)(b), if the acoustic quality objectives for an area or place are not being achieved or maintained, the noise experienced in the area or place must, to the extent it is reasonable to do so, be dealt with in a way that progressively improves the acoustic environment of the area or place.
- (4) In this section—

background creep, for noise in an area or place, means a gradual increase in the total amount of background noise in the area or place as measured under the document called the 'Noise measurement manual' published on the department's website.

Schedule 1 of the Environmental Protection (Noise) Policy 2019 provides the following specific “Acoustic Quality Objectives” to ensure that the above is achieved:

Column 1	Column 2	Column 3			Column 4
Sensitive receptor	Time of day	Acoustic quality objectives (measured at the receptor) dB(A)			Environmental value
		$L_{Aeq,adj,1hr}$	$L_{A10,adj,1hr}$	$L_{A1,adj,1hr}$	
residence (for outdoors)	daytime and evening	50	55	65	health and wellbeing
residence (for indoors)	daytime and evening	35	40	45	health and wellbeing
	night-time	30	35	40	health and wellbeing, in relation to the ability to sleep

Table 3: Criterion from Schedule 1 of the Environmental Protection (Noise) Policy 2019.

Based upon the applied background L_{90} levels presented in Table 2 of Section 3.3, the “Background Creep” criterion (as previously defined under the Environmental Protection (Noise) Policy 2008) equates to the following levels at the nearest offsite receivers:

Time Varying Noise Source	Noise Limit, SPL dB(A) L_{eq}
Day 7am to 6pm	47 (Background L_{90} level 42 + 5 dB)
Evening 6pm to 10pm	45 (Background L_{90} level 40 + 5 dB)
Night-time 10pm to 6am	40 (Background L_{90} level 35 + 5 dB)
Continuous Noise Source	Noise Limit, SPL dB(A) L_{90}
Day 7am to 6pm	42 (Background L_{90} level 42 + 0 dB)
Evening 6pm to 10pm	40 (Background L_{90} level 40 + 0 dB)
Night-time 10pm to 6am	35 (Background L_{90} level 35 + 0 dB)

Table 4: Noise limit criterion for “Background Creep”.

5.0 PREDICTED ONSITE ACTIVITY NOISE IMPACTS

Burchills provided traffic generation rates for from the proposed development. Evening peak hour rates of 100 vehicles trips (or 200 movements) are predicted, with 70 trips (140 movements) via the western driveway and the remaining 30 trips (60 movements) via the southeast driveway.

The generation rates have been used for modelling daytime and evening onsite activity noise (as shown in Table 5 and the point calculation sheets presented in Appendix C). For the night-time period we have assumed 30% of the peak hour rates.

All noise source levels used in the assessment have been collected from similar assessments. All noise levels assessed under the "Acoustic Quality Objectives" criterion have been corrected for impulsiveness or tonality as per Australian Standard AS 1055 "Acoustics-Description and measurement of environmental noise".

The following noise source levels would typically occur as part of the proposed development and have been assessed within this report.

Activity / Noise Source	Events Per Hour (Day / Even)	Assumed Duration (Secs.)	Event Noise Level, SPL dB(A) @ 1m			
			L _{eq} 15 min	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr
Car door closures	120	1.5	75	80*	82*	85*
Car engine start-ups	40	3	73	73	74	75
Car movements in – Burchills traffic rate	100	Varies	68	68	70	73
Car movements out – Burchills traffic rate	100	Varies	68	68	70	73
Group of people talking outside	Full 60min	900	62	62	70	73
Drive-through speakers	45 x 2	45	70	70	73	75
Truck engine start-ups at loading bays	2	3	78	78	81	83
Truck movements	2	60	85	85	87	88
Truck with refrigeration unit at loading bay	2	900	81	81	82	83
Truck airbrakes	18	2	90	95*	103*	107*
Deliveries at loading bay	6	900	75	75	80	82
Waste collection of metal industrial bin	2	180	92	97*	102*	107*

* Denotes + 5 dB correction for impulsiveness in accordance with AS1055. ** Denotes + 5 dB correction for tonality in accordance with AS1055

Table 5: Typical noise source levels associated with the proposed development.

Based upon the location of the onsite activities in relation to the surrounding noise sensitive receivers (building façades, inside rooms), we predict the following noise impact levels as presented in Table 6 (Daytime and Evening Periods) and Table 7 (Night-time Period).

With regards to the $L_{A10 \text{ 1hr}}$ and $L_{A01 \text{ 1hr}}$ levels, in many cases, particularly during the night-time period, noise events such as car door closures may not register as L_{A10} or L_{A01} levels if the events do not occur for 10% or 1% of the time period respectively. For example, a 1 second event would have to occur 360 times during a one hour period to register as an L_{A10} , and 36 times during a one hour period to register as an L_{A01} as these noise descriptors are statistically defined. If the events do not occur for the minimum number of iterations (or time period) we have presented the results as "N/A" in Tables 6 and 7.

For the L_{Aeq} levels we have presented both the adjusted 15 minute duration and also the adjusted one hour duration. For assessment of the "*Background Creep*" criterion we have adopted the $L_{Aeq \text{ 15 minute}}$ duration levels.

Combined impacts do not include delivery or waste collection activities (including truck movements) given that they are infrequent occurrences and would not occur during every hourly period.

The predicted levels assume that the recommended treatments detailed in Section 6 are incorporated into the development. For point source calculations refer to Appendix C.

For receiver R2, windows and doors are assumed to be closed to the habitable rooms, given that it is a motel use (and air-conditioned). For receiver R1, the motel rooms have bathroom windows fronting the subject site; therefore, we have assumed these windows would be open for modelling purposes, regardless of the fact that the guestrooms are air-conditioned.

DAYTIME AND EVENING PERIODS: 7am to 10pm

Fluctuating Noise Source	Predicted Noise Impact, SPL dB(A)						
	Nearest Façade				Inside Windows OPEN		
	L _{eq} 15 min	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr
R1: Jolly Swagman accommodation due south							
Car door closures spaces NORTH	21	26	N/A	47	16	N/A	37
Car door closures spaces SOUTH	19	24	N/A	48	< 15	N/A	38
Car door closures spaces BUILDING	18	23	N/A	47	< 15	N/A	37
Car engine starts spaces NORTH	17	17	N/A	37	< 15	N/A	27
Car engine starts spaces SOUTH	15	20	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces BUILDING	< 15	19	N/A	N/A	< 15	N/A	N/A
Car movement to site NORTH	28	27	32	35	17	22	25
Car movement to site SOUTH	39	37	44	47	27	34	37
Car movement from site NORTH	30	29	34	37	19	24	27
Car movement from site SOUTH	39	38	44	47	28	34	37
People talking outside	24	24	32	35	< 15	22	25
Drive-through speakers A	32	30	36	38	20	26	28
Drive-through speakers B	32	31	36	38	21	26	28
Truck engine starts loading bay	16	18	N/A	N/A	< 15	N/A	N/A
Truck movement NORTH	35	32	N/A	50	22	N/A	40
Truck movement SOUTH	47	44	N/A	62	34	N/A	52
Trucks with refrigeration unit	39	35	40	41	25	30	31
Truck airbrakes loading bay	26	28	N/A	N/A	18	N/A	N/A
Deliveries at loading bay	38	39	48	50	29	38	40
Waste collection of metal bin	48	46	N/A	70	36	N/A	60
Combined L_{eq} + mech. plant and Highest L₁₀ L₀₁ impacts	43	42	44	48	32	34	38
Applicable Criterion	B. Creep						
Daytime / Evening Criterion	Acoustic Quality Objectives						
	47 / 45	50	55	65	35	40	45

Fluctuating Noise Source	Predicted Noise Impact, SPL dB(A)						
	Nearest Façade				Inside Windows CLOSED		
	L _{eq} 15 min	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr
R2: Best Western accommodation due north							
Car door closures spaces NORTH	23	28	N/A	49	< 15	N/A	31
Car door closures spaces SOUTH	18	23	N/A	47	< 15	N/A	29
Car door closures spaces BUILDING	19	24	N/A	48	< 15	N/A	30
Car engine starts spaces NORTH	19	19	N/A	39	< 15	N/A	21
Car engine starts spaces SOUTH	< 15	19	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces BUILDING	15	20	N/A	N/A	< 15	N/A	N/A
Car movement to site NORTH	29	28	33	36	< 15	15	18
Car movement to site SOUTH	27	26	32	35	< 15	< 15	17
Car movement from site NORTH	29	28	33	36	< 15	15	18
Car movement from site SOUTH	28	27	32	35	< 15	< 15	17
People talking outside	24	24	32	35	< 15	< 15	17
Drive-through speakers A	30	29	34	36	< 15	16	18
Drive-through speakers B	30	29	34	36	< 15	16	18
Truck engine starts loading bay	16	18	N/A	N/A	< 15	N/A	N/A
Truck movement NORTH	36	33	N/A	51	15	N/A	33
Truck movement SOUTH	35	32	N/A	50	< 15	N/A	32
Trucks with refrigeration unit	38	35	39	40	17	21	22
Truck airbrakes loading bay	26	28	N/A	N/A	< 15	N/A	N/A
Deliveries at loading bay	37	39	47	49	21	29	31
Waste collection of metal bin	47	46	N/A	69	28	N/A	51
Combined L_{eq} + mech. plant and Highest L₁₀ L₀₁ impacts	37	37	34	49	19	16	31
Applicable Criterion	B. Creep						
Daytime / Evening Criterion	Acoustic Quality Objectives						
	47 / 45	50	55	65	35	40	45

Table 6: DAY / EVENING Predicted onsite short duration noise impact levels at noise sensitive receivers.

NIGHT-TIME PERIOD: 10pm to 7am

Fluctuating Noise Source	Predicted Noise Impact, SPL dB(A)						
	Nearest Façade				Inside Windows OPEN		
	L _{eq} 15 min	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr
R1: Jolly Swagman accommodation due south							
Car door closures spaces NORTH	16	21	N/A	N/A	< 15	N/A	N/A
Car door closures spaces SOUTH	< 15	19	N/A	N/A	< 15	N/A	N/A
Car door closures spaces BUILDING	< 15	18	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces NORTH	< 15	< 15	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces SOUTH	< 15	15	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces BUILDING	< 15	< 15	N/A	N/A	< 15	N/A	N/A
Car movement to site NORTH	23	21	32	35	< 15	22	25
Car movement to site SOUTH	33	33	44	47	23	34	37
Car movement from site NORTH	25	24	34	37	< 15	24	27
Car movement from site SOUTH	35	33	44	47	23	34	37
People talking outside	24	24	32	35	< 15	22	25
Drive-through speakers A	27	26	36	38	16	26	28
Drive-through speakers B	27	26	36	38	16	26	28
Truck engine starts loading bay	16	18	N/A	N/A	< 15	N/A	N/A
Truck movement NORTH	35	32	N/A	50	22	N/A	40
Trucks with refrigeration unit	39	35	40	41	25	30	31
Truck airbrakes loading bay	26	28	N/A	N/A	18	N/A	N/A
Deliveries at loading bay	38	39	48	50	29	38	40
Combined L_{eq} + mech. plant and Highest L₁₀ L₀₁ impacts	39	38	44	47	28	34	37
Applicable Criterion	B. Creep		Acoustic Quality Objectives				
Night-time Criterion	40				30	35	40

Fluctuating Noise Source	Predicted Noise Impact, SPL dB(A)						
	Nearest Façade				Inside Windows CLOSED		
	L _{eq} 15 min	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr	L _{eq} 1hr	L ₁₀ 1hr	L ₀₁ 1hr
R2: Best Western accommodation due north							
Car door closures spaces NORTH	18	23	N/A	N/A	< 15	N/A	N/A
Car door closures spaces SOUTH	< 15	18	N/A	N/A	< 15	N/A	N/A
Car door closures spaces BUILDING	< 15	19	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces NORTH	15	< 15	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces SOUTH	< 15	< 15	N/A	N/A	< 15	N/A	N/A
Car engine starts spaces BUILDING	< 15	15	N/A	N/A	< 15	N/A	N/A
Car movement to site NORTH	24	23	33	36	< 15	15	18
Car movement to site SOUTH	22	21	32	35	< 15	< 15	17
Car movement from site NORTH	24	23	33	36	< 15	15	18
Car movement from site SOUTH	23	22	32	35	< 15	< 15	17
People talking outside	24	24	32	35	< 15	< 15	17
Drive-through speakers A	25	24	34	36	< 15	16	18
Drive-through speakers B	25	24	34	36	< 15	16	18
Truck engine starts loading bay	16	18	N/A	N/A	< 15	N/A	N/A
Truck movement NORTH	36	33	N/A	51	15	N/A	33
Trucks with refrigeration unit	38	35	39	40	17	21	22
Truck airbrakes loading bay	26	28	N/A	N/A	< 15	N/A	N/A
Deliveries at loading bay	37	39	47	49	21	29	31
Combined L_{eq} + mech. plant and Highest L₁₀ L₀₁ impacts	33	33	34	36	15	16	18
Applicable Criterion	B. Creep		Acoustic Quality Objectives				
Night-time Criterion	40				30	35	40

Table 7: NIGHT-TIME Predicted onsite short duration noise impact levels at noise sensitive receivers.

Continuous activity noise source levels have been compiled from similar previous investigations. All noise levels have been corrected for impulsiveness or tonality as per Australian Standard AS 1055 "Acoustics-Description and measurement of environmental noise".

It should be stressed that mechanical plant selections have yet to be undertaken, for this reason; we have applied noise levels from other similar commercial sites as follows:

- Rooftop kitchen exhaust fans each generating 62 dB(A) at 3m.
- Rooftop toilet exhaust fans each generating 52 dB(A) at 3m.
- Rooftop air conditioner units each generating 60 dB(A) at 3m.
- Rooftop refrigeration compressor units each generating 65 dB(A) at 3m.

Based upon the assumed locations of the onsite mechanical plant in relation to the surrounding noise sensitive receivers (building façades, inside rooms), we predict the following noise impact levels as presented in Table 8.

As a worst case scenario we have assumed that all mechanical plant will be running at the same time.

The predicted levels assume that the recommended treatments detailed in Section 6 are incorporated into the development. For point source calculations refer to Appendix C.

ALL TIME PERIODS

Continuous Noise Source	Predicted Noise Impact, SPL L ₉₀ dB(A)	
	Nearest Façade	Inside Windows OPEN
R1: Jolly Swagman accommodation due south		
Combined mech. plant	27	17
Daytime / Evening Criterion	42 / 40	35
Night-time Criterion	35	30

Continuous Noise Source	Predicted Noise Impact, SPL L ₉₀ dB(A)	
	Nearest Façade	Inside Windows CLOSED
R2: Best Western accommodation due north		
Combined mech. plant	26	< 15
Daytime / Evening Criterion	42 / 40	35
Night-time Criterion	35	30

Table 8: Predicted onsite continuous noise impact levels at noise sensitive receivers.

6.0 RECOMMENDED ACOUSTIC TREATMENTS

We recommend that the following acoustic treatments and management controls be incorporated into the development to mitigate onsite activity noise impacts:

- Hours of operation be 24 hours per day, 7 days per week.
- Waste collection be limited to the daytime period between 7am and 6pm.
- Truck deliveries during the evening and night-time periods after 6pm and before 7am should be limited to using the northwestern driveway crossover to Mill Street only.
- Driveway and car parking areas be finished with surface coatings which prevent tyre squeal (an uncoated unpolished concrete or bitumen surface is acceptable).
- Drainage grating over trafficable areas be well secured to prevent rattling.
- Drive-through speakers be limited to a maximum noise source level of 73 dB(A) L_{10} measured at 1m from the speakers.
- Mechanical plant for the development be designed and installed to comply with the noise criterion presented in Section 4. As final plant selection has not been completed, an assessment of plant should be conducted during the design phase.
 - Based upon the assumed mechanical plant and source levels, outside condenser units and refrigeration compressors may require acoustic screens / enclosures and exhaust fans will likely require acoustic silencers / attenuators.

7.0 DISCUSSION

The proposal is to construct a food and drink outlet (including drive-through facility) at the northwestern corner of the subject site. The site and surrounds are within the Centre Zone (Highway Commercial Precinct) which anticipates food and drink outlets, large format stores and showrooms, service and low impact industry. Short term accommodation is also anticipated, *“where they are compatible with surrounding land uses and do not interfere with the predominantly commercial intent of the precinct”*.

The nearest assessed offsite noise sensitive receivers include the Jolly Swagman Motor Inn (1 Anderson Street, Goondiwindi, Lots 5 & 6 on RP850853), and the Best Western Ascot Lodge Motor Inn (2 Phar Lap Court, Goondiwindi, Lot 3 on SP158276). We have not assessed future short term accommodation as they would have acoustical treatments applied, given the Centre Zone (Highway Commercial Precinct) prevents development that would interfere with the predominantly commercial intent of the precinct, and parts of the remaining vacant land are within Transport Noise Corridors.

Based upon the recommended acoustic treatments and management controls, onsite activity noise emissions are predicted to impact the assessed offsite noise sensitive receivers at or below the relevant external *“Background Creep”* and *“Acoustic Quality Objective”* criterion except for waste collection and truck movements along the southern driveway.

To minimise to the potential for annoyance we have recommended that deliveries during the evening and night-time periods after 6pm and before 7am should be limited to using the western driveway crossover to Mill Street only. We have also recommended that waste collection be limited to the daytime period between 7am to 6pm. As waste collection and delivery activities (including truck movements) are typically of short duration and of an infrequent nature such activities are unlikely to cause annoyance.

We have also provided an indication of potential noise impact levels of likely onsite mechanical plant; although the levels are merely a guide as no plant selections have yet been completed. For this reason, additional more detailed assessment/s should be conducted upon determination of plant.

8.0 CONCLUSIONS

This report is in response to a request from EPO Developments Pty Ltd for an environmental noise impact assessment of proposed food and drink outlet development on Mill Street in Goondiwindi.

In undertaking the assessment, background noise measurements were conducted, noise modelling was undertaken, and predictions of proposed commercial activity noise emissions were produced. Based upon the predicted noise impact levels, recommendations regarding acoustic treatment to the development have been provided.

Overall, it is concluded that the proposed use is appropriate for the site, given the zoning, and based upon the layout of the proposed development, onsite activities can be designed to achieve acceptable levels of the adopted criterion subject to acoustic treatments and management controls detailed in Section 6 of this report incorporated into the development.

Report Reviewed By:



JAY CARTER BSc
Director

Report Compiled by:



Matthew Lopez BEng
Consultant

APPENDIX A

Subject Site, Measurement Location and Surrounding Noise Sensitive Receivers

Figure No. 1: Subject Site Location (Google Maps).



Figure No. 2: Subject Site, Logger Location and Surrounding Noise Sensitive Receivers (QLD Globe).



APPENDIX B

Development Plans



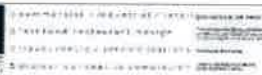
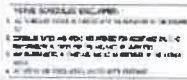
LOT 1 & 4 on RP850853
PARISH: GOODWIN
COUNTY: MARSH
COUNCIL: GOODWIN REGIONAL

- OVERALL SITE AREA - 6,544m²
- PROP. LOT 1 - 2,599m²
- PROP. LOT 2 - 3,945m²
- INCLUDES ACCESS (PARKING)
- LANDSCAPED AREA - 4,270m²
- BLDG SITE COVER - 35%
- INCLUDES ALL SCULPTURE WORK

PRE SITE DEVELOPMENT - $0m^3$
POST SITE DEVELOPMENT - $2,274m^3$

T1 FOOD & DRINK - 225m³
POLICE OFFICE AREA - 1m³

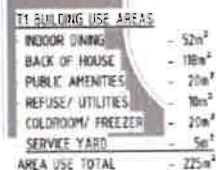
- PARKING REQUIRED	- 15
ITO BE COMPLETED	
- PARKING PROVIDED	- 21



PROJECT NO. 22082 PROJECT NAME: 2nd STREET RESTAURANT PROJECT ADDRESS: 2nd STREET, GARDENVIEW, CA 94030		PROJECT TYPE: PROP. SITE PLAN PROJECT DATE: 08/01/11 PROJECT STATUS: P1	
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PROJECT NO. AND DATE	APPROVED	APPROVED	APPROVED
17-00000-00	02/08/2017	02/08/2017	02/08/2017
PROJECT NAME	PROJECT LOCATION	PROJECT TYPE	PROJECT PHASE
PROPOSED BUCK SERVICE RESTAURANT	2 MIL STREET, GROVERDALE, IL 61146	PROP. SIGNAGE PLAN	
DATE	DATE	DATE	DATE
02/08/2017	02/08/2017	02/08/2017	02/08/2017



3. The following would be correct with the exception of the amount: 100
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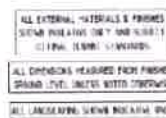


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2	2	1991			11
3	3	1992			12
4	4	1993			13
5	5	1994			14
6	6	1995			15
7	7	1996			16
8	8	1997			17
9	9	1998			18
10	10	1999			19
11	11	2000			20
12	12	2001			21
13	1	2002			22
14	2	2003			23
15	3	2004			24
16	4	2005			25
17	5	2006			26
18	6	2007			27
19	7	2008			28
20	8	2009			29
21	9	2010			30
22	10	2011			31
23	11	2012			32
24	12	2013			33
25	1	2014			34
26	2	2015			35
27	3	2016			36
28	4	2017			37
29	5	2018			38
30	6	2019			39
31	7	2020			40
32	8	2021			41
33	9	2022			42
34	10	2023			43
35	11	2024			44
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63	3	2052			72
64	4	2053			73
65	5	2054			74
66	6	2055			75
67	7	2056			76
68	8	2057			77
69	9	2058			78
70	10	2059			79
71	11	2060			80
72	12	2061			81
73	1	2062			82
74	2	2063			83
75	3	2064			84
76	4	2065			85
77	5	2066			86
78	6	2067			87
79	7	2068			88
80	8	2069			

PROPOSAL DUER SERVICE RESTAURANT
2 HILL STREET, GARDENVIEW OLD & NEW

22092 DAA

22092	DA02	P1
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1. 下列各句中，没有语病的一句是（3分）
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4. 下列各句中，没有语病的一句是（3分）



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5	1/5/2020	10:00-11:00	101-102-103
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8	1/8/2020	10:00-11:00	101-102-103
9	1/9/2020	10:00-11:00	101-102-103
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11	1/11/2020	10:00-11:00	101-102-103
12	1/12/2020	10:00-11:00	101-102-103
13	1/13/2020	10:00-11:00	101-102-103
14	1/14/2020	10:00-11:00	101-102-103
15	1/15/2020	10:00-11:00	101-102-103
16	1/16/2020	10:00-11:00	101-102-103
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19	1/19/2020	10:00-11:00	101-102-103
20	1/20/2020	10:00-11:00	101-102-103
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22	1/22/2020	10:00-11:00	101-102-103
23	1/23/2020	10:00-11:00	101-102-103
24	1/24/2020	10:00-11:00	101-102-103
25	1/25/2020	10:00-11:00	101-102-103
26	1/26/2020	10:00-11:00	101-102-103
27	1/27/2020	10:00-11:00	101-102-103
28	1/28/2020	10:00-11:00	101-102-103
29	1/29/2020	10:00-11:00	101-102-103
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PROPOSED GUY STREET BRIDGE

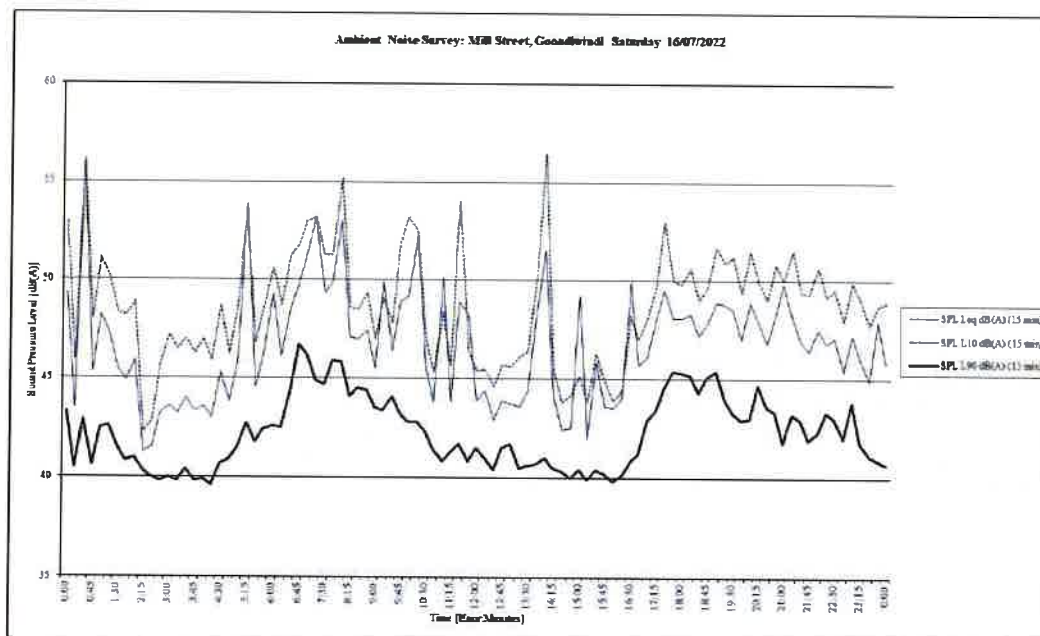
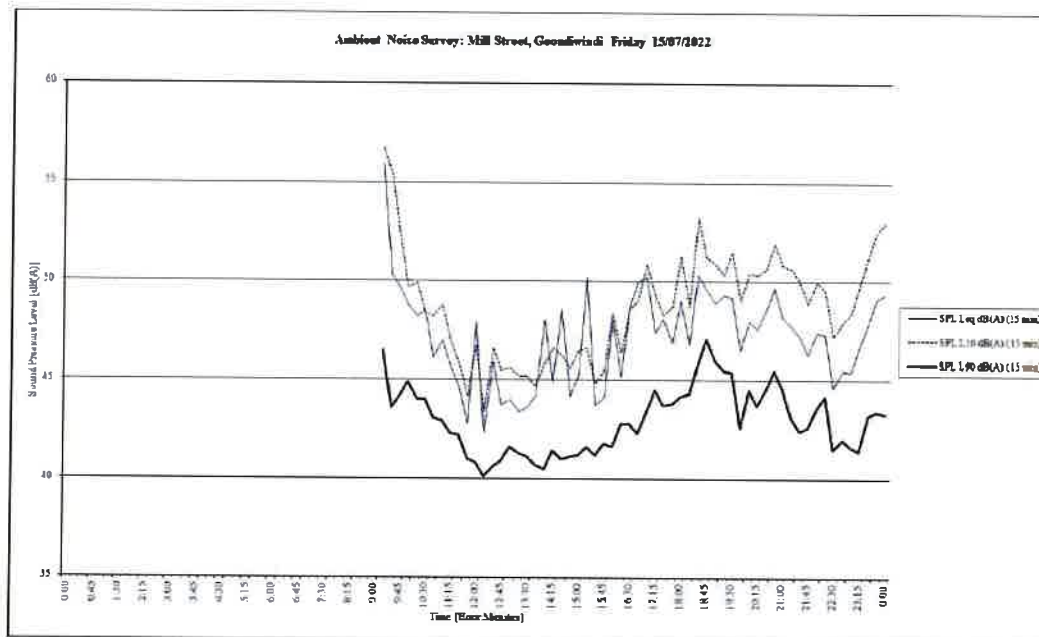
2 MILL STREET, BOSTONWICH TLO

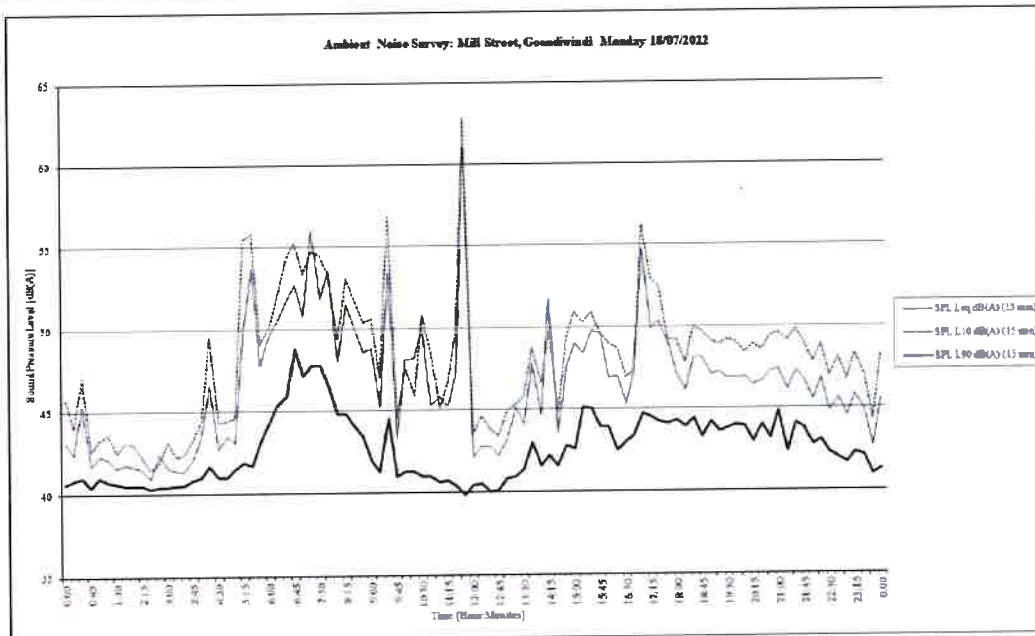
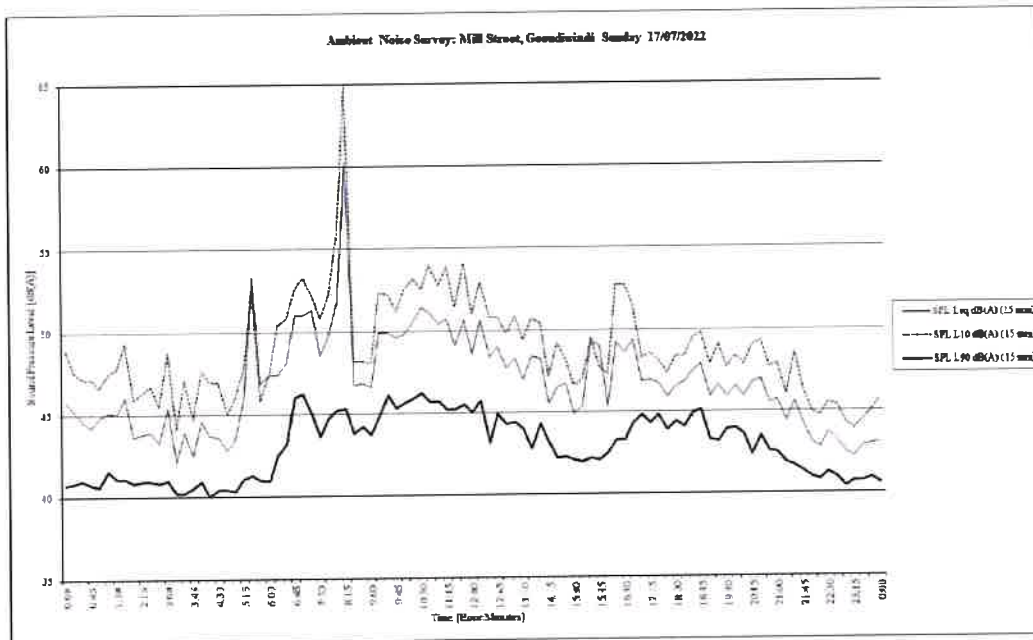
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IND	PERSPECTIVES
	22092 DA

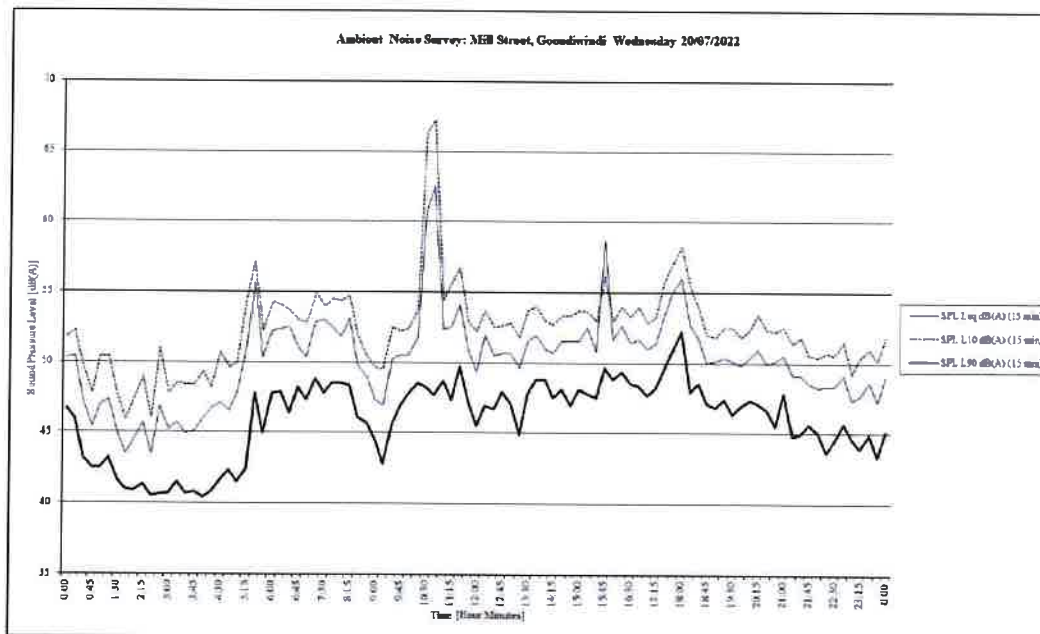
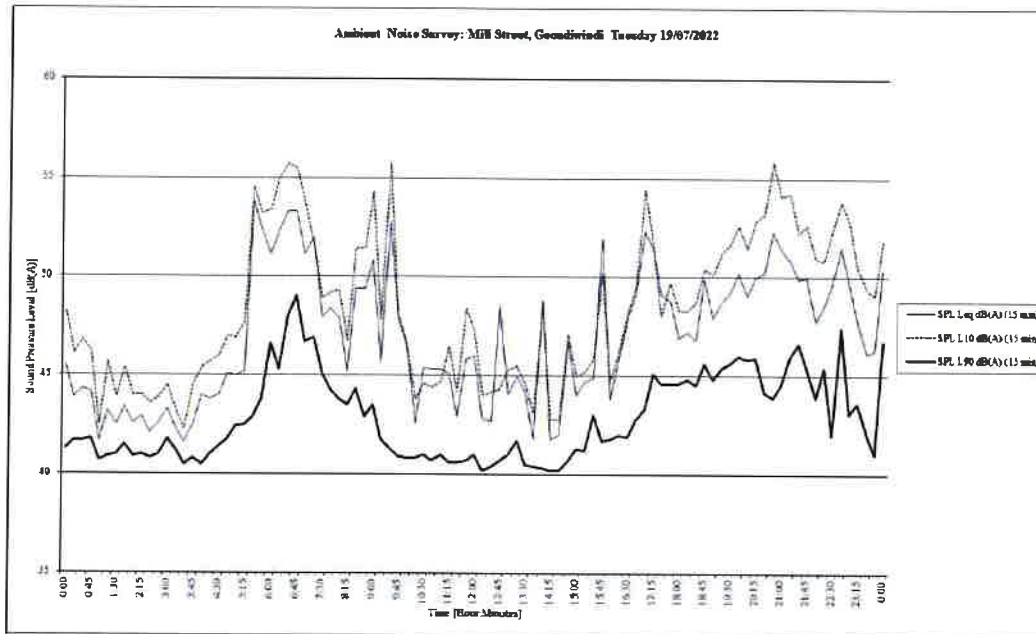
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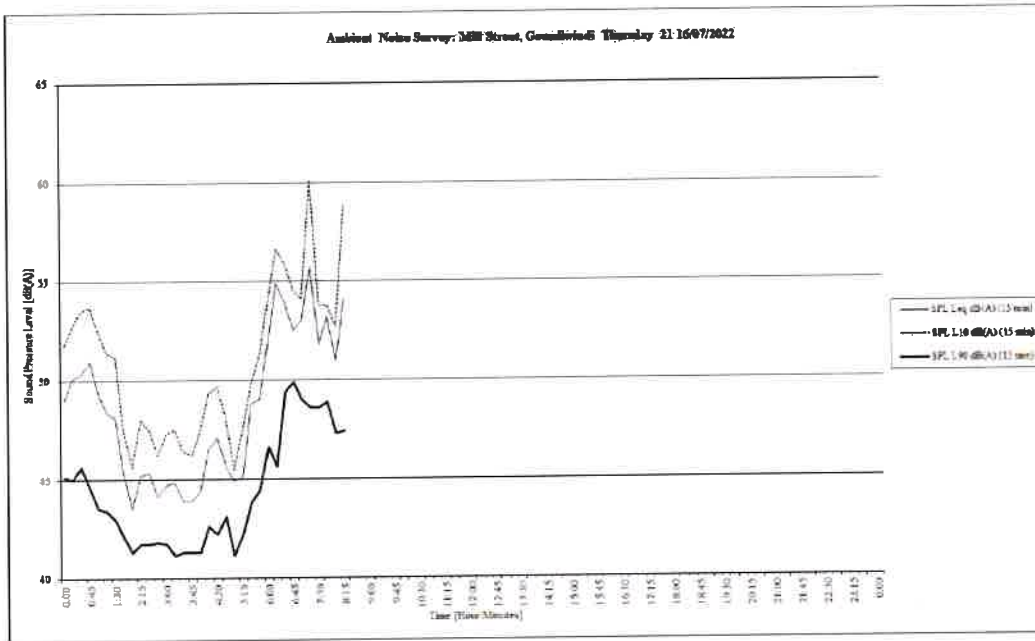
APPENDIX C

Measurement Results and Model Calculations / Predictions









Daytime ACTIVITY NOISE PREDICTION CALCULATIONS: (L_{A10 1hr} and L_{A01 1hr} levels are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

CAR DOOR CLOSURE north car spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	15	60	Events
Total time duration of combined events	22.5	90.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	59	59 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		109	m
Distance attenuation (-6 dB per doubling of distance)		-41	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	21	26 N/A 47	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10 -10 -10	dB
Impact inside		16 N/A 37	dB(A)

R2: Best Western accommodation due north

CAR DOOR CLOSURE north car spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	15	60	Events
Total time duration of combined events	22.5	90.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	59	59 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		88	m
Distance attenuation (-6 dB per doubling of distance)		-39	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	23	28 N/A 49	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18 -18 -18	dB
Impact inside		10 N/A 31	dB(A)

CAR DOOR CLOSURE south spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	8	30	Events
Total time duration of combined events	11.3	45.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	56	56 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		95	m
Distance attenuation (-6 dB per doubling of distance)		-40	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	19	24 N/A 48	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10 -10 -10	dB
Impact inside		14 N/A 38	dB(A)

CAR DOOR CLOSURE south spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	8	30	Events
Total time duration of combined events	11.3	45.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	56	56 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		106.0	m
Distance attenuation (-6 dB per doubling of distance)		-41	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	18	23 N/A 47	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18 -18 -18	dB
Impact inside		5 N/A 29	dB(A)

CAR DOOR CLOSURE at building spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	8	30	Events
Total time duration of combined events	11.3	45.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	56	56 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		107.5	m
Distance attenuation (-6 dB per doubling of distance)		-41	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	18	23 N/A 47	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10 -10 -10	dB
Impact inside		13 N/A 37	dB(A)

CAR DOOR CLOSURE at building spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	75	77 80	dB(A)
Duration of single event	1.5		Seconds
Number of events in the measurement period	8	30	Events
Total time duration of combined events	11.3	45.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	56	56 N/A 80	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		99	m
Distance attenuation (-6 dB per doubling of distance)		-40	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	19	24 N/A 48	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18 -18 -18	dB
Impact inside		6 N/A 30	dB(A)

CAR ENGINE STARTS north spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	73	74 75	dB(A)
Duration of single event	3		Seconds
Number of events in the measurement period	5	20	Events
Total time duration of combined events	15.0	60.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	55	55 N/A 75	dB(A)
Tonality / Impulsiveness correction	0	0	dB
Minimum distance to receiver		109	m
Distance attenuation (-6 dB per doubling of distance)		-41	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	17	17 N/A 37	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10 -10 -10	dB
Impact inside		7 N/A 27	dB(A)

CAR ENGINE STARTS north spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	73	74 75	dB(A)
Duration of single event	3		Seconds
Number of events in the measurement period	5	20	Events
Total time duration of combined events	15.0	60.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	55	55 N/A 75	dB(A)
Tonality / Impulsiveness correction	0	0	dB
Minimum distance to receiver		88	m
Distance attenuation (-6 dB per doubling of distance)		-39	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	19	19 N/A 39	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18 -18 -18	dB
Impact inside		1 N/A 21	dB(A)

CAR ENGINE STARTS south spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	73	74 75	dB(A)
Duration of single event	3		Seconds
Number of events in the measurement period	3	10	Events
Total time duration of combined events	7.5	30.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	52	52 N/A N/A	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		95	m
Distance attenuation (-6 dB per doubling of distance)		-40	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	15	20 N/A N/A	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10 -10 -10	dB
Impact inside		10 N/A N/A	dB(A)

CAR ENGINE STARTS south spaces	Creep LAeq	Acoustic Quality Objectives LAeq LA10 LA01	
Noise source level for single event	73	74 75	dB(A)
Duration of single event	3		Seconds
Number of events in the measurement period	3	10	Events
Total time duration of combined events	7.5	30.0	Seconds
	LAeq	LAeq 1hr LA10 1hr LA01 1hr	
Noise source level for assessment time period	52	52 N/A N/A	dB(A)
Tonality / Impulsiveness correction	0	5	dB
Minimum distance to receiver		106.0	m
Distance attenuation (-6 dB per doubling of distance)		-41	dB
Barrier screening		0	dB
Facade reflection		2.5	dB
Impact at nearest facade	14	19 N/A N/A	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18 -18 -18	dB
Impact inside		1 N/A N/A	dB(A)

Daytime ACTIVITY NOISE PREDICTION CALCULATIONS: ($L_{Aeq,1hr}$ and $L_{A01,1hr}$ are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

CAR ENGINE STARTS at building spaces	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	73		74	75	dB(A)
Duration of single event	3	3			seconds
Number of events in the measurement period		10			Events
Total time duration of combined events	7.5		30.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	52	52	N/A	N/A	dB(A)
Tonality / Impulsiveness correction	0		5		dB
Minimum distance to receiver		107.5			m
Distance attenuation (-6 dB per doubling of distance)		-41			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	14	19	N/A	N/A	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	-10	dB
Impact inside	9	N/A	N/A	N/A	dB(A)

CAR MOVEMENT TO north	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event	23	25			seconds
Number of events in the measurement period		70			Events
Total time duration of combined events	900		1750.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	65	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		110			m
Distance attenuation (-6 dB per doubling of distance)		-41			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	28	27	32	35	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	-10	dB
Impact inside	17	22	25	25	dB(A)

CAR MOVEMENT TO south	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		43			seconds
Number of events in the measurement period	10		30		Events
Total time duration of combined events	430.0		1290.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	65	64	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		27			m
Distance attenuation (-6 dB per doubling of distance)		-29			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	39	37	44	47	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	-10	dB
Impact inside	27	34	37	37	dB(A)

CAR MOVEMENT FROM north	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		27			seconds
Number of events in the measurement period	23		70		Events
Total time duration of combined events	630.0		1890.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	65	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		85			m
Distance attenuation (-6 dB per doubling of distance)		-39			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	30	29	34	37	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	-10	dB
Impact inside	19	24	27	27	dB(A)

CAR MOVEMENT FROM south	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		52			seconds
Number of events in the measurement period	10		30		Events
Total time duration of combined events	520.0		1560.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	64	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		27			m
Distance attenuation (-6 dB per doubling of distance)		-29			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	39	38	44	47	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	-10	dB
Impact inside	28	34	37	37	dB(A)

R2: Best Western accommodation due north

CAR ENGINE STARTS at building spaces	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	73		74	75	dB(A)
Duration of single event	3	3			seconds
Number of events in the measurement period	7.5		10		Events
Total time duration of combined events	7.5		30.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	52	52	N/A	N/A	dB(A)
Tonality / Impulsiveness correction	0		5		dB
Minimum distance to receiver		99			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	15	20	N/A	N/A	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	-18	dB
Impact inside	2	N/A	N/A	N/A	dB(A)

CAR MOVEMENT TO north	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event	23	25			seconds
Number of events in the measurement period		70			Events
Total time duration of combined events	900		1750.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	65	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		94			m
Distance attenuation (-6 dB per doubling of distance)		-39			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	29	28	33	36	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	-18	dB
Impact inside	10	15	18	18	dB(A)

CAR MOVEMENT TO south	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		43			seconds
Number of events in the measurement period	10		30		Events
Total time duration of combined events	430.0		1290.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	65	64	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		102			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	27	26	32	35	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	-18	dB
Impact inside	8	14	17	17	dB(A)

CAR MOVEMENT FROM north	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		27			seconds
Number of events in the measurement period	23		70		Events
Total time duration of combined events	630.0		1890.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	65	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		94			m
Distance attenuation (-6 dB per doubling of distance)		-39			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	29	28	33	36	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	-18	dB
Impact inside	10	15	18	18	dB(A)

CAR MOVEMENT FROM south	Acoustic Quality Objectives				
	Creep LAeq	LAeq	LA10	LA01	
Noise source level for single event	68		70	73	dB(A)
Duration of single event		52			seconds
Number of events in the measurement period	10		30		Events
Total time duration of combined events	520.0		1560.0		seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	66	64	70	73	dB(A)
Tonality / Impulsiveness correction	0		0		dB
Minimum distance to receiver		102			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	28	27	32	35	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	-18	dB
Impact inside	9	14	17	17	dB(A)

Daytime ACTIVITY NOISE PREDICTION CALCULATIONS: (L_{A1010} and L_{A101} are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

PEOPLE TALKING OUTSIDE	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	62		70	73
Duration of single event		900		
Number of events in the measurement period	1	4		
Total time duration of combined events	900.0	3600.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	62	62	70	73
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		105		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	24	24	32	35
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside	14	22	25	

DRIVE-THROUGH SPEAKER A	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	70		73	75
Duration of single event		45		
Number of events in the measurement period	15	45		
Total time duration of combined events	675.0	2025.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	69	68	73	75
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		95		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	32	30	36	38
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside	20	26	28	

DRIVE-THROUGH SPEAKER B	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	70		73	75
Duration of single event		45		
Number of events in the measurement period	15	45		
Total time duration of combined events	675.0	2025.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	69	68	73	75
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		93		
Distance attenuation (-6 dB per doubling of distance)		-39		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	32	31	36	38
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside	21	26	28	

TRUCK ENGINE STARTS Loading bay	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	78		81	83
Duration of single event		3		
Number of events in the measurement period	1	2		
Total time duration of combined events	3.0	6.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	53	50	N/A	N/A
Tonality / Impulsiveness correction	0		5	
Minimum distance to receiver		100		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	16	18	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside	8	N/A	N/A	

TRUCK MOVEMENT FROM north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	85		87	88
Duration of single event		60		
Number of events in the measurement period	1	2		
Total time duration of combined events	60.0	120.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	73	70	N/A	88
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		110		
Distance attenuation (-6 dB per doubling of distance)		-41		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	35	32	N/A	50
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside	22	N/A	40	

R2: Best Western accommodation due north

PEOPLE TALKING OUTSIDE	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	62		70	73
Duration of single event		900		
Number of events in the measurement period	1	4		
Total time duration of combined events	900.0	3600.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	62	62	70	73
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		105		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	24	24	32	35
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside	6	14	17	

DRIVE-THROUGH SPEAKER A	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	70		73	75
Duration of single event		45		
Number of events in the measurement period	15	45		
Total time duration of combined events	675.0	2025.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	69	68	73	75
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		117		
Distance attenuation (-6 dB per doubling of distance)		-41		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	30	29	34	36
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside	11	16	18	

DRIVE-THROUGH SPEAKER B	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	70		73	75
Duration of single event		45		
Number of events in the measurement period	15	45		
Total time duration of combined events	675.0	2025.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	69	68	73	75
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		117.0		
Distance attenuation (-6 dB per doubling of distance)		-41		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	30	29	34	36
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside	11	16	18	

TRUCK ENGINE STARTS Loading bay	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	78		81	83
Duration of single event		3		
Number of events in the measurement period	1	2		
Total time duration of combined events	3.0	6.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	53	50	N/A	N/A
Tonality / Impulsiveness correction	0		5	
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	16	18	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside	0	N/A	N/A	

TRUCK MOVEMENT FROM north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	85		87	88
Duration of single event		60		
Number of events in the measurement period	1	2		
Total time duration of combined events	60.0	120.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	73	70	N/A	88
Tonality / Impulsiveness correction	0		0	
Minimum distance to receiver		94		
Distance attenuation (-6 dB per doubling of distance)		-39		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	36	33	N/A	51
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside	15	N/A	33	

Daytime ACTIVITY NOISE PREDICTION CALCULATIONS: (LA₁₀ and LA₉₀ are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

TRUCK MOVEMENT FROM south	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	85		87	88
Duration of single event	60			
Number of events in the measurement period	1	2		
Total time duration of combined events	60.0	120.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	73	70	N/A	88
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	27			
Distance attenuation (-6 dB per doubling of distance)	-29			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	47	44	N/A	62
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	34	N/A	52	

TRUCKS WITH REFRIGERATION UNIT	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	81		82	83
Duration of single event	900			
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	81	78	82	83
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	100			
Distance attenuation (-6 dB per doubling of distance)	-40			
Refrigeration unit truck directivity / screening	-5			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	39	35	40	41
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	25	30	31	

TRUCK AIRBRAKES at loading bay	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	90		98	102
Duration of single event	2			
Number of events in the measurement period	1	2		
Total time duration of combined events	2.0	4.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	63	60	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver	100			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	26	28	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	18	N/A	N/A	

TRUCK UNLOADING	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	75		80	82
Duration of single event	900			
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	75	72	80	82
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	100			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Rear of truck unload, truck screening	0			
Facade reflection	2.5			
Impact at nearest facade	38	34	43	45
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	24	33	35	

WASTE COLLECTION	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	92		97	102
Duration of single event	180			
Number of events in the measurement period	1	1		
Total time duration of combined events	180.0	180.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	85	79	N/A	102
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver	100			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	48	46	N/A	70
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	36	N/A	60	

Combined impact at facade DAY	43	42	44	48
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside	32	34	38	

R2: West Western accommodation due north

TRUCK MOVEMENT FROM south	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	85		87	88
Duration of single event	60			
Number of events in the measurement period	1	2		
Total time duration of combined events	60.0	120.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	73	70	N/A	88
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	105			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	35	32	N/A	50
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	14	N/A	32	

TRUCKS WITH REFRIGERATION UNIT	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	81		82	83
Duration of single event	900			
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	81	78	82	83
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	102			
Distance attenuation (-6 dB per doubling of distance)	-40			
Refrigeration unit truck directivity / screening	-5			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	38	35	39	40
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	17	21	22	

TRUCK AIRBRAKES at loading bay	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	90		98	102
Duration of single event	2			
Number of events in the measurement period	1	2		
Total time duration of combined events	2.0	4.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	63	60	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver	102			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	26	28	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	10	N/A	N/A	

TRUCK UNLOADING	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	75		80	82
Duration of single event	900			
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	75	72	80	82
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver	102			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Rear of truck unload, truck screening	0			
Facade reflection	2.5			
Impact at nearest facade	37	34	42	44
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	16	24	26	

WASTE COLLECTION	Acoustic Quality Objectives			
	LAeq	LAeq	LA10	LA01
Noise source level for single event	92		97	102
Duration of single event	180			
Number of events in the measurement period	1	1		
Total time duration of combined events	180.0	180.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	85	79	N/A	102
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver	102			
Distance attenuation (-6 dB per doubling of distance)	-40			
Barrier screening	0			
Facade reflection	2.5			
Impact at nearest facade	47	46	N/A	69
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	28	N/A	51	

Combined impact at facade DAY	37	37	34	49
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside	19	16	31	

Night-time ACTIVITY NOISE PREDICTION CALCULATIONS: ($L_{Aeq,1hr}$ and $L_{Aeq,1hr}$ are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

CAR DOOR CLOSURE north car spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	3		20	Events
Total time duration of combined events	7.5		30.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	54	54	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		109		m
Distance attenuation (-6 dB per doubling of distance)		-41		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	16	21	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		11	N/A	N/A

CAR DOOR CLOSURE south spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	3		10	Events
Total time duration of combined events	3.8		15.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		95		m
Distance attenuation (-6 dB per doubling of distance)		-40		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	14	19	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		9	N/A	N/A

CAR DOOR CLOSURE at building spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	3		10	Events
Total time duration of combined events	3.8		15.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		107.5		m
Distance attenuation (-6 dB per doubling of distance)		-41		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	13	18	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		8	N/A	N/A

CAR ENGINE STARTS north spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		Seconds
Number of events in the measurement period	2		7	Events
Total time duration of combined events	6.0		21.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		0	dB
Minimum distance to receiver		109		m
Distance attenuation (-6 dB per doubling of distance)		-41		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	13	12	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		2	N/A	N/A

CAR ENGINE STARTS south spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		Seconds
Number of events in the measurement period	1		3	Events
Total time duration of combined events	3.0		9.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	48	47	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		95		m
Distance attenuation (-6 dB per doubling of distance)		-40		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	11	15	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		5	N/A	N/A

R2: Best Western accommodation due north

CAR DOOR CLOSURE north car spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	5		20	Events
Total time duration of combined events	7.5		30.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	54	54	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		88		m
Distance attenuation (-6 dB per doubling of distance)		-39		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	18	23	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		5	N/A	N/A

CAR DOOR CLOSURE south spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	3		10	Events
Total time duration of combined events	3.8		15.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		106.0		m
Distance attenuation (-6 dB per doubling of distance)		-41		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	13	18	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		0	N/A	N/A

CAR DOOR CLOSURE at building spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	75		77	80
Duration of single event		1.5		Seconds
Number of events in the measurement period	3		10	Events
Total time duration of combined events	3.8		15.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		99		m
Distance attenuation (-6 dB per doubling of distance)		-40		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	14	19	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		1	N/A	N/A

CAR ENGINE STARTS north spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		Seconds
Number of events in the measurement period	2		7	Events
Total time duration of combined events	6.0		21.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	51	51	N/A	N/A
Tonality / Impulsiveness correction	0		0	dB
Minimum distance to receiver		88		m
Distance attenuation (-6 dB per doubling of distance)		-39		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	15	14	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		-1	N/A	N/A

CAR ENGINE STARTS south spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		Seconds
Number of events in the measurement period	1		3	Events
Total time duration of combined events	3.0		9.0	Seconds
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	48	47	N/A	N/A
Tonality / Impulsiveness correction	0		5	dB
Minimum distance to receiver		106.0		m
Distance attenuation (-6 dB per doubling of distance)		-41		dB
Barrier screening		0		dB
Facade reflection		2.5		dB
Impact at nearest facade	10	14	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		-4	N/A	N/A

Night-time ACTIVITY NOISE PREDICTION CALCULATIONS: (LA10 1hr and LA01 1hr levels are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

CAR ENGINE STARTS at building spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		
Number of events in the measurement period	1	3		
Total time duration of combined events	3.0	9.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	48	47	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver		107.5		
Distance attenuation (-6 dB per doubling of distance)		-41		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	10	14	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside		4	N/A	N/A

CAR MOVEMENT TO north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		25		
Number of events in the measurement period	7	21		
Total time duration of combined events	900	525.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		110		
Distance attenuation (-6 dB per doubling of distance)		-41		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	23	21	32	35
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside		11	22	25

CAR MOVEMENT TO south	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		43		
Number of events in the measurement period	3	10		
Total time duration of combined events	129.0	430.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	60	59	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		27		
Distance attenuation (-6 dB per doubling of distance)		-29		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	33	33	44	47
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside		23	34	37

CAR MOVEMENT FROM north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		27		
Number of events in the measurement period	7	21		
Total time duration of combined events	189.0	567.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		85		
Distance attenuation (-6 dB per doubling of distance)		-39		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	25	24	34	37
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside		14	24	27

CAR MOVEMENT FROM south	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		52		
Number of events in the measurement period	3	10		
Total time duration of combined events	173.3	520.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		27		
Distance attenuation (-6 dB per doubling of distance)		-29		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	35	33	44	47
Reduction through open BATH window (also minus 2.5 dB facade)	-10	-10	-10	
Impact inside		23	34	37

R2: Best Western accommodation due north

CAR ENGINE STARTS at building spaces	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	73		74	75
Duration of single event		3		
Number of events in the measurement period	1	3		
Total time duration of combined events	3.0	9.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	48	47	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver		99		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	11	15	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside		-3	N/A	N/A

CAR MOVEMENT TO north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		25		
Number of events in the measurement period	7	21		
Total time duration of combined events	900	525.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		94		
Distance attenuation (-6 dB per doubling of distance)		-39		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	24	23	33	36
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside		5	15	18

CAR MOVEMENT TO south	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		43		
Number of events in the measurement period	3	10		
Total time duration of combined events	129.0	430.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	60	59	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	22	21	32	35
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside		3	14	17

CAR MOVEMENT FROM north	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		27		
Number of events in the measurement period	7	21		
Total time duration of combined events	189.0	567.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		94		
Distance attenuation (-6 dB per doubling of distance)		-39		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	24	23	33	36
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside		5	15	18

CAR MOVEMENT FROM south	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event	68		70	73
Duration of single event		52		
Number of events in the measurement period	3	10		
Total time duration of combined events	173.3	520.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	61	60	70	73
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	23	22	32	35
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	-18	-18	
Impact inside		4	14	17

Night-time ACTIVITY NOISE PREDICTION CALCULATIONS: (L_{A101hr} and L_{A011hr} are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

PEOPLE TALKING OUTSIDE	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	62		70	73	dB(A)
Duration of single event		900			Seconds
Number of events in the measurement period	1	4			Events
Total time duration of combined events	900.0	3600.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	62	62	70	73	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		105			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	24	24	32	35	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10	dB
Impact inside		14	22	25	dB(A)

DRIVE-THROUGH SPEAKER A	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	70		73	75	dB(A)
Duration of single event		45			Seconds
Number of events in the measurement period	5	15			Events
Total time duration of combined events	225.0	675.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	64	63	73	75	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		95			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	27	26	36	38	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10	dB
Impact inside		16	26	28	dB(A)

DRIVE-THROUGH SPEAKER B	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	70		73	75	dB(A)
Duration of single event		45			Seconds
Number of events in the measurement period	5	15			Events
Total time duration of combined events	225.0	675.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	64	63	73	75	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		93			m
Distance attenuation (-6 dB per doubling of distance)		-39			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	27	26	36	38	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10	dB
Impact inside		16	26	28	dB(A)

TRUCK ENGINE STARTS Loading bay	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	78		81	83	dB(A)
Duration of single event		3			Seconds
Number of events in the measurement period	1	1			Events
Total time duration of combined events	3.0	3.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	53	47	N/A	N/A	dB(A)
Tonality / Impulsiveness correction	0	5			dB
Minimum distance to receiver		100			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	16	15	N/A	N/A	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10	dB
Impact inside		5	N/A	N/A	dB(A)

TRUCK MOVEMENT FROM north	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	85		87	88	dB(A)
Duration of single event		60			Seconds
Number of events in the measurement period	1	2			Events
Total time duration of combined events	60.0	120.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	73	70	N/A	88	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		110			m
Distance attenuation (-6 dB per doubling of distance)		-41			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	35	32	N/A	50	dB(A)
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10	dB
Impact inside		22	N/A	40	dB(A)

R2: Best Western accommodation due north

PEOPLE TALKING OUTSIDE	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	62		70	73	dB(A)
Duration of single event		900			Seconds
Number of events in the measurement period	1	4			Events
Total time duration of combined events	900.0	3600.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	62	62	70	73	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		105			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	24	24	32	35	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18	dB
Impact inside		6	14	17	dB(A)

DRIVE-THROUGH SPEAKER A	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	70		73	75	dB(A)
Duration of single event		45			Seconds
Number of events in the measurement period	5	15			Events
Total time duration of combined events	225.0	675.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	64	63	73	75	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		117			m
Distance attenuation (-6 dB per doubling of distance)		-41			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	25	24	34	36	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18	dB
Impact inside		6	16	18	dB(A)

DRIVE-THROUGH SPEAKER B	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	70		73	75	dB(A)
Duration of single event		45			Seconds
Number of events in the measurement period	5	15			Events
Total time duration of combined events	225.0	675.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	64	63	73	75	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		117.0			m
Distance attenuation (-6 dB per doubling of distance)		-41			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	25	24	34	36	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18	dB
Impact inside		6	16	18	dB(A)

TRUCK ENGINE STARTS Loading bay	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	78		81	83	dB(A)
Duration of single event		3			Seconds
Number of events in the measurement period	1	1			Events
Total time duration of combined events	3.0	3.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	53	47	N/A	N/A	dB(A)
Tonality / Impulsiveness correction	0	5			dB
Minimum distance to receiver		102			m
Distance attenuation (-6 dB per doubling of distance)		-40			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	16	15	N/A	N/A	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18	dB
Impact inside		-3	N/A	N/A	dB(A)

TRUCK MOVEMENT FROM north	Creep	Acoustic Quality Objectives			
	L _{Aeq}	L _{Aeq}	LA10	LA01	
Noise source level for single event	85		87	88	dB(A)
Duration of single event		60			Seconds
Number of events in the measurement period	1	2			Events
Total time duration of combined events	60.0	120.0			Seconds
	L _{Aeq}	L _{Aeq} 1hr	LA10 1hr	LA01 1hr	
Noise source level for assessment time period	73	70	N/A	88	dB(A)
Tonality / Impulsiveness correction	0	0			dB
Minimum distance to receiver		94			m
Distance attenuation (-6 dB per doubling of distance)		-39			dB
Barrier screening		0			dB
Facade reflection		2.5			dB
Impact at nearest facade	36	33	N/A	51	dB(A)
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18	dB
Impact inside		15	N/A	33	dB(A)

Night-time ACTIVITY NOISE PREDICTION CALCULATIONS: ($L_{A10\text{thr}}$ and $L_{A01\text{thr}}$ are represented as N/A if the duration of events do not occur for 10% or 1% of the 1 hour period)

R1: Jolly Swagman accommodation due south

TRUCKS WITH REFRIGERATION UNIT	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		81	82	83
Duration of single event		900		
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	81	78	82	83
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		100		
Distance attenuation (-6 dB per doubling of distance)		-40		
Refrigeration unit truck directivity / screening		-5		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	39	35	40	41
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		25	30	31

TRUCK AIRBRAKES at loading bay	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		93	98	102
Duration of single event		2		
Number of events in the measurement period	1	3		
Total time duration of combined events	2.0	2.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	63	57	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver		100		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	26	25	N/A	N/A
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		15	N/A	N/A

TRUCK UNLOADING	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		75	80	82
Duration of single event		900		
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	75	72	80	82
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		100		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Rear of truck unload, truck screening		0		
Facade reflection		2.5		
Impact at nearest facade	38	34	43	45
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		24	33	35

Combined impact at facade NIGHT	39	38	44	47
Reduction through open BATH window (also minus 2.5 dB facade)		-10	-10	-10
Impact inside		28	34	37

R2: Best Western accommodation due north

TRUCKS WITH REFRIGERATION UNIT	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		81	82	83
Duration of single event		900		
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	81	78	82	83
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Refrigeration unit truck directivity / screening		-5		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	38	35	39	40
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		17	21	22

TRUCK AIRBRAKES at loading bay	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		90	98	102
Duration of single event		2		
Number of events in the measurement period	1	3		
Total time duration of combined events	2.0	2.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	63	57	N/A	N/A
Tonality / Impulsiveness correction	0	5		
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Facade reflection		2.5		
Impact at nearest facade	26	25	N/A	N/A
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		7	N/A	N/A

TRUCK UNLOADING	Acoustic Quality Objectives			
	Creep LAeq	LAeq	LA10	LA01
Noise source level for single event		75	80	82
Duration of single event		900		
Number of events in the measurement period	1	2		
Total time duration of combined events	900.0	1800.0		
	LAeq	LAeq 1hr	LA10 1hr	LA01 1hr
Noise source level for assessment time period	75	72	80	82
Tonality / Impulsiveness correction	0	0		
Minimum distance to receiver		102		
Distance attenuation (-6 dB per doubling of distance)		-40		
Barrier screening		0		
Rear of truck unload, truck screening		0		
Facade reflection		2.5		
Impact at nearest facade	37	34	42	44
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		16	24	26

Combined impact at facade NIGHT	33	33	34	36
Reduction through CLOSED window (also minus 2.5 dB facade)		-18	-18	-18
Impact inside		15	16	18

ONSITE MECH PLANT NOISE PREDICTION CALCULATIONS:

R1: Jolly Swagman accommodation due south

Kitchen exhaust fan units	62	dBA @ 3m
Number of units	2	units
Toilet Exhaust Units	52	dBA @ 3m
Number of units	2	units
Total noise level	65	dBA @ 3m
Distance to receiver	95	m
Distance attenuation (-6 dB per doubling of distance)	-30	dBA
Acoustic attenuators	-20	dBA
Roof screening	0	dBA
Facade reflection	2.5	dBA
Impact at facade	18	dBA
Reduction through open BATHROOM window (also minus 2.5 dB facade)	-10	dBA
Impact inside open window	-8	dBA

A/C Units	60	dBA @ 3m
Number of units	2	units
Refrig Units	65	dBA @ 3m
Number of units	2	units
Total noise level	69	dBA @ 3m
Distance to receiver	95	m
Distance attenuation (-6 dB per doubling of distance)	-30	dBA
Rooftop screen attenuation	-15	dBA
Barrier screening	0.0	dBA
Facade reflection	2.5	dBA
Impact at facade	27	dBA
Reduction through open BATHROOM window (also minus 2.5 dB facade)	-10	dBA
Impact inside open window	17	dBA

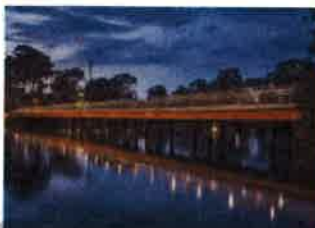
Combined impact at facade	27	dBA
Reduction through open BATHROOM window (also minus 2.5 dB facade)	-10	dBA
Impact inside open window	17	dBA

R2: Best Western accommodation due north

Kitchen exhaust fan units	62	dBA @ 3m
Number of units	2	units
Toilet Exhaust Units	52	dBA @ 3m
Number of units	2	units
Total noise level	65	dBA @ 3m
Distance to receiver	115	m
Distance attenuation (-6 dB per doubling of distance)	-32	dBA
Acoustic attenuators	-20	dBA
Roof screening	0	dBA
Facade reflection	2.5	dBA
Impact at facade	16	dBA
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	dBA
Impact inside open window	-2	dBA

A/C Units	60	dBA @ 3m
Number of units	2	units
Refrig Units	65	dBA @ 3m
Number of units	2	units
Total noise level	69	dBA @ 3m
Distance to receiver	115	m
Distance attenuation (-6 dB per doubling of distance)	-32	dBA
Rooftop screen attenuation	-15	dBA
Barrier screening	0.0	dBA
Facade reflection	2.5	dBA
Impact at facade	25	dBA
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	dBA
Impact inside open window	7	dBA

Combined impact at facade	25	dBA
Reduction through CLOSED window (also minus 2.5 dB facade)	-18	dBA
Impact inside open window	8	dBA



The experience **you deserve** >




**2 Mill Street, Goondiwindi
KFC Proposed Development**


Traffic Impact Assessment


Client: EPO Development Pty Ltd
Project No: BE220369
Document No: BE220369-RP-TIA-01

August 2022

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice
Council Reference: 22/32
Dated: 28/10/22
Signed: 
Print Name: Carl Manton
(Under Delegation) ASSESSMENT MANAGER

Document Control Record

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Executive Summary

EPO Development Pty Ltd has engaged Burchills Engineering Solutions to prepare a Traffic Impact Assessment Report (TIA) to be considered as part of a Development Application for a fast-food development located at 2 Mill Street, Goondiwindi (Lots 1 on RP850853).

The proposed means of ingress to or egress from the development are adequate and located appropriately according to the road hierarchy. The development provides for a safe and convenient movement to, from and within the site. The proposed access arrangements do not impede the traffic performance of the existing roads.

The development will incorporate a drive-thru KFC restaurant with site access points from Mill Street. The development will generate up to 100 vehicles per hour during the evening peak hour. Capacity analysis by using SIDRA has been done as part of this Traffic Report Assessment due to the close proximity of the State-controlled Road (Marshall Street) which runs adjacent to the north-east boundary of the subject site. Mill Street is a low-traffic volume road that mainly serves 4 small industrial developments and a motel.

HRV vehicles manoeuvre the site satisfactorily. Lane 2 of the Drive-Thru will be used for all deliveries to the site and for loading and unloading purposes, deliveries to be made outside of the operational hours. Lane 2 will be closed by using traffic cones and only removed once the delivery is completed and it's safe to open the lane for the customers.

The subject site provides 6 additional parking spaces and a wide access aisle to allow faster and safer traffic movement, site is well accessible via the pedestrian network on Marshall Street.



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Appendices

- Appendix A – Site Layout
- Appendix B – Swept paths analysis
- Appendix C – Sidra Analysis



1. Introduction

1.1 Background

Burchills Engineering Solutions Ltd has been engaged by EPO Development Pty Ltd to prepare a Traffic Assessment Report to be considered as a part of the development application for commercial development (KFC Restaurant) at Lots 1 on RP850853. The proposed development layout is attached as Appendix A to this report.

The subject site will be accessed via Mill Street near the intersection with Marshal Street in Goondiwindi. The site provides 21 car spaces which is designed in line with AS2890.1 standards. Parking bays are 2.6m and are accessible by a 7.5m wide aisle.

This report considers the transportation aspects of the development proposal, in particular, site access, parking traffic generation and service vehicle on-site movement. It concludes that the proposed site access arrangement is adequate to service the site and that there will be no material impacts associated with the development of the site as the traffic generated is low and does not impact the local road network.

1.2 Scope

This report provides an audit of the existing transport conditions in the vicinity of the site including a description of the local road network and its operation. It also determines the anticipated level of trip generation, the distribution of these trips and the impact of this development traffic on the local road network. In addition, the report addresses the key issues in relation to the provisions made for the loading, unloading and manoeuvring of service vehicles.

The structure of this report is summarised below:

- Section 2: Describes the site location and the existing road network in the vicinity of the site;
- Section 3 Outlines the relevant characteristics of the proposed development including access and parking arrangements; Swept path analysis include servicing, loading and waste collection;
- Section 4: Estimate the increase in traffic generated by the proposed development;
- Section 5: Assess the operation of key intersections in the vicinity of the site;
- Section 6: Presents a summary of the report and identifies the main conclusions that can be drawn from the Traffic Assessment Report.



2. Existing Conditions

Section 2 of this report details the baseline conditions in the vicinity of the site, including the existing development site, the local road infrastructure, existing traffic conditions etc.

2.1 Subject Site

The subject site is located at 2 Mill Street in Goondiwindi (Lot 1 RP850853).

As shown in Figure 2.1 below, the subject site is bordered by Marshall Street to the east, to the south by Mill Street and south by vacant land.



Figure 2.1 Subject Site Location

Goondiwindi is a rural town with approx. 830 km² area, and locality in the Goondiwindi Regional Council, it is on the border of Queensland and New South Wales. As per the 2016 Census, there were 6,355 people in Goondiwindi.

The proposed site is located within a Highway Commercial Precinct of the Goondiwindi Regional Council. Figure 2.4 shows the zone plan for the subject site extracted from the council's planning scheme.



Figure 2.2 Subject Site Zone Plan

2.2 Local Road Network

2.2.1 Marshal Street

Marshal Street is a two-lane state-controlled road subject to a 50km/h speed limit in the vicinity other Mills Street intersection. It has a 64m road reserve and a total paved surface of 7.6m, which includes a 3.5m wide lanes in each direction. Marshal Street also has a 2m wide footpath which runs near the north-east boundary of the subject site.

Figure 2.3 shows the cross-section of Marshal Street near the subject site.

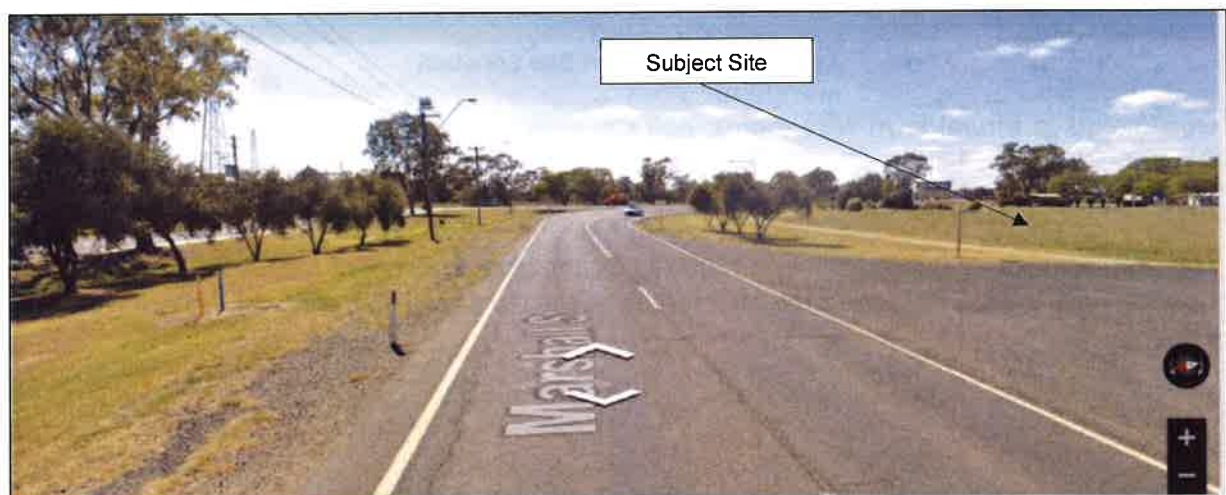


Figure 2.3 Marshall St Southern Approach to Site Access



2.2.2 Mill Street

Mill Street is a two-way, two-lane Council controlled road subject to 50km/h speed limit. It has a 20m wide road reserve along with an 11.5m wide paved surface and connects with Marshall Street in the north and Andersen Street in the south. Mill Street runs adjacent to the southwest boundary of the subject site. The proposed site entrance to the subject site is located near the intersection of Marshall Street and Mill Street. Figure 2.4 below shows the Mill Street cross-section facing toward the intersection with Marshall Street.



Figure 2.4 Mill Street (Subject Site to the Right)

2.3 Traffic Data

The traffic impact of the proposed development will be assessed within the development's 'area of influence'. The implications of the proposed development on the operation of the Marshall St/ Mill St unsignalized intersection were considered as part of the Traffic Impact Assessment.

2.3.1 AADT along Marshall St

The proposed development site is located adjacent to Mill Street which connects with Marshall Street to the northwest. The wider road network is accessible via Marshall Street. Marshall Street Annual Average Daily Traffic (AADT) data was provided by TMR (2004-2018 AADTs traffic Census data) and is presented in Table 2.1 below.

Table 2.1 Historical AADT Flows along Marshall Street

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2014	2016	2018
AADT	3,228	3,051	3,224	3,200	3,332	3,450	3,563	3,513	3,632	3,558	3,720	3,838



2004 - 2018 Historical AADT along Goondiwindi Connection Road

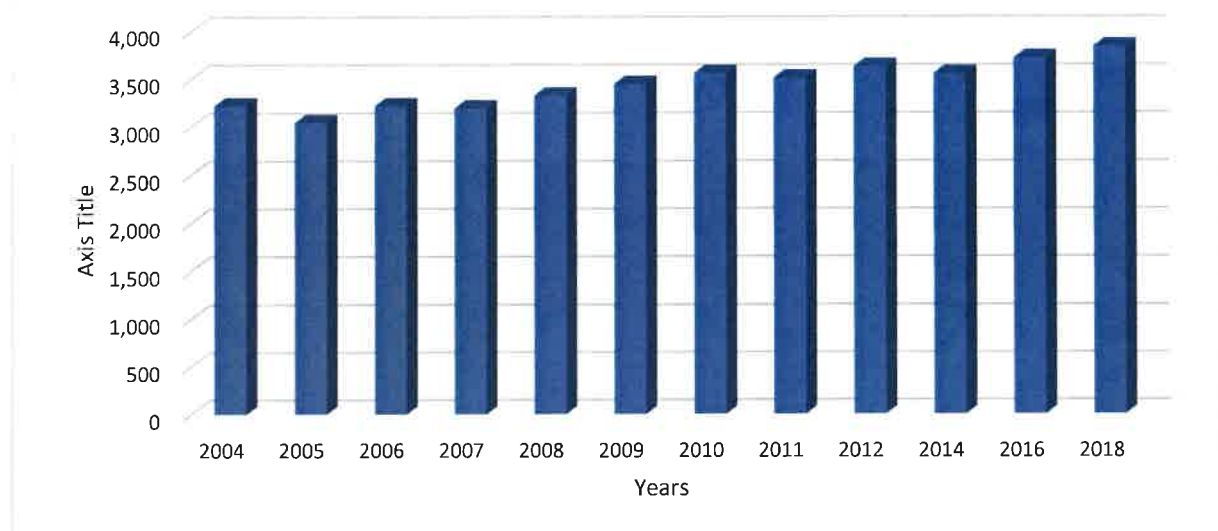


Figure 2.5 2004-2018 Historical AADT along Goondiwindi Connection Road (Marshall St)

As shown in Figure 2.5, the traffic along Marshall Street in the last 12 years grew at an inconsistent level. For robust assessment, the Queensland Population Forecast data has been adopted for the traffic volume projections

3. Proposed Development

Figure 3.1 below shows the proposed development layout. For further details regarding the proposed layout, refer to the proposed site plan prepared by Verve Building Design attached within Figure 3.1.



Figure 3.1 Proposed Development Layout

The proposed development is a KFC drive-through facility which provide single access to the site for Mill Street near the intersection with Marshal Street. Proposed development comprises of 225m² “food and drink” area along with a drive-thru area and 21 vehicle parking spaces.

3.1 Development Access

Assess to the proposed development is provided via Access Facility Category 2. According to AS2890.1 Figure 3.1 a minimum of a Category 2 access facility is required. The proposed driveway is 8m wide, which is within the minimum requirement of the Australian Standards.

3.1.2 Visibility requirement

The proposed development vehicular access arrangements to the wider road network are via a new access driveway with Mill Street to the north-west boundary of the site.



The proposed access driveway is designed in line with AS2890.2 standards for heavy vehicles. In summary, 3.0m x 69m visibility triangle to the left due to the straight alignment of Mill Street. The right, Mill Street benefits from an intersection (approximately 30m) resulting in lower speeds. The above requires 3.0m x 55m visibility splays associated with reduced 40km/h road speed at the intersection. Sightlines are achieved and to increase the safety at the intersection of driveway and Mill Street, A give way sign will be installed at the driveway.

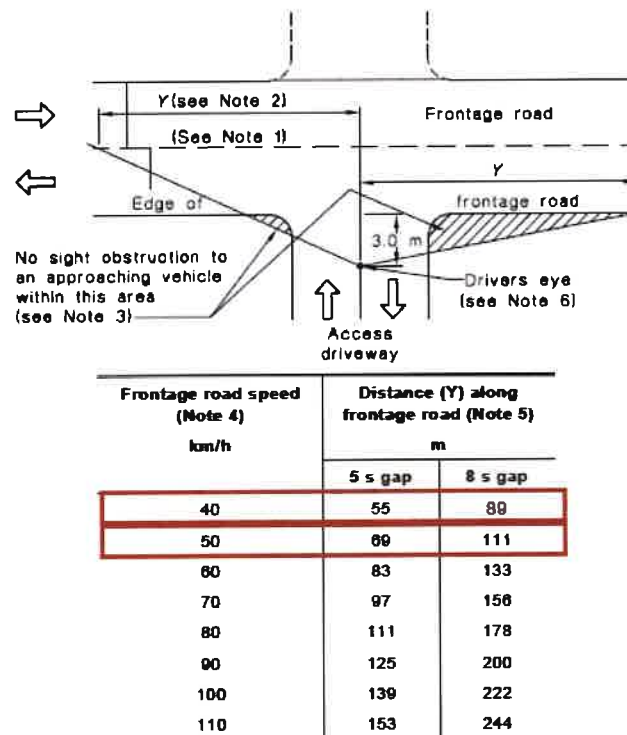


Figure 3.2 Visibility Requirements at Access Driveway (Source:2890.2)

3.2 Parking Requirements

The proposed development's car parking rate are determined by the Goondiwindi Regional Council Planning Scheme, car parking rates food and drink facility are shown in Table 3.1 below.

Table 3.1 Goondiwindi Regional Council Parking Requirements

Land Use	Car Parking Rates	Car Parking Requirements
Food and Drink (225m ²)	1 space per 15m ² of gross floor area; plus queuing for 10 vehicles associated with any drive-through	15 car parking space

Based on the Goondiwindi Regional Council car parking requirements the proposed development is required to provide minimum 15 car parking spaces for visitors and queuing area for 10 vehicles for drive through facility from the collection point as well as accommodate onsite movement for an MRV service vehicle.



3.3 Car Parking Spaces Supplied

The proposed development benefits from 21 car parking spaces which 6 spaces above the minimum GCR requirement. Figure 3.3 shows the proposed car parking and pedestrian crossing area for the site.

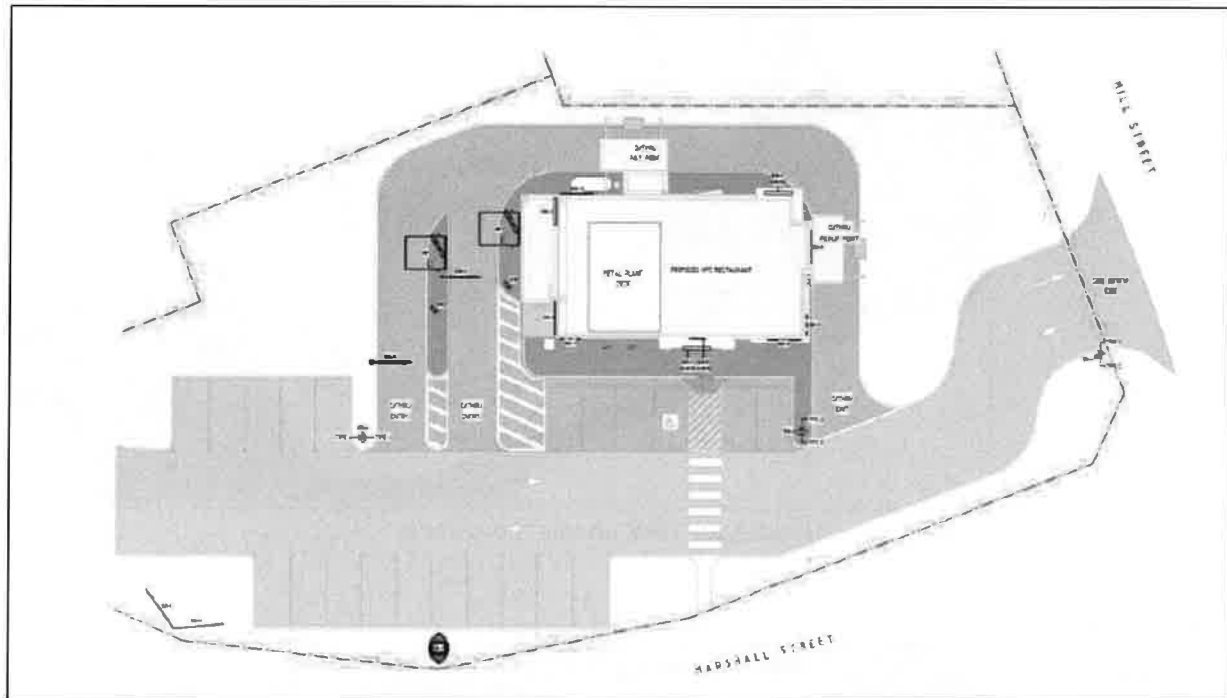


Figure 3.3 Proposed Car Parking Area

3.3.1 Design of car parking areas

The proposed car parking area is designed in line with Australian Standards AS/NZ2890.1. The following

- Visitor Car Parking (User Class 3*) - 2.6m x 5.4m parking bays and min 6.6m wide aisles.

A 7.5m width is adopted for aisle, allowing a safe and quick maneuver in the parking area.

3.3.2 Loading/unloading Area

To providing a safe loading and unloading bay close to the restaurant, Lane 2 of the Drive-Thru will be used for deliveries purposes. All deliveries will be made outside of the operational hours and for safety precaution, traffic cones will be used while the deliveries are in progress and only to be removed once the delivery is completed. A statement with details about the loading bay operation is also provided in Appendix A. As per the Goondiwindi Regional Council's Development codes Part 9, Table 9.4.4.2. the service vehicle for a food and drink outlet is an MRV vehicle, however, deliveries to site will be made by a HRV vehicle, detail swept paths HRV vehicles are provided in Appendix B.

The figure 3.4 shows the swept path movement for the HRV service vehicle in and out of the Lane 2 of the Drive-Thru.



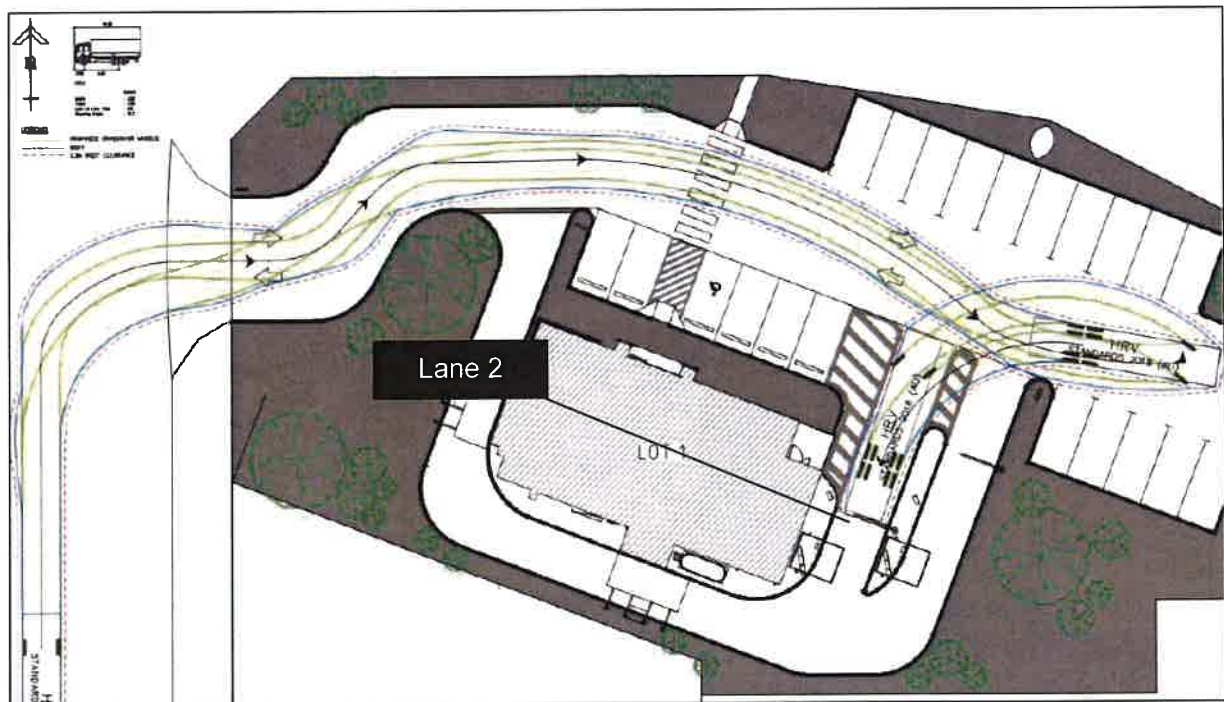


Figure 3.4 HRV on-site movement

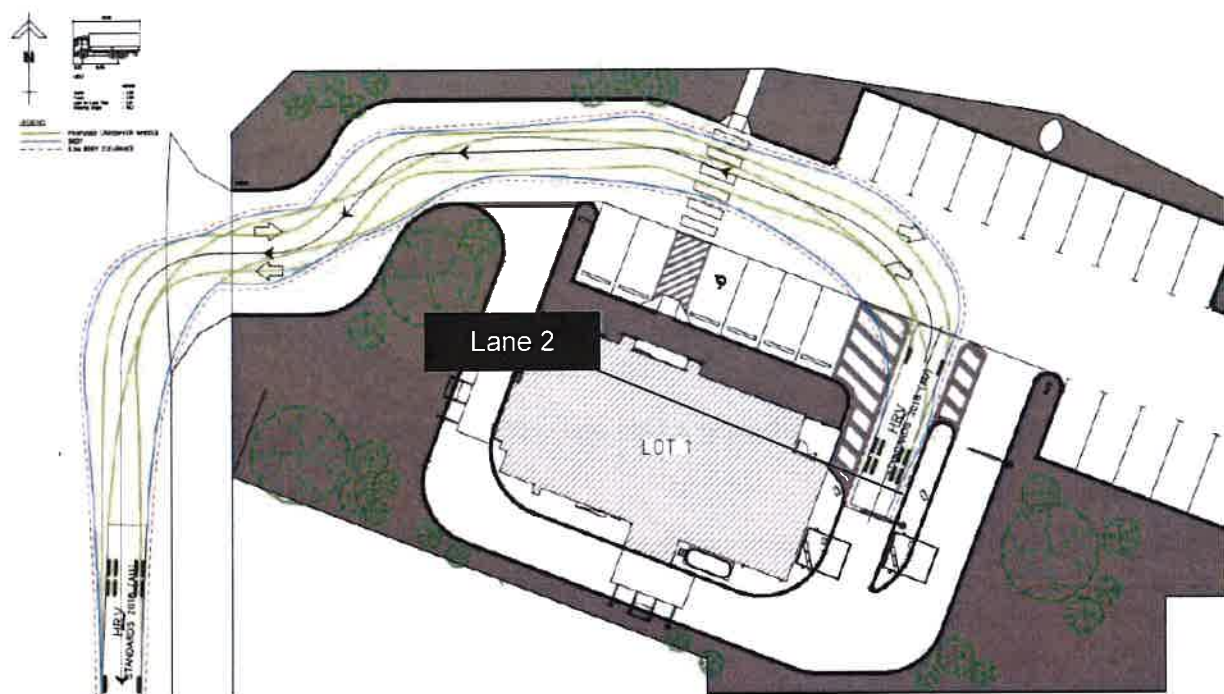


Figure 3.5 HRV on-site movement

As seen in above Figure 3.4 and Figure 3.5, a service vehicle can easily manoeuvre in and out of the Lane 2.



4. Trip Generation

In order to assess the relative impact of the proposal on the surrounding road network, it is necessary to define the existing traffic demands on the road network and estimate future traffic demands on key intersections.

The existing traffic demands as defined in traffic surveys are forecast to the future assessment years. These volumes represent the "Pre-Development" scenario.

The traffic generated by the proposed development is estimated, along with its distribution across the surrounding road network. These volumes are added to the "Pre-Development" scenario to provide the "Post Development" traffic scenario.

4.1 Pre-Development Traffic

4.1.1 Background Traffic Growth Rates

The development is expected to be completed by 2023 and the 10-year design horizon in accordance with the Department of Main Roads, *Guide to Traffic Impact Assessment*, is 2033.

The review of the historical AADT traffic data along Marshal Street shows traffic growth between 2004 and 2018. Traffic data was recorded at the site 50090 (Road Section 360 – Goondiwindi Connection Road) was 3,834 in both directions.

The growth factor is shown in Table 4.1 below.

Table 4.1 Traffic Growth Factors

	2018 to 2023	2017 to 2023
Marshal Street	1.019 (1.9%)	1.022 (2.2%)

4.1.2 Future Year Traffic Volume (Marshall Street)

Growth factors summarised in Figure 4.1 has been applied to the 2018 traffic Volume (Fig 2.5) to identify the future traffic flows in 2023 and 2033. The resultant future traffic flow for the year 2023 and 2033 AM and PM peak hours is shown in Figure 4.1.

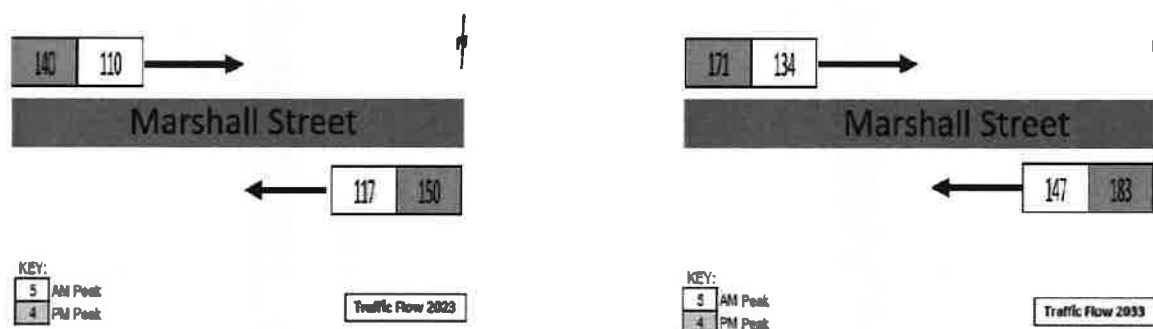


Figure 4.1 2023 and 2033 Pre-Development Traffic Flow



4.1.3 Future Year Traffic Volume (Mill Street)

Growth factors summarised in Table 4.1 have been used to assume the future traffic volume of Mill Street. The current estimation of peak hour traffic flow for Mill Street is based on the area of the industrial development and motel.

The trip rates for developments on Mill Street have been extracted from the RTA "Guide to Traffic Generating Development".

Table 4.2 Trip Generation for Mill Street

Development	Total gross warehouse area	Trip generation rate	Trips (peak hour)
Warehouse 1	452m ²	1 per 100m ²	5
Warehouse 2	539m ²	1 per 100m ²	6
Warehouse 3	211m ²	1 per 100m ²	2
Warehouse 4	202m ²	1 per 100m ²	2
Motel	52 Unit/Room	0.4 per unit	21
Total Trips			36

It is also to be noted that most of the traffic toward the motel will be coming from state highway via Andersen Road that why only 50% of traffic will be using the Mill St and Marshall St intersection. Based on the trip generation in Table 4.2, the resultant future traffic flow for Mill Street and Marshall St intersection for the year 2023 and 2033 AM and PM peak hours is shown in Figure 4.2, with 70% traffic coming in and 30% going out in AM peak and 80% going out and 20% in.

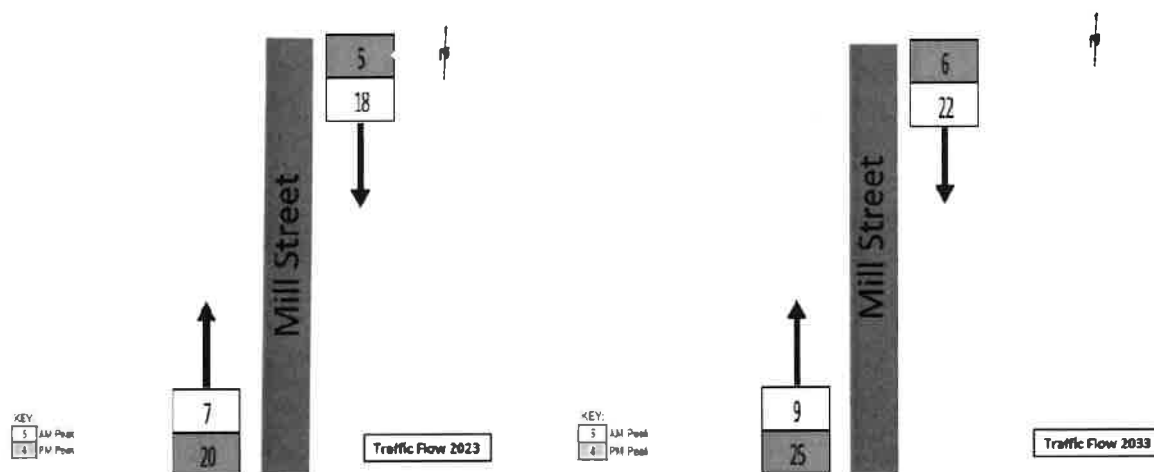


Figure 4.2 2023 and 2033 Pre-Development Traffic Flow

4.2 Development Traffic

The trip rates are based on the RMS published Guide to Traffic Generating Developments updated traffic surveys (TDT 2013/04a). The proposed development trip generation rate is shown in Figure 4.3 below.

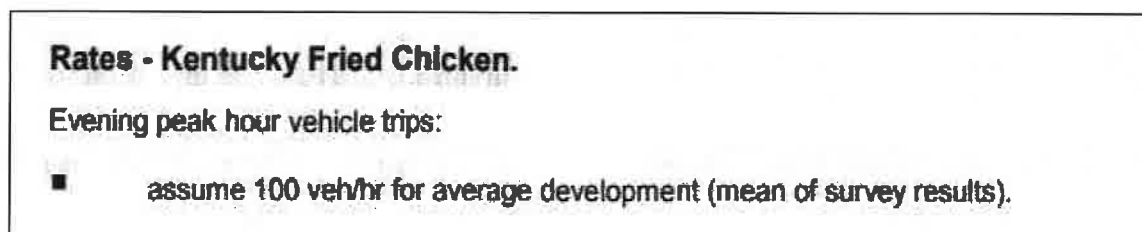


Figure 4.3 Trip Generation Rate for KFC

The proposed development Trip rates and in/out trip distribution used in the Traffic Impact Assessment are summarised in Table 4.3 below:

Table 4.3 Proposed Development Trip Rates and In/Out Distribution Split

Land Use	GFA (m ²)	PM Peak		
		Total Trip	In	Out
Food & Drink	225m ²	100	50%	50%
Trip Generation			50	50

The above table identifies that the proposed development is likely to generate approximately 100 additional vehicle trip movements in the PM peak hour. The RMS Guide only provides the afternoon peak rate for Drive-in take away food outlets as these businesses are usually open after the morning peak hours and doesn't impact the AM peak traffic volume.

4.2.1 Trip distribution

The trip distribution for the subject site is assumed to be 60-40, where 60% of the traffic is believed to be coming from the west of subject site from the Goondiwindi town and 40% coming from the state highway Cunningham Highway. Figure 4.4 shows the trip distribution to/from the site.

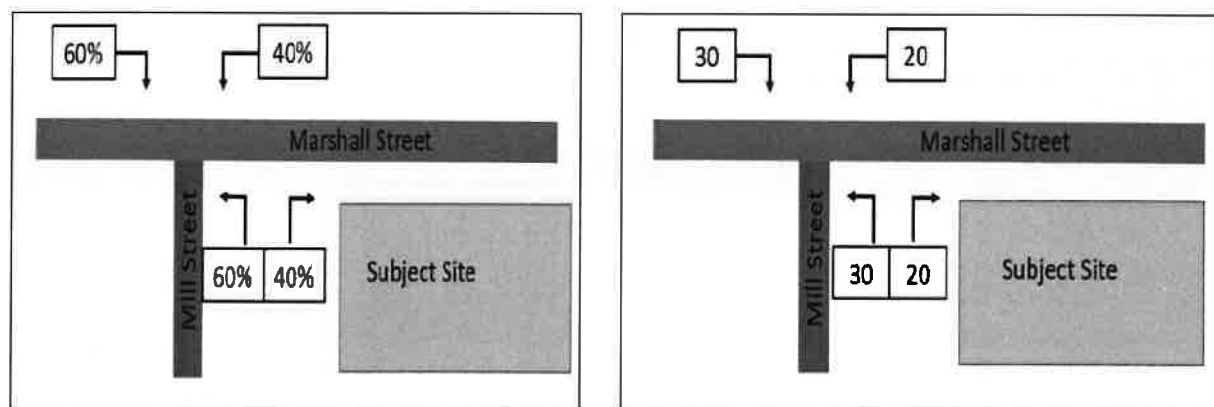


Figure 4.4 Proposed Development Trip Distribution



4.2.2 Post Development Traffic

The development traffic has been added to the future basic traffic flow to provide the Post Development Traffic for the interim scenario and are shown in Figure 4.5 below. As mentioned in section 4.2 the development traffic only affects the afternoon traffic flow.

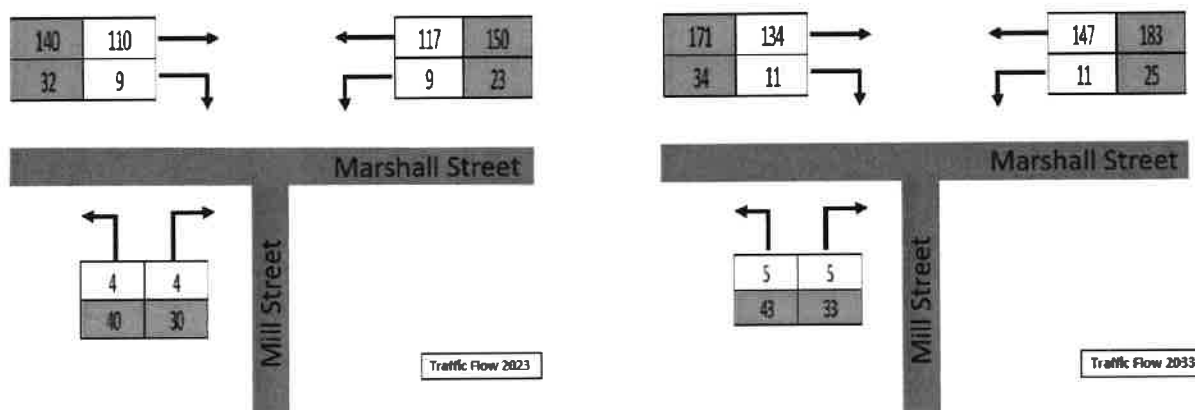


Figure 4.5 2023 and 2033 with Proposed Development Traffic Flows

The overall sustainability of the traffic operations is maintained due to the following:

- The insignificant traffic increase resulting from the proposed development;
- Maintained safe and efficient operation of the existing Mill Street and Marshall Street.
- Safe and convenient vehicle movement to, from and within the site is provided with one access roadway;
- Available sight distances and the location and design of access point which meets with Austroads requirements;
- Linkage to the existing walking and cycling facilities.

4.3 Sidra Analysis

The forecast background traffic was combined with the development traffic to determine the site's impact on Mill Street and Marshall Street. The SIDRA output summary is provided in Figure 4.6 and Figure 4.7 below, with full output attached at Appendix C.

MOVEMENT SUMMARY

Grp: 101 [Marshall Street and 10th Street All peak with development year 2033 (See Folder: General)]

Marshall Street and Mill Street Add patch.

Site Catalog (Name)
Date (Date)

Give-Way (Tomb-Mark)

[illegible]

Figure 4.6 2023 PM peak movement summary with development

MOVEMENT SUMMARY

Site: 101 (Marshall Street and Mill Street PM peak with development year 2033 (Site Folder: General))
 Marshall Street and Mill Street PM Peak
 Site Category: (None)
 Grid: (Two (Two))

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Orig. Sat. s/c	Est. Delay sec	Level of Service	95% SAT. OF QUEUE		Stop Que	Effective Stop Rate	Area No. Cycles	Area Speed km/h
		[Total veh/s]	HV %	[Total veh/s]	HV %				[Total veh]	[Total Dist. m]				
South Mill Street														
1	L2	43	4.0	45	4.5	0.977	6.2	LOS A	3.3	2.8	0.33	0.61	0.33	50.3
3	R2	33	18.8	35	19.1	0.877	7.7	LOS A	3.3	2.8	0.33	0.61	0.33	49.7
Approach		76	6.6	80	6.6	0.877	6.9	LOS A	3.3	2.8	0.33	0.61	0.33	50.0
East Marshall Street (East)														
4	L2	25	4.0	26	4.0	0.116	5.6	LOS A	0.0	0.0	0.00	0.07	0.06	56.2
3	T1	183	9.0	193	9.0	0.116	8.0	LOS A	0.0	0.0	0.00	0.07	0.06	56.1
Approach		208	8.4	219	8.4	0.116	0.7	NA	0.0	0.0	0.00	0.07	0.06	56.0
West Marshall Street (West)														
11	T1	171	8.4	189	8.4	0.122	8.2	LOS A	3.3	2.8	0.13	0.16	0.13	58.5
12	R2	34	5.5	38	5.5	0.122	8.4	LOS A	3.3	2.8	0.13	0.16	0.13	54.9
Approach		205	7.8	216	7.6	0.122	1.2	NA	3.3	2.8	0.13	0.16	0.13	58.0
All Vehicles		489	7.9	515	7.9	0.122	1.9	NA	0.3	2.1	0.11	0.17	0.11	57.3

Figure 4.7 2033 PM peak movement summary with development

As observed in Figure 4.6 and Figure 4.7 above the Level of Service A (LoS) for the intersection post development. Based on the insignificant traffic increase, SIDRA analysis demonstrates that the traffic from subject site does not affect the serviceability of the local road network.

4.4 Turn Warrant

Turn warrants have been developed in relation to safety. The warrants have been developed around the relationship between traffic volumes, speed environments and accident statistics, employing a Benefit Cost Ratio (BCR) across an assumed design life.

Figure 4A-2 - Calculation of the major road traffic volume parameter 'Qm'

Road Type	Turn Type	Splitter Island	Qm (veh/h)
2 Lane 2 Way	Right	No	$= Q_{R1} + Q_{R2} + Q_L$
		Yes	$= Q_{R1} + Q_{R2}$
	Left	Yes/No	$= Q_{L1}$
4 Lane 2 Way	Right	No	$= 50\% \times Q_{R1} + Q_{R2} + Q_L$
		Yes	$= 50\% \times Q_{R1} + Q_{R2}$
	Left	Yes/No	$= 50\% \times Q_{L1}$

Figure 4.8 Turn Warrants Qm Traffic Flow Calculation

The warrants are based on the construction of intersections on new roads. For existing intersections, Marshall Street and Mill Street intersection is used as reference point, however, are not strictly applied as the BCRs in established locations often do not support upgrades, due to the existing physical constraints (e.g. services, road reserve, drainage structures, etc). A summary of turn treatments is provided in Table 4.4.



Table 4.4 Turn Lane Descriptions

Turn Treatment	Description
BAL	Basic Left Turn Lane
CHL	Channelised Left Turn Lane
AUL (s)	Shortened Auxiliary Left Turn Lane
AUL	Full Length Auxiliary Left Turn Lane
BAR	Basic Right Turn Lane
CHR (s)	Shortened Channelised Right Turn Lane
CHR	Channelised Right Turn Lane

Turn Warrant assessment is based on Department of Transport and Main Roads (DTMR) Road Planning and Design Manual Edition 2: Volume 3 Supplement to Austroads Guide to Road Design Part 4A: Unsignalised Intersections August 2014. Table 4.5 shows the calculation of the major road traffic volume parameters 'Q_m' and turning warrants assessment based on Figure 4A -1 Warrants – major road turn treatments – normal design domain from the DTMR - RPDM.

An estimate of the peak hour traffic passing the site is shown in the following Table 4.5:

Table 4.5 Site Access Trips Peak Hours (Left Turn)

Traffic Volume	AM peak hour	PM peak hour
Q _{T1} (northbound)	0	0
Q _{T2} (southbound)	147	185
Q _L (from south)	11	25
Q _R (from north)	0	0

Turn Type	AM peak Hour			PM peak Hour		
	Q _M	Turning Volume	Turning Warrant.	Q _M	Turning Volume	Turning Warrant.
Left	147	Q _L = 11	BAL	185	Q _L = 25	BAL
Right	N/A					

Table 4.6 shows Traffic Volume adopted for the calculation of Q_m and the turning warrants based on Figure 4.9 as extracted from the DTMR – RPDM.

Table 4.6 Site Development Trips Peak Hours

Turn Type	AM peak Hour			PM peak Hour		
	Q _M	Turning Volume	Turning Warrant.	Q _M	Turning Volume	Turning Warrant.
Left	147	Q _L = 11	BAL	185	Q _L = 25	BAL
Right	N/A					



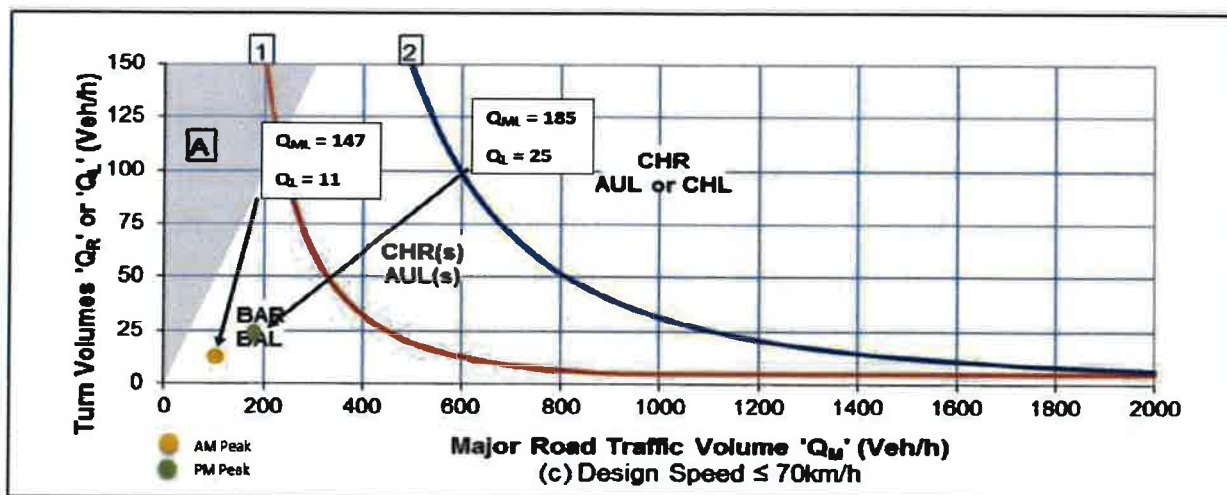


Figure 4.9 Left Turn Warrant Assessment

An estimate of the peak hour traffic passing the site for Right Turn is shown in the following Table 4.7.

Table 4.7 Site Access Trips Peak Hours (Right Turn)

Traffic Volume	AM peak hour	PM peak hour
Q _{T1} (northbound)	134	177
Q _{T2} (southbound)	147	183
Q _L (from south)	11	25
Q _R (from north)	11	34

Table 4.7 shows Traffic Volume adopted for the calculation of Q_m for Right Turn and the turning warrants based on Figure 3.3 as extracted from the DTMR – RPDM.

Table 4.8 Site Development Trips Peak Hours

Turn Type	AM peak Hour			PM peak Hour		
	Q _{T1} + Q _{T2} + Q _L = Q _M	Turning Volume	Turning Warrant.	Q _{T1} + Q _{T2} + Q _L = Q _M	Turning Volume	Turning Warrant.
Right	134 + 147 + 11 = 292	Q _R = 11	BAL	177 + 183 + 25 = 385	Q _R = 34	BAL



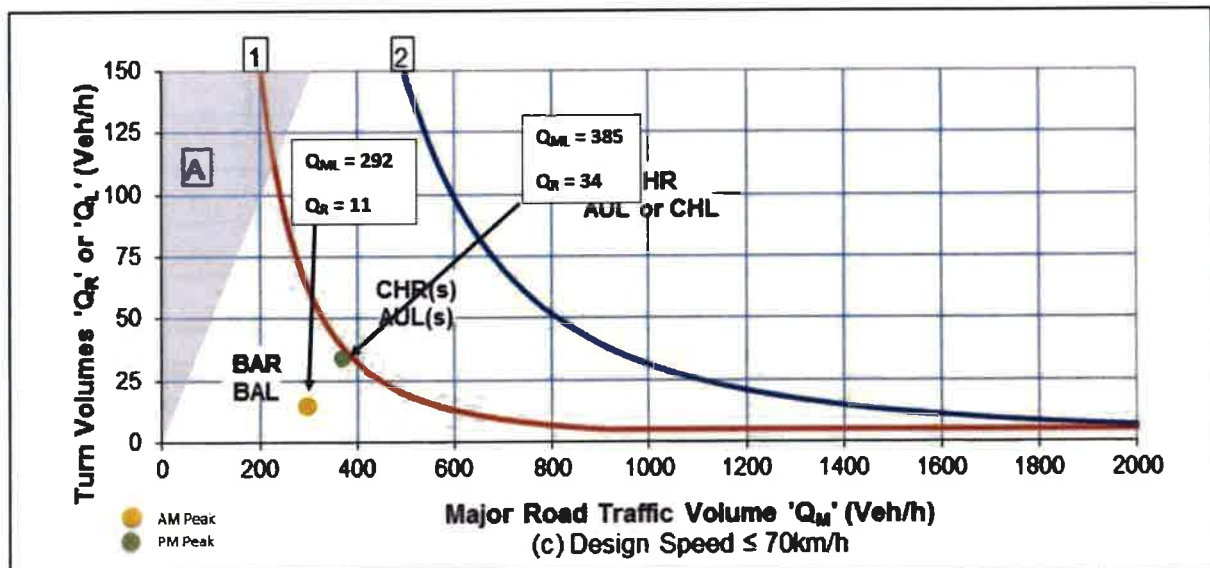


Figure 4.10 Right Turn Warrant Assessment

As demonstrated, due to the addition of development trips, a CHR(s) turning treatment for the right lane is warranted at the intersection. The volume of the BAL Left Turn is not required as the volume of traffic making Left Turn is very low.

5. Conclusions

EPO Development Pty Ltd has engaged Burchills Engineering Solutions to prepare a Traffic Impact Assessment Report (TIA) to be considered as part of a Development Application for a fast-food development located at 2 Mill Street, Goondiwindi (Lots 1 on RP850853).

The proposed means of ingress to or egress from the development are adequate and located appropriately according to the road hierarchy. The development provides for a safe and convenient movement to, from and within the site. The proposed access arrangements do not impede the traffic performance of the existing roads.

The development will incorporate a drive-thru KFC restaurant with site access points from Mill Street. The development will generate up to 100 vehicles per hour during the evening peak hour. Capacity analysis by using SIDRA has been done as part of this Traffic Report Assessment due to the close proximity of the State-controlled Road (Marshall Street) which runs adjacent to the north-east boundary of the subject site. Mill Street is a low-traffic volume road that mainly serves 4 small industrial developments and a motel. The SIDRA analysis for post development shows the intersection level of service as A and both left and right turns with the development traffic are not warranted as the traffic volume are low.

HRV vehicles manoeuvre the site satisfactorily. Swept path for Lane 2 shows that the combination of the Drive-Thru Lane and loading bay can be easily managed and doesn't not affect the traffic movement in Lane 1 of the Drive-Thru or the access aisle.

The subject site provides 6 additional parking spaces and a wide access aisle to allow faster and safer traffic movement, site is well accessible via the pedestrian network on Marshall Street.



6. References

Australian / New Zealand Standard 2004, Parking Facilities Part 1: *Off-Street Car Parking*, Standards Australia, Sydney.

Standards Australia 2002, AS 2890.2 Parking Facilities Part 2: *Off-Street Commercial Vehicle*.

Department of Main Roads 2004, Road Planning and Design Manual Chapter 5: *Traffic Parameters and Human Factors*, Queensland Government, Brisbane.

Department of Main Roads 2005, Road Planning and Design Manual Chapter 3: *Road Planning and Design Fundamentals*, Queensland Government, Brisbane.


Department of Main Roads 2006, Road Planning and Design Manual: Supplement to Austroads Guide to Road Design Part 4A: *Unsignalised and Signalised Intersections*.

Department of Main Roads 2006, *Guidelines for Assessment of Road Impacts of Development*, Queensland Government, Brisbane.

Roads and Traffic Authority (RTA) 2002, *Guide to Traffic Generating Developments*, Roads and Traffic Authority, Sydney.

Austroads 2009, Guide to Road Design – Part 4A: *Unsignalised and Signalised Intersections*, Austroads Incorporated, Sydney.



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Appendix A – Site Layout



PRELIMINARY
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DWG No	DRAWING TITLE
DA00	COVER PAGE
DA01	PROP SITE PLAN
DA02	PROP FLOOR PLAN
DA03	BUILDING ELEVATIONS & PERSPECTIVES
DA04	BUILDING ELEVATIONS & PERSPECTIVES
DA05	PROP SITE PERSPECTIVES
DA06	PROP SIGNAGE PLAN
DA07	PROP SIGNAGE DETAILS
DA08	SUBDIVISION PLAN

[illegible]



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RPD:

LOT 1 & 4 on RP850853

PARISH: GOONDIWINDI

COUNTY: MARSH

COUNCIL: GOONDIWINDI REGIONAL

DEVELOPMENT ASSESSMENT

- OVERALL SITE AREA - 6,544m²
- PROP. LOT 1 - 2,599m²
- PROP. LOT 2 - 3,945m²
- INCLUDES ACCESS EASEMENT
- LANDSCAPED AREA - 4,793m²
- BLDG SITE COVER - 3.5%
- INCLUDES ALL ROOFED AREAS

IMPERVIOUS AREAS

- PRE SITE DEVELOPMENT - 0m²
(INCLUDES BUILDING ROOFED AREAS)
- POST SITE DEVELOPMENT - 1,751m²
(INCLUDES BUILDING ROOFED AREAS)

BUILDING AREAS - (GFA)

- T1 FOOD & DRINK - 225m²
(INCLUDES REFUSE AREA - 10m²)

CAR PARKING

- PARKING REQUIRED - 15
(TO BE CONFIRMED)
- PARKING PROVIDED - 21



VERVE SCHEDULE DISCLOSURE

- ALL VERVES SHOULD BE CHECKED WITH THE COUNCIL OF THE SHIRAZ
- SCHEDULED RATES AND AREAS ARE INDICATED FOR ASSUMED ONLY NO RESPONSIBILITY IS TAKEN FOR THE ACCURACY OF SCHEDULES
- ANY DISCREPANCIES IN SCHEDULES SHOULD BE REPORTED TO THE AUTHOR
- ALL AREAS ARE CAPSULES UNLESS NOTED OTHERWISE

CONSTRUCTIVE FEATURES

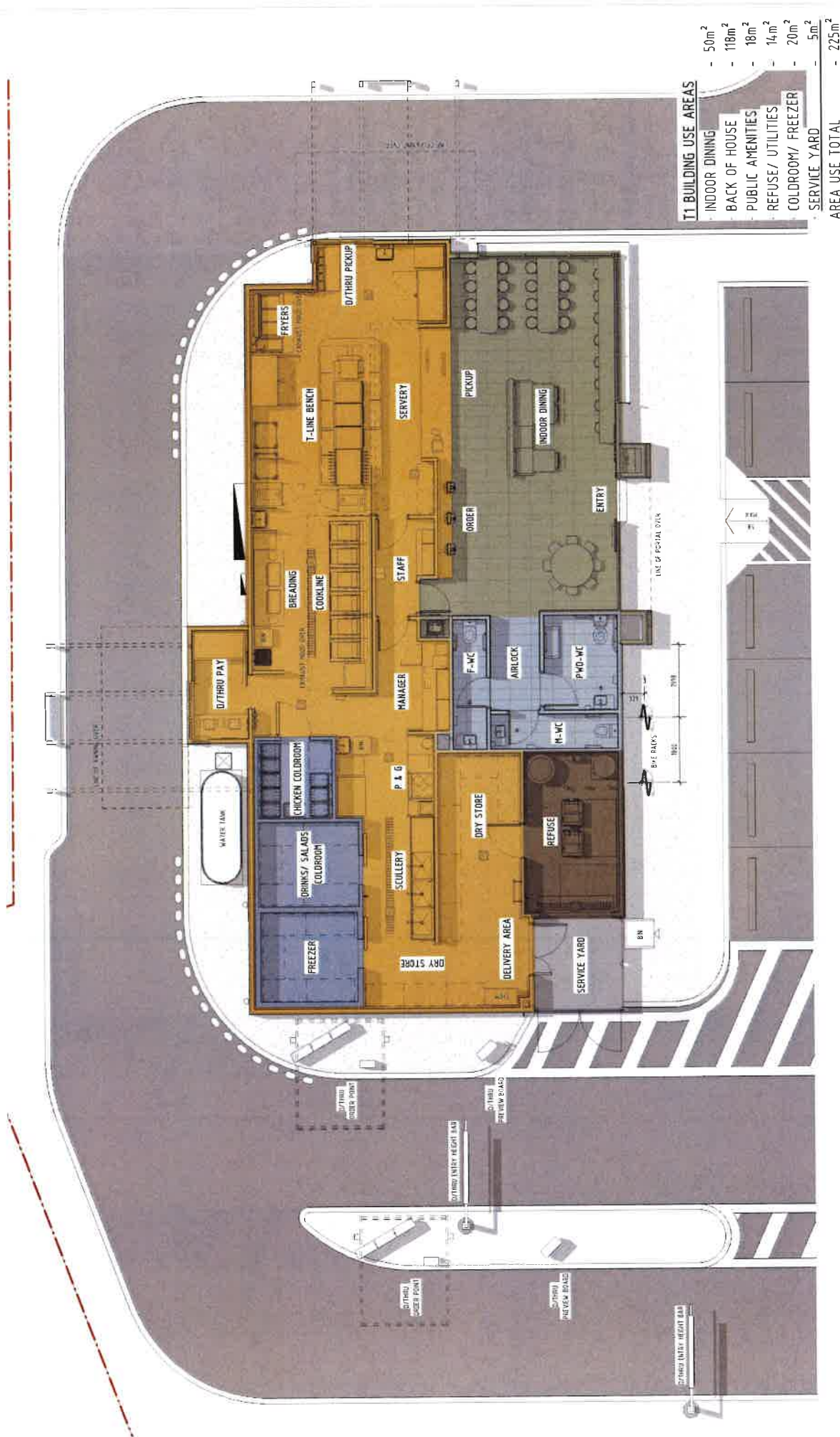


Commercial / Industrial / Retail / Community Development
Fast food restaurant design
Travel centre / service stations
Project concept to completion

Section	Date	Rev	Description
1	11/11/21	1	PRELIMINARY PLAN
2	11/11/21	1	PLAN FOR PERMIT
3	11/11/21	1	PLAN FOR PERMIT
4	11/11/21	1	PLAN FOR PERMIT
5	11/11/21	1	PLAN FOR PERMIT

Project Description	App	Project Name
PROPOSED QUICK SERVICE RESTAURANT	2	MILL STREET, GOONDIWINDI QLD 4390
Author	11/11/21	11/11/21
Check	11/11/21	11/11/21
Drawn	11/11/21	11/11/21

Scale	Sheet	Project Number
1:1	DA01	22092
1:1	B	



VERVE SCHEDULES OVERLAP

THE EXACT SCHEDULES WITH THE GRANTS OF THE 2015-2016 FISCAL YEAR, AND THE 2016-2017 FISCAL YEAR, ARE SHOWN IN THE ATTACHED SCHEDULES. THE 2016-2017 FISCAL YEAR SCHEDULES WILL BE REVIEWED BY THE GRANTS BOARD IN THE 2016-2017 FISCAL YEAR.

VERVE SCHEDULES OVERLAP

THE EXACT SCHEDULES WITH THE GRANTS OF THE 2015-2016 FISCAL YEAR, AND THE 2016-2017 FISCAL YEAR, ARE SHOWN IN THE ATTACHED SCHEDULES. THE 2016-2017 FISCAL YEAR SCHEDULES WILL BE REVIEWED BY THE GRANTS BOARD IN THE 2016-2017 FISCAL YEAR.

VERVE SCHEDULES OVERLAP

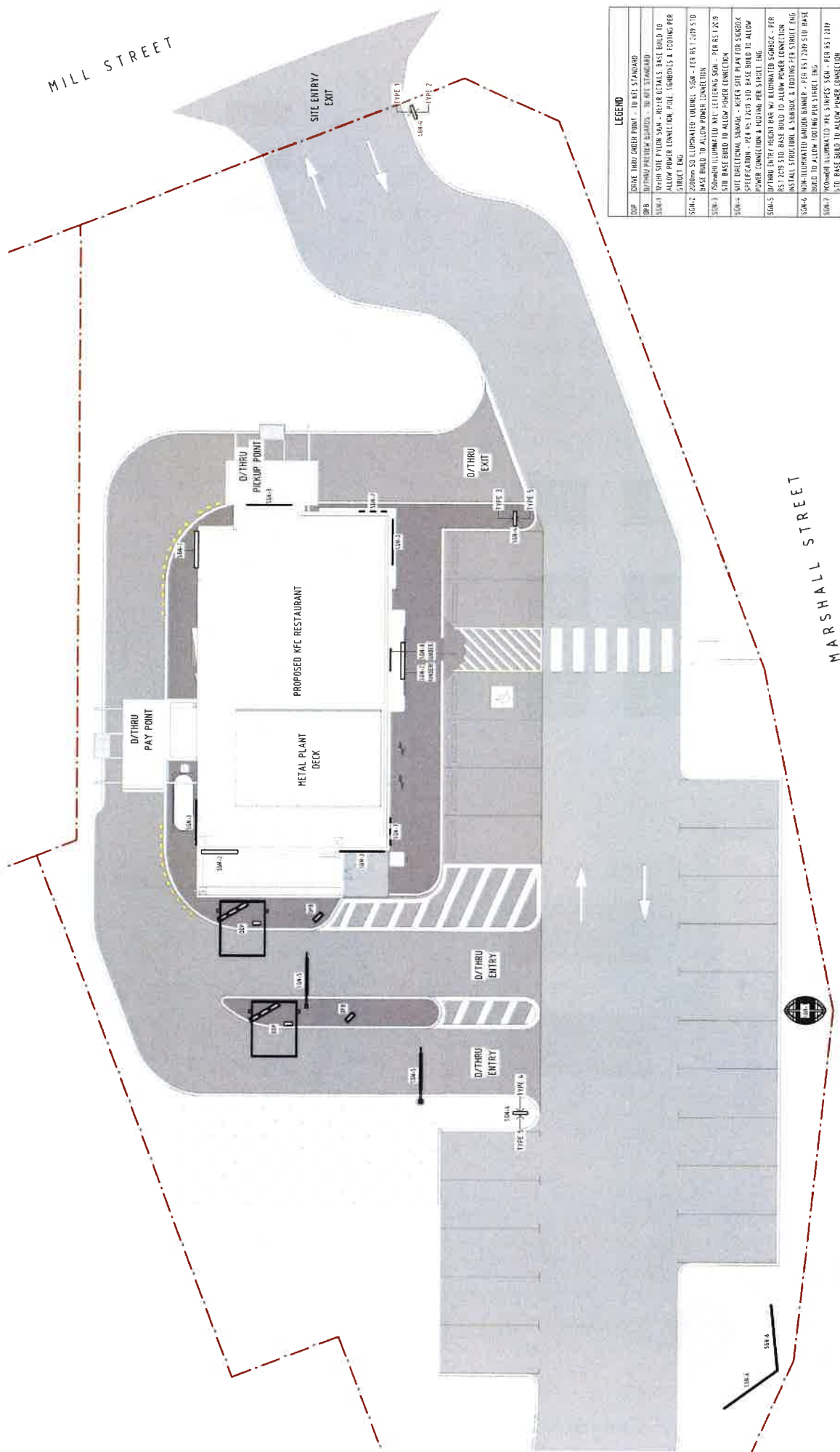
THE EXACT SCHEDULES WITH THE GRANTS OF THE 2015-2016 FISCAL YEAR, AND THE 2016-2017 FISCAL YEAR, ARE SHOWN IN THE ATTACHED SCHEDULES. THE 2016-2017 FISCAL YEAR SCHEDULES WILL BE REVIEWED BY THE GRANTS BOARD IN THE 2016-2017 FISCAL YEAR.

VERVE SCHEDULES OVERLAP

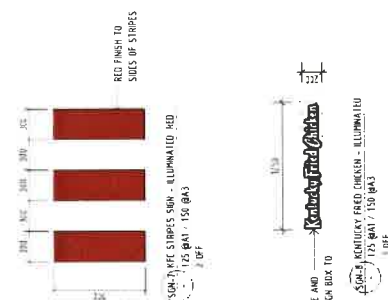
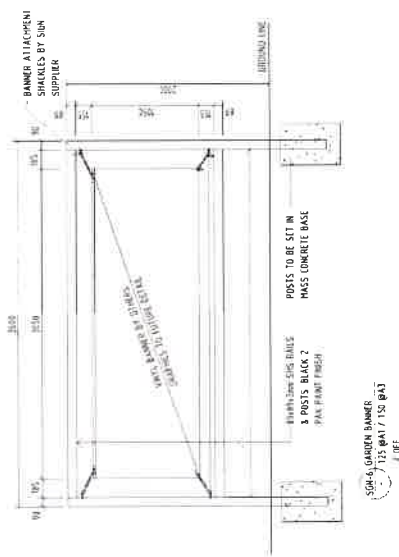
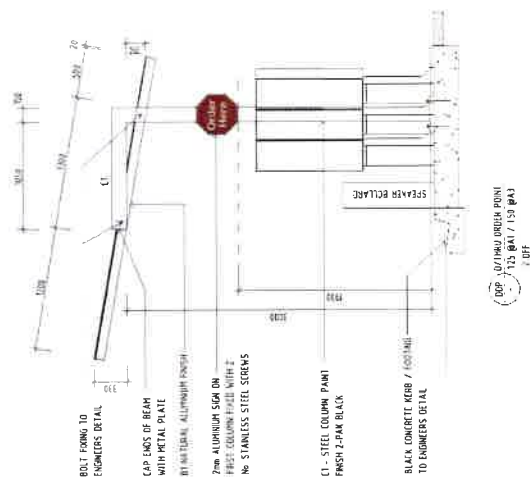
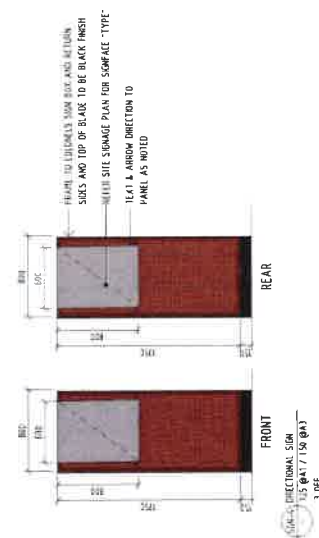
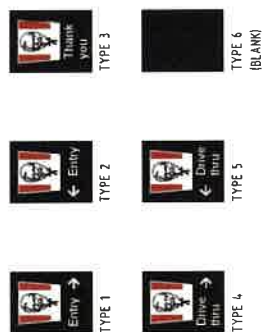
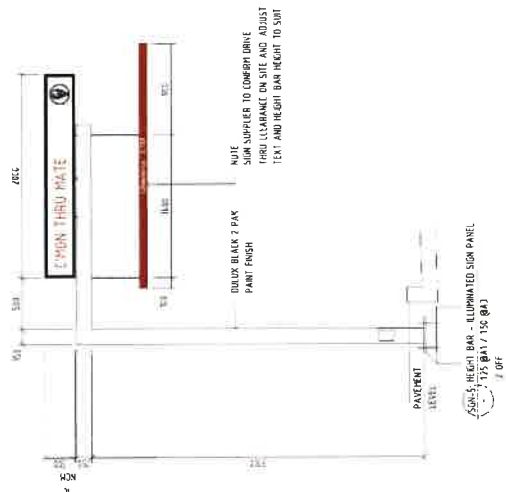
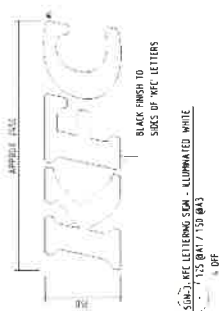
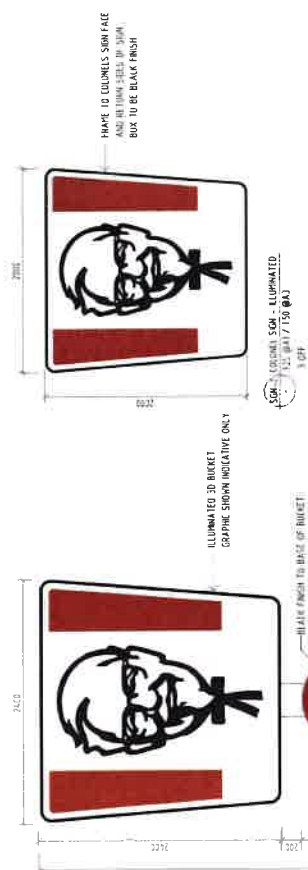
THE EXACT SCHEDULES WITH THE GRANTS OF THE 2015-2016 FISCAL YEAR, AND THE 2016-2017 FISCAL YEAR, ARE SHOWN IN THE ATTACHED SCHEDULES. THE 2016-2017 FISCAL YEAR SCHEDULES WILL BE REVIEWED BY THE GRANTS BOARD IN THE 2016-2017 FISCAL YEAR.



MILL STREET

[illegible][illegible]

PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION



CHECKING NUMBER																																																																							
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27 July 2022



COLLINS FOODS LIMITED

ACN 151 420 781 | ABN 13 151 420 781

PO Box 286 Lutwyche QLD 4030
Level 3, KSD1, 485 Kingsford Smith Drive
Hamilton QLD 4007 Australia
T +61 7 3352 0800 | F +61 7 3352 0894

**KFC Goondiwindi – 2 Mill Street, Goondiwindi
Combo Drive Thru / Loading Bay Statement**

To whom it may concern,

I am writing to you about the proposed KFC restaurant at 2 Mill Street, Goondiwindi. We intend to operate this store with a combined loading bay and second drive thru lane. We have experience operating this configuration on a number of other stores throughout our portfolio, the most recent store being KFC Bundamba opening on 21 December 2021.

Typically, deliveries are completed outside of operational hours, prior to our 10am open. Staff will use traffic cones to close the lane prior to delivery. The traffic cones are not removed until the delivery is complete, and the lane can then be re-opened to customers. We have found this arrangement to work well, enabling us the efficiency of operating a second drive thru lane in peak times but still have a dedicated lane acting as a loading bay out of operational hours.

Yours faithfully,

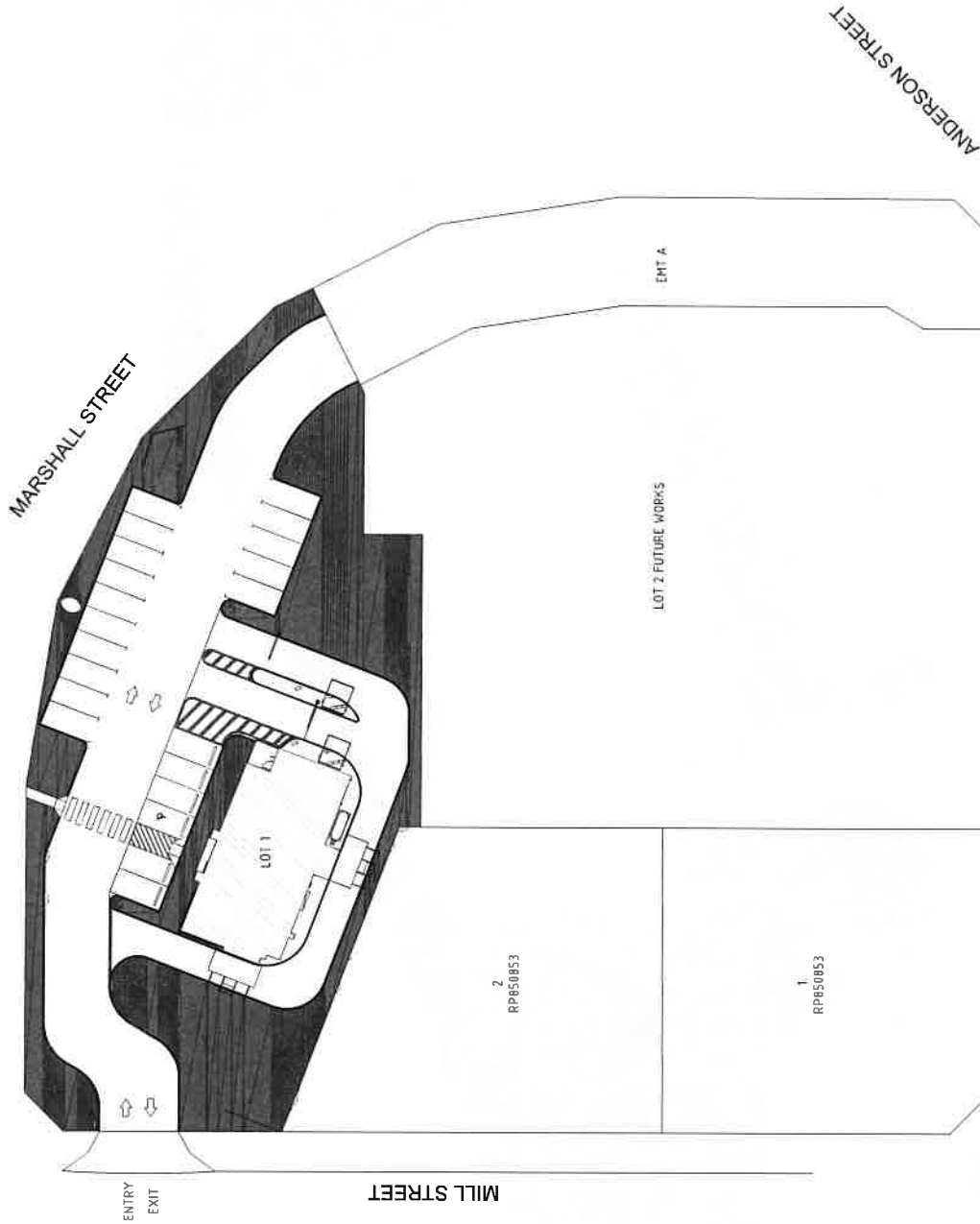
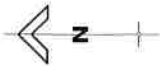
Ryan McKnight
QLD / NT Development Manager



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Appendix B – Swept paths analysis





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MILL STREET

NOTE:
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COUNCIL AND OTHER REGULATORY BODIES.

Prepared for: EPO DEVELOPMENTS

KFC - 2 MILL STREET, GOONDIWINDI
PROPOSED DEVELOPMENT LAYOUT

SCALE 1:250 (FULL SIZE)

BE220369-SK01

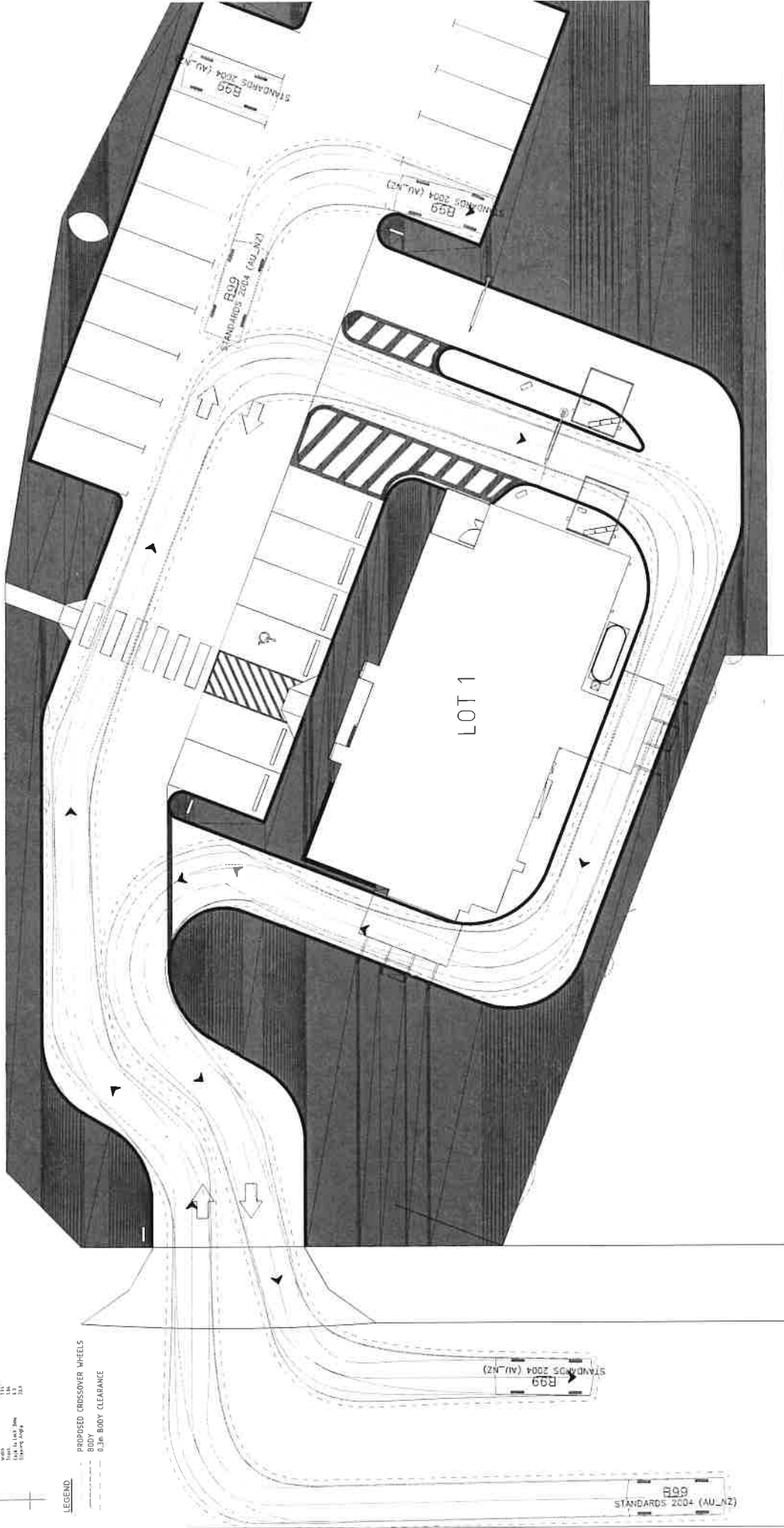


BURCHILLS
ENGINEERING SOLUTIONS
Gold Coast | Brisbane | Townsville
Bendigo | Melbourne
Phone +61 7 5599 5400
Email info@burchills.com.au
Goondiwindi Engineering Pty Ltd
ABN 76 624 342 302

Designer: CARL KRUGER
Checked: DALE KLEMEYER
Date: 11-08-2022



Legend:
Proposed Crossover Wheels
0.3m Body Clearance



NOTE:
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SUBJECT TO TRAFFIC ASSESSMENT SURVEY AND APPROVALS FROM
COUNCIL AND OTHER REGULATORY BODIES

PRELIMINARY
NOT FOR CONSTRUCTION OR TENDER

Prepared for: EPO DEVELOPMENTS

KFC - 2 MILL STREET, GOONDIWINDI
PROPOSED DEVELOPMENT LAYOUT - B99 SWEEP/PATH

Designer: CARL KRUGER
Checked: DALE KLEIMEYER
Date: 11-08-2022

BURCHILLS
ENGINEERING SOLUTIONS
GOONDIWINDI
Phone: +61 7 5091 1000
Fax: +61 7 5091 1001
Email: info@burchills.com.au
Goondi Burchills Engineering Pty Ltd
ABN 176 106 242 302



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KFC - 2 MILL STREET, GOONDIWINDI
PROPOSED DEVELOPMENT LAYOUT - HRV SWEEPYPATH

Designer: CARL KRUGER
Checked: DALE KLEIMEYER
Date: 11-08-2022

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Gold Coast | Brisbane | Melbourne

17 Ipswich | Morven Bay

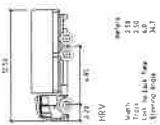
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Fax +61 7 5509 6411

Email advertising@burchills.com.au

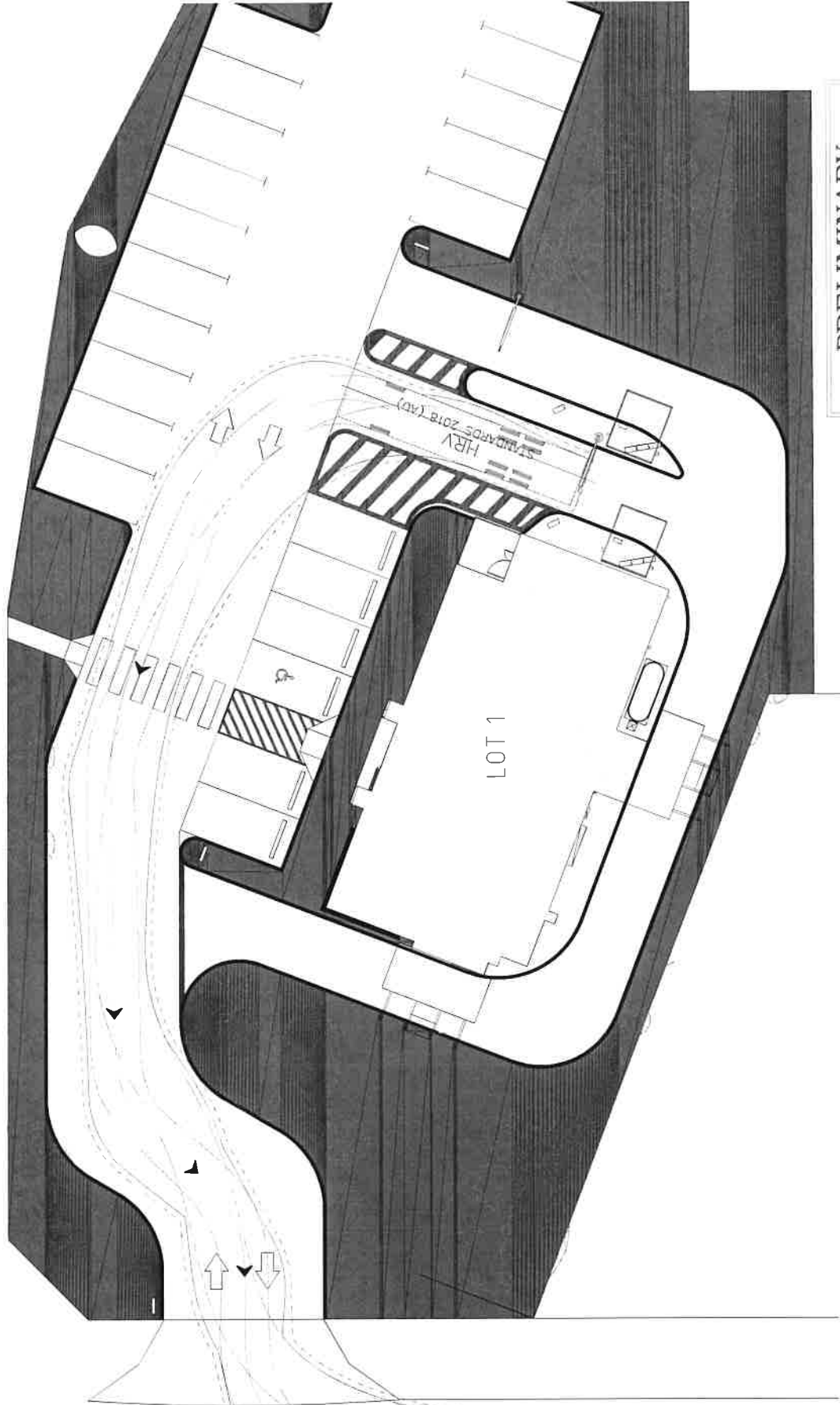
Coastal Burchills Engineering Pty Ltd

ABN 76 106 942 365



PROPOSED CROSSOVER WHEELS
BODY
8.3m BODY CLEARANCE

LEGEND



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NOTE:
LAYOUT SHOWN IS FOR INFORMATION PURPOSES ONLY. LAYOUT IS
SUBJECT TO TRAFFIC ASSESSMENT, SURVEY AND APPROVALS FROM
COUNCIL AND OTHER REGULATORY BODIES

Prepared for: EPO DEVELOPMENTS

KFC - 2 MILL STREET, GOONDIWINDI
PROPOSED DEVELOPMENT LAYOUT - HRV SWEEP PATH

Designer: CARL KRUGER
Checked: DALE KLEIMEYER
Date: 11-08-2022

SCALE 1:500 (FULL SIZE) 1m (Feet)

BE220369-SK06

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Appendix C – Sidra Analysis



MOVEMENT SUMMARY

Site: 101 [Marshall Street and Mill Street AM peak (Site Folder: General)]

Marshall Street and Mill Street AM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: Mill Street														
1	L2	4	3.0	4	3.0	0.007	5.9	LOS A	0.0	0.2	0.24	0.55	0.24	50.7
3	R2	4	10.0	4	10.0	0.007	6.6	LOS A	0.0	0.2	0.24	0.55	0.24	50.0
Approach		8	6.5	8	6.5	0.007	6.3	LOS A	0.0	0.2	0.24	0.55	0.24	50.4
East: Marshall Street (East)														
4	L2	9	4.0	9	4.0	0.071	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	117	9.0	123	9.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		126	8.6	133	8.6	0.071	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Marshall Street (West)														
11	T1	110	3.0	116	3.0	0.066	0.0	LOS A	0.1	0.5	0.05	0.05	0.05	59.4
12	R2	9	5.0	9	5.0	0.066	6.0	LOS A	0.1	0.5	0.05	0.05	0.05	55.9
Approach		119	3.2	125	3.2	0.066	0.5	NA	0.1	0.5	0.05	0.05	0.05	59.2
All Vehicles		253	6.0	266	6.0	0.071	0.6	NA	0.1	0.5	0.03	0.06	0.03	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

Organisation: BURCHILLS ENGINEERING SOLUTIONS | Licence: NETWORK / 1PC | Processed: Thursday, 11 August 2022 11:46:03 PM

Project: I:\Projects\2022\BE220369_2 Mill Street, Goondiwindi\Traffic\SIDRA\Marshall Street and Mill Street, Goondiwindi.sip9

MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street PM peak (Site Folder: General)]

Marshall Street and Mill Street PM peak

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	10	4.0	11	4.0	0.019	6.1	LOS A	0.1	0.5	0.28	0.57	0.28	50.5
3	R2	10	10.0	11	10.0	0.019	6.9	LOS A	0.1	0.5	0.28	0.57	0.28	49.9
Approach		20	7.0	21	7.0	0.019	6.5	LOS A	0.1	0.5	0.28	0.57	0.28	50.2
East: Marshall Street (East)														
4	L2	3	4.0	3	4.0	0.087	5.6	LOS A	0.0	0.0	0.00	0.01	0.00	56.9
5	T1	150	9.0	158	9.0	0.087	0.0	LOS A	0.0	0.0	0.00	0.01	0.00	59.8
Approach		153	8.9	161	8.9	0.087	0.1	NA	0.0	0.0	0.00	0.01	0.00	59.8
West: Marshall Street (West)														
11	T1	140	8.4	147	8.4	0.081	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	59.8
12	R2	3	5.0	3	5.0	0.081	6.1	LOS A	0.0	0.2	0.01	0.01	0.01	56.4
Approach		143	8.3	151	8.3	0.081	0.1	NA	0.0	0.2	0.01	0.01	0.01	59.8
All Vehicles		316	8.5	333	8.5	0.087	0.5	NA	0.1	0.5	0.02	0.05	0.02	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street AM peak year 2023
(Site Folder: General)]

Marshall Street and Mill Street AM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	4	3.0	4	3.0	0.006	5.9	LOS A	0.0	0.2	0.23	0.54	0.23	50.7
3	R2	3	10.0	3	10.0	0.006	6.6	LOS A	0.0	0.2	0.23	0.54	0.23	50.1
Approach		7	6.0	7	6.0	0.006	6.2	LOS A	0.0	0.2	0.23	0.54	0.23	50.4
East: Marshall Street (East)														
4	L2	9	4.0	9	4.0	0.071	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	117	9.0	123	9.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		126	8.6	133	8.6	0.071	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Marshall Street (West)														
11	T1	110	3.0	116	3.0	0.066	0.0	LOS A	0.1	0.5	0.05	0.05	0.05	59.4
12	R2	9	5.0	9	5.0	0.066	6.0	LOS A	0.1	0.5	0.05	0.05	0.05	55.9
Approach		119	3.2	125	3.2	0.066	0.5	NA	0.1	0.5	0.05	0.05	0.05	59.2
All Vehicles		252	6.0	265	6.0	0.071	0.6	NA	0.1	0.5	0.03	0.06	0.03	59.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street PM peak year 2023
(Site Folder: General)]

Marshall Street and Mill Street PM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %]	[Total veh/h	HV %]				[Veh. veh	Dist m]				
South: Mill Street														
1	L2	9	4.0	9	4.0	0.017	6.1	LOS A	0.1	0.4	0.28	0.57	0.28	50.5
3	R2	9	10.0	9	10.0	0.017	6.9	LOS A	0.1	0.4	0.28	0.57	0.28	49.9
Approach		18	7.0	19	7.0	0.017	6.5	LOS A	0.1	0.4	0.28	0.57	0.28	50.2
East: Marshall Street (East)														
4	L2	4	4.0	4	4.0	0.087	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	56.9
5	T1	150	9.0	158	9.0	0.087	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach		154	8.9	162	8.9	0.087	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.8
West: Marshall Street (West)														
11	T1	140	8.4	147	8.4	0.081	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	59.8
12	R2	3	5.0	3	5.0	0.081	6.1	LOS A	0.0	0.2	0.01	0.01	0.01	56.4
Approach		143	8.3	151	8.3	0.081	0.1	NA	0.0	0.2	0.01	0.01	0.01	59.8
All Vehicles		315	8.5	332	8.5	0.087	0.5	NA	0.1	0.4	0.02	0.05	0.02	59.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street AM peak year 2033
(Site Folder: General)]

Marshall Street and Mill Street AM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	5	3.0	5	3.0	0.010	6.0	LOS A	0.0	0.2	0.27	0.56	0.27	50.5
3	R2	5	10.0	5	10.0	0.010	6.9	LOS A	0.0	0.2	0.27	0.56	0.27	49.9
Approach		10	6.5	11	6.5	0.010	6.5	LOS A	0.0	0.2	0.27	0.56	0.27	50.2
East: Marshall Street (East)														
4	L2	11	4.0	12	4.0	0.089	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	147	9.0	155	9.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		158	8.7	166	8.7	0.089	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Marshall Street (West)														
11	T1	134	3.0	141	3.0	0.081	0.1	LOS A	0.1	0.6	0.05	0.05	0.05	59.4
12	R2	11	5.0	12	5.0	0.081	6.2	LOS A	0.1	0.6	0.05	0.05	0.05	55.9
Approach		145	3.2	153	3.2	0.081	0.5	NA	0.1	0.6	0.05	0.05	0.05	59.2
All Vehicles		313	6.0	329	6.0	0.089	0.7	NA	0.1	0.6	0.03	0.06	0.03	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▼ Site: 101 [Marshall Street and Mill Street PM peak year 2033
(Site Folder: General)]

Marshall Street and Mill Street PM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	11	4.0	12	4.0	0.022	6.2	LOS A	0.1	0.6	0.32	0.58	0.32	50.3
3	R2	11	10.0	12	10.0	0.022	7.3	LOS A	0.1	0.6	0.32	0.58	0.32	49.8
Approach		22	7.0	23	7.0	0.022	6.8	LOS A	0.1	0.6	0.32	0.58	0.32	50.0
East: Marshall Street (East)														
4	L2	5	4.0	5	4.0	0.106	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	56.9
5	T1	183	9.0	193	9.0	0.106	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Approach		188	8.9	198	8.9	0.106	0.2	NA	0.0	0.0	0.00	0.02	0.00	59.7
West: Marshall Street (West)														
11	T1	171	8.4	180	8.4	0.099	0.0	LOS A	0.0	0.2	0.02	0.01	0.02	59.8
12	R2	4	5.0	4	5.0	0.099	6.3	LOS A	0.0	0.2	0.02	0.01	0.02	56.4
Approach		175	8.3	184	8.3	0.099	0.2	NA	0.0	0.2	0.02	0.01	0.02	59.7
All Vehicles		385	8.5	405	8.5	0.106	0.5	NA	0.1	0.6	0.03	0.05	0.03	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street AM peak with development year 2023 (Site Folder: General)]

Marshall Street and Mill Street AM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist m				
South: Mill Street														
1	L2	4	3.0	4	3.0	0.007	5.9	LOS A	0.0	0.2	0.24	0.55	0.24	50.7
3	R2	4	10.0	4	10.0	0.007	6.6	LOS A	0.0	0.2	0.24	0.55	0.24	50.0
Approach		8	6.5	8	6.5	0.007	6.3	LOS A	0.0	0.2	0.24	0.55	0.24	50.4
East: Marshall Street (East)														
4	L2	9	4.0	9	4.0	0.071	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	117	9.0	123	9.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		126	8.6	133	8.6	0.071	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Marshall Street (West)														
11	T1	110	3.0	116	3.0	0.066	0.0	LOS A	0.1	0.5	0.05	0.05	0.05	59.4
12	R2	9	5.0	9	5.0	0.066	6.0	LOS A	0.1	0.5	0.05	0.05	0.05	55.9
Approach		119	3.2	125	3.2	0.066	0.5	NA	0.1	0.5	0.05	0.05	0.05	59.2
All Vehicles		253	6.0	266	6.0	0.071	0.6	NA	0.1	0.5	0.03	0.06	0.03	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Marshall Street and Mill Street PM peak with development year 2023 (Site Folder: General)]

Marshall Street and Mill Street PM peak

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	40	4.0	42	4.0	0.067	6.1	LOS A	0.2	1.8	0.29	0.59	0.29	50.4
3	R2	30	10.0	32	10.0	0.067	7.2	LOS A	0.2	1.8	0.29	0.59	0.29	49.9
Approach		70	6.6	74	6.6	0.067	6.6	LOS A	0.2	1.8	0.29	0.59	0.29	50.2
East: Marshall Street (East)														
4	L2	23	4.0	24	4.0	0.098	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	56.2
5	T1	150	9.0	158	9.0	0.098	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	59.2
Approach		173	8.3	182	8.3	0.098	0.8	NA	0.0	0.0	0.00	0.08	0.00	58.9
West: Marshall Street (West)														
11	T1	140	8.4	147	8.4	0.102	0.2	LOS A	0.2	1.8	0.13	0.11	0.13	58.4
12	R2	32	5.0	34	5.0	0.102	6.2	LOS A	0.2	1.8	0.13	0.11	0.13	54.7
Approach		172	7.8	181	7.8	0.102	1.3	NA	0.2	1.8	0.13	0.11	0.13	57.9
All Vehicles		415	7.8	437	7.8	0.102	2.0	NA	0.2	1.8	0.10	0.18	0.10	57.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▽ Site: 101 [Marshall Street and Mill Street AM peak with development year 2033 (Site Folder: General)]

Marshall Street and Mill Street AM peak
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Mill Street														
1	L2	5	3.0	5	3.0	0.010	6.0	LOS A	0.0	0.2	0.27	0.56	0.27	50.5
3	R2	5	10.0	5	10.0	0.010	6.9	LOS A	0.0	0.2	0.27	0.56	0.27	49.9
Approach		10	6.5	11	6.5	0.010	6.5	LOS A	0.0	0.2	0.27	0.56	0.27	50.2
East: Marshall Street (East)														
4	L2	11	4.0	12	4.0	0.089	5.6	LOS A	0.0	0.0	0.00	0.04	0.00	56.6
5	T1	147	9.0	155	9.0	0.089	0.0	LOS A	0.0	0.0	0.00	0.04	0.00	59.6
Approach		158	8.7	166	8.7	0.089	0.4	NA	0.0	0.0	0.00	0.04	0.00	59.4
West: Marshall Street (West)														
11	T1	134	3.0	141	3.0	0.081	0.1	LOS A	0.1	0.6	0.05	0.05	0.05	59.4
12	R2	11	5.0	12	5.0	0.081	6.2	LOS A	0.1	0.6	0.05	0.05	0.05	55.9
Approach		145	3.2	153	3.2	0.081	0.5	NA	0.1	0.6	0.05	0.05	0.05	59.2
All Vehicles		313	6.0	329	6.0	0.089	0.7	NA	0.1	0.6	0.03	0.06	0.03	59.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▼ Site: 101 [Marshall Street and Mill Street PM peak with development year 2033 (Site Folder: General)]

Marshall Street and Mill Street PM peak

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Mill Street														
1	L2	43	4.0	45	4.0	0.077	6.2	LOS A	0.3	2.1	0.33	0.61	0.33	50.3
3	R2	33	10.0	35	10.0	0.077	7.7	LOS A	0.3	2.1	0.33	0.61	0.33	49.7
Approach		76	6.6	80	6.6	0.077	6.9	LOS A	0.3	2.1	0.33	0.61	0.33	50.0
East: Marshall Street (East)														
4	L2	25	4.0	26	4.0	0.118	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	56.2
5	T1	183	9.0	193	9.0	0.118	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	59.3
Approach		208	8.4	219	8.4	0.118	0.7	NA	0.0	0.0	0.00	0.07	0.00	59.0
West: Marshall Street (West)														
11	T1	171	8.4	180	8.4	0.122	0.2	LOS A	0.3	2.0	0.13	0.10	0.13	58.5
12	R2	34	5.0	36	5.0	0.122	6.4	LOS A	0.3	2.0	0.13	0.10	0.13	54.9
Approach		205	7.8	216	7.8	0.122	1.2	NA	0.3	2.0	0.13	0.10	0.13	58.0
All Vehicles		489	7.9	515	7.9	0.122	1.9	NA	0.3	2.1	0.11	0.17	0.11	57.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

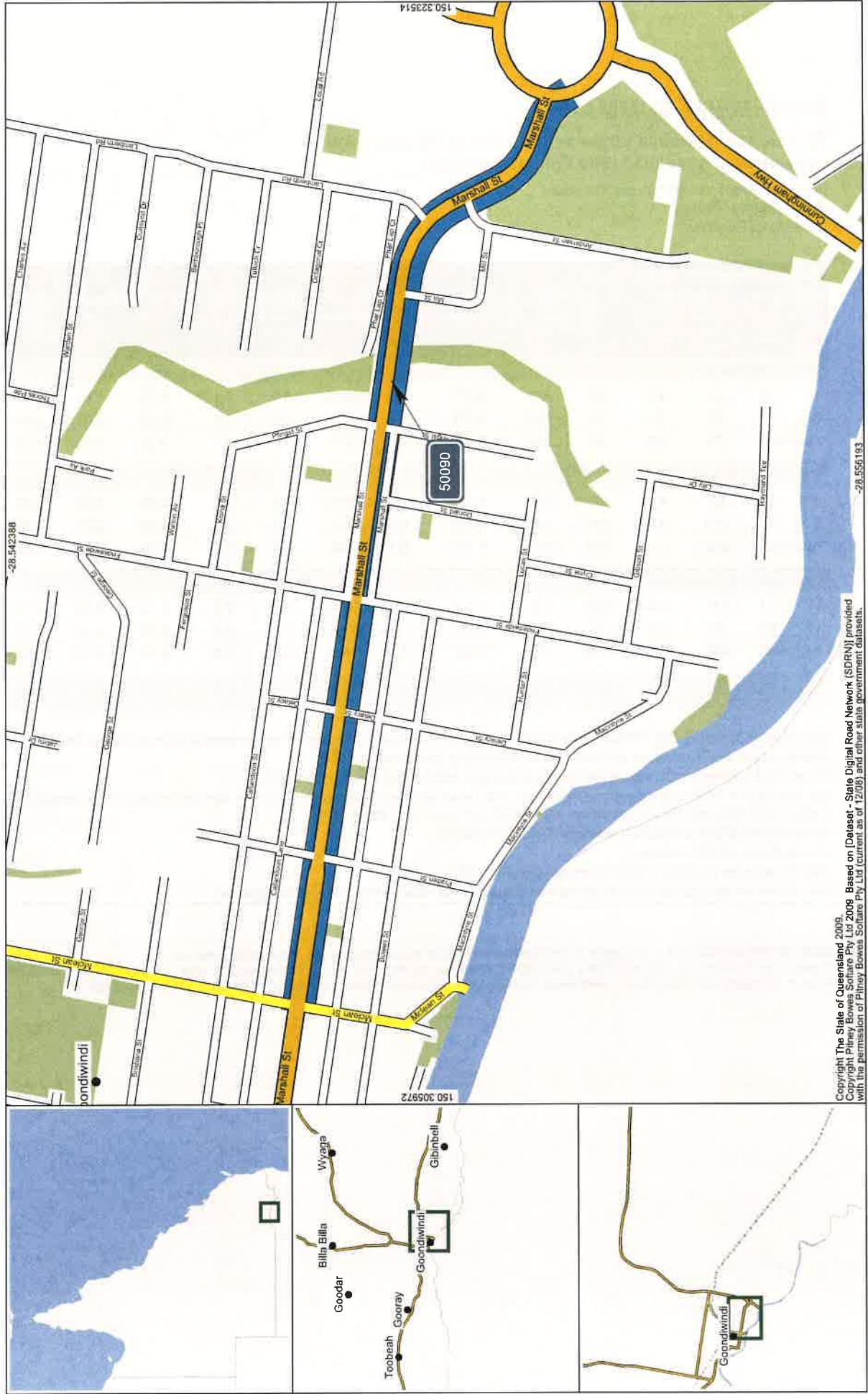
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.



Site 50090, Point 250000111, At Serpentine Creek.
0.54 km



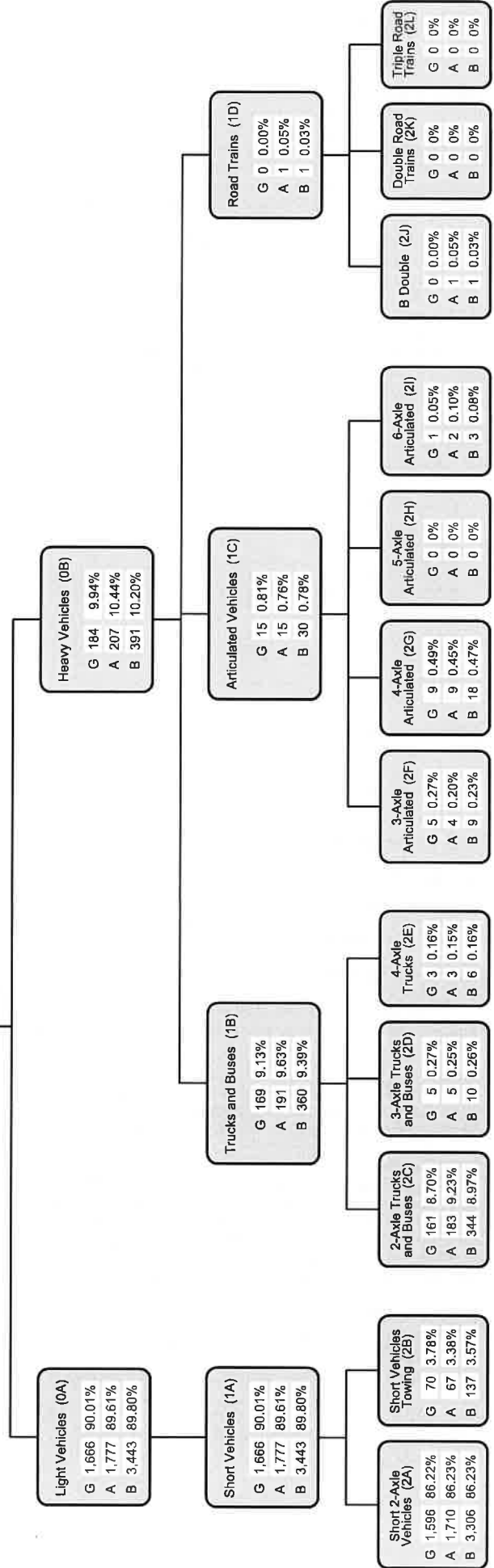
0.00 km
Start Point 250000105, Marshall St @ Goondiwindi roundabout.

1.57 km
End Point 250015421, END - West of McLean St Roundabout @ end of median for Rd 362.

The width of each Road Segment is proportional to its AADT.

This report shows Annual Average Daily Traffic values (AADTs). Because the AADT values are converted to whole numbers, there will be occasional inaccuracies due to rounding. These inaccuracies are statistically insignificant.

All Vehicles (00)
G 1,851 100%
A 1,993 100%
B 3,834 100%



AADT Segment Annual Volume Report

Provides summary data for the selected AADT Segment of a Road Section. Summary data is presented as both directional information and a combined bi-directional figure. The data is then broken down by Traffic Class, when available. The report also includes maps displaying the location of both the AADT Segment and the traffic count site.

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT Segments

The State declared road network is broken into Road Sections and then further broken down into AADT Segments. An AADT Segment is a sub-section of the declared road network where traffic volume is similar along the entire AADT Segment.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
Fitzroy District	404
Mackay/Whitsunday District	405
Metropolitan District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

AADT Values

AADT values are displayed by direction of travel as:

- G Traffic flow in gazetted direction
- A Traffic flow against gazetted direction
- B Traffic flow in both directions

Data Collection Year

Is the most recent year that data was collected at the data collection site.

Please Note:

Due to location and/or departmental policy, some sites are not counted every year.

Gazetted Direction

Is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazetted direction is from Brisbane to Gympie.

Maps

Display the selected location from a range of viewing levels, the start and end position details for the AADT Segment and the location of the traffic count site.

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazetted Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Segment Site

Is the unique identifier for the traffic count site representing the traffic flow within the AADT Segment.

Site

The physical location of a traffic counting device. Sites are located at a specified Through Distance along a Road Section.

Site Description

The description of the physical location of the traffic counting device.

Start and End Point

The unique identifier for the Through Distance along a Road Section.

Vehicle Class

Traffic is categorised as per the Austroads Vehicle Classification scheme. Traffic classes are in the following hierarchical format:

Volume or All Vehicles

00 = 0A + 0B

Light Vehicles

0A = 1A

1A = 2A + 2B

Heavy Vehicles

0B = 1B + 1C + 1D

1B = 2C + 2D + 2E

1C = 2F + 2G + 2H + 2I

1D = 2J + 2K + 2L

The following classes are the categories for which data can be captured:

Volume

00 All vehicles

2-Bin

0A Light vehicles
0B Heavy vehicles

4-Bin

1A Short vehicles
1B Truck or bus
1C Articulated vehicles
1D Road train

12-Bin

2A Short 2 axle vehicles
2B Short vehicles towing
2C 2 axle truck or bus
2D 3 axle truck or bus
2E 4 axle truck
2F 3 axle articulated vehicle
2G 4 axle articulated vehicle
2H 5 axle articulated vehicle
2I 6 axle articulated vehicle
2J B double
2K Double road train
2L Triple road train

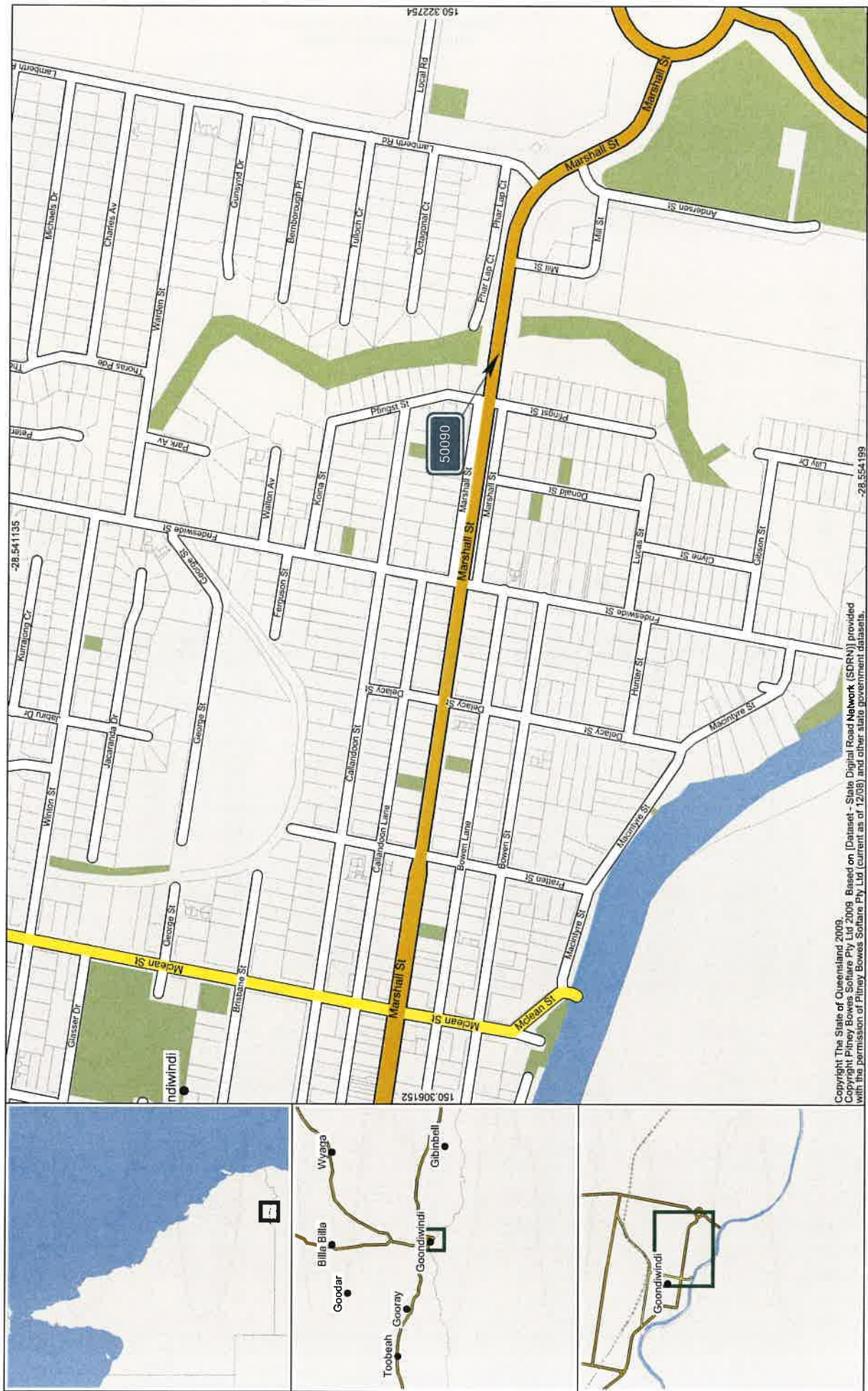
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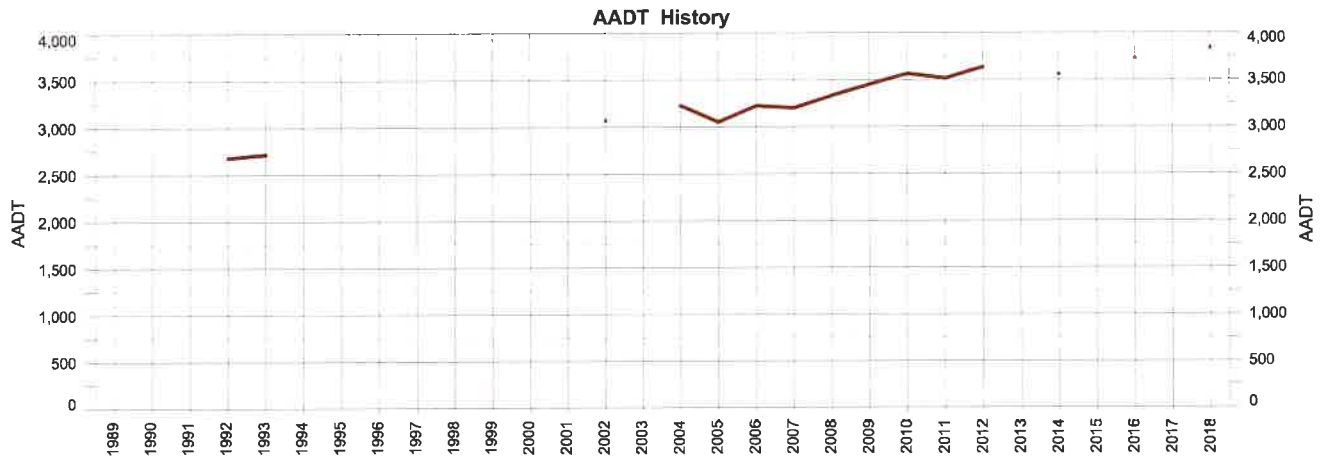
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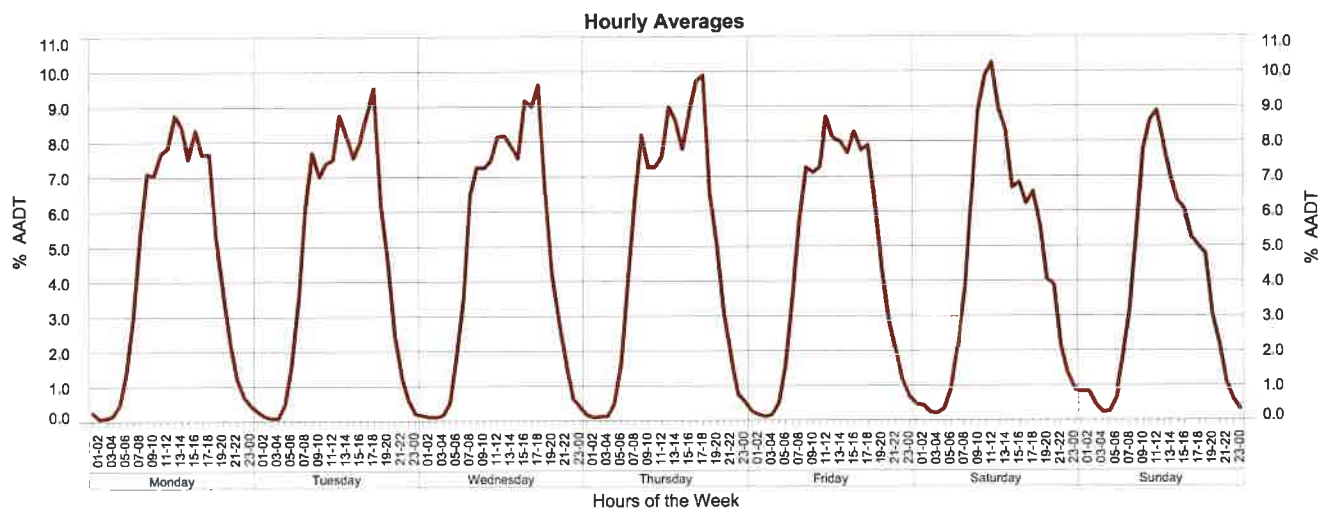
Area 402 - Darling Downs District
Road Section 360 - GOONDIWINDI CONNECTION ROAD
Site 50090 - 360-60m East of Pflingst St (Goondiwindi)
Thru Dist 0.54
Type C - Coverage
Stream TB - Bi-directional traffic flow

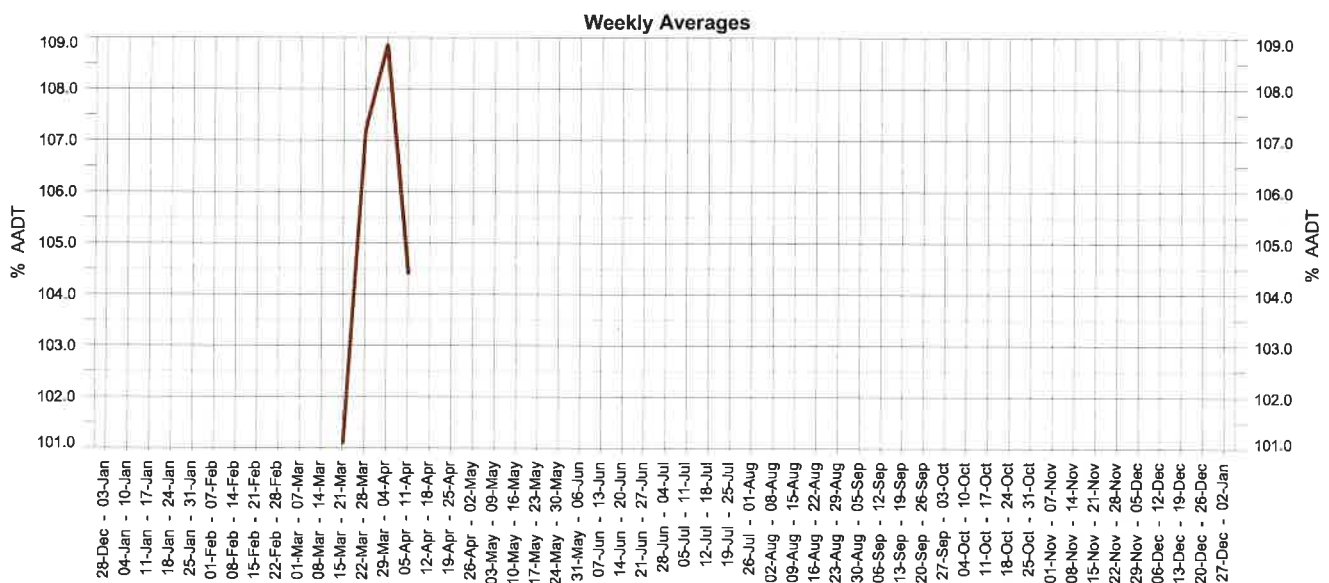
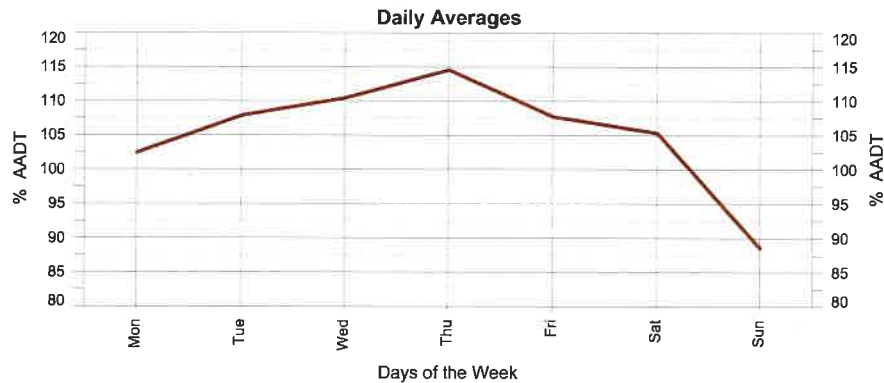
Year 2018
AADT 3,834
Avg Week Day 4,140
Avg Weekend Day 3,680
Growth last Year
Growth last 5 Yrs
Growth last 10 Yrs 1.22%



Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2018	3,834			1.22%
2017				
2016	3,720		1.05%	1.32%
2015				
2014	3,558		0.27%	1.16%
2013				
2012	3,632	3.39%	2.21%	1.91%
2011	3,513	-1.40%	1.80%	
2010	3,563	3.28%	3.07%	
2009	3,450	3.54%	2.23%	
2008	3,332	4.12%		
2007	3,200	-0.74%	0.68%	
2006	3,224	5.67%		
2005	3,051	-5.48%		
2004	3,228			

Year	AADT	1-Year Growth	5-Year Growth	10-Year Growth
2003				
2002	3,073			1.39%
2001				
2000				
1999				
1998				
1997				
1996				
1995				
1994				
1993	2,716	1.46%		
1992	2,677			
1991				
1990				
1989				





2018 Calendar

January							February							March							April						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
1	2	3	4	5	6	7				1	2	3	4				1	2	3	4	30						1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28					26	27	28	29	30	31		23	24	25	26	27	28	29

May							June							July							August							
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	
	1	2	3	4	5	6					1	2	3	30	31					1				1	2	3	4	5
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30	31			

September							October							November							December						
M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
					1	2	1	2	3	4	5	6	7					1	2	3	4	31				1	2
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30			24	25	26	27	28	29	30

Days on which traffic data was collected.

Annual Volume Report

Displays AADT history with hourly, daily and weekly patterns by Stream in addition to annual data for AADT figures with 1 year, 5 year and 10 year growth rates.

Annual Average Daily Traffic (AADT)

Annual Average Daily Traffic (AADT) is the number of vehicles passing a point on a road in a 24 hour period, averaged over a calendar year.

AADT History

Displays the years when traffic data was collected at this count site.

Area

For administration purposes the Department of Transport and Main Roads has divided Queensland into 12 Districts. The Area field in TSDM reports displays the District Name and Number.

District Name	District
Central West District	401
Darling Downs District	402
Far North District	403
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Mackay/Whitsunday District	405
Metropolitan District	406
North Coast District	407
North West District	409
Northern District	408
South Coast District	410
South West District	411
Wide Bay/Burnett District	412

Avg Week Day

Average daily traffic volume during the week days, Monday to Friday.

Avg Weekend Day

Average daily traffic volume during the weekend, Saturday and Sunday.

Calendar

Days on which traffic data was collected are highlighted in green.

Gazettal Direction

The Gazettal Direction is the direction of the traffic flow. It can be easily recognised by referring to the name of the road eg. Road Section: 10A Brisbane - Gympie denotes that the gazettal direction is from Brisbane to Gympie.

- G Traffic flowing in Gazettal Direction
- A Traffic flowing against Gazettal Direction
- B The combined traffic flow in both Directions

Growth Percentage

Represents the increase or decrease in AADT, using a exponential fit over the previous 1, 5 or 10 year period.

Hour, Day & Week Averages

The amount of traffic on the road network will vary depending on the time of day, the day of the week and the week of the year. The ebb and flow of traffic travelling through a site over a period of time forms a pattern. The Hour, Day and Week Averages are then used in the calculation of AADT.

Road Section

Is the Gazetted road from which the traffic data is collected. Each Road Section is given a code, allocated sequentially in Gazettal Direction. Larger roads are broken down into sections and identified by an ID code with a suffix for easier data collection and reporting (eg. 10A, 10B, 10C). Road Sections are then broken into AADT Segments which are determined by traffic volume.

Site

The unique identifier and description of the physical location of a traffic counting device. Sites are located at a Through Distance along a Road Section.

Stream

The lane in which the traffic is travelling in. This report provides data for the combined flow of traffic in both directions.

Thru Dist or TDist

The distance from the beginning of the Road Section, in kilometres.

Type

There are two types of traffic counting sites, Permanent and Coverage. Permanent means the traffic counting device is in place 24/7. Coverage means the traffic counting device is in place for a specified period of time.

Year

Is the current year for the report. Where an AADT Year record is missing a traffic count has not been conducted, for that year.

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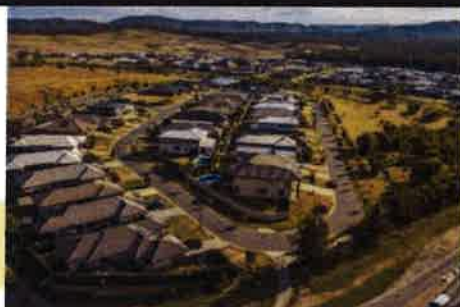
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The experience **you deserve** >



2 Mill Street, Goondiwindi

Conceptual Stormwater Management Plan

Client: EPO Developments Pty Ltd

Project No: BE220369

Document No: BE220369-RP-CSMP-00

August 2022

GOONDIWINDI REGIONAL COUNCIL
Approved Plan referred to in Council's Decision Notice


Council Reference: 22/32

Dated: 28/10/22

Signed: 

Print Name: Carl Manton
(Under Delegation) ASSESSMENT MANAGER

Document Control Record

Prepared by:	Samuel Huddy
Position:	Senior Civil and Water Engineer
Signed:	
Date:	11/08/2022

Approved by:	Rodney Barry
Position:	Principal Civil Engineer RPEQ
Signed:	
Date:	11/08/2022

Version No.	Description	Date	Prepared	Approved
00	Initial Issue	11/08/2022	SH	RB

Recipients are responsible for eliminating all superseded documents in their possession

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Executive Summary

This Conceptual Stormwater Management Plan (CSMP) has been prepared for EPO Developments Pty Ltd in accordance with the Goondiwindi Regional Council Planning Scheme Version 2 (2018), and is to accompany the development application for a Material Change of Use (MCU) at 2 Mill Street, Goondiwindi, properly described as Lots 1 and 4 on RP850853 (the subject site).

This report provides a summary of the mitigation methods required to meet Goondiwindi Regional Council's (GRC) stormwater quality and quantity objectives during the operational and construction phases of the development.

This CSMP has referenced relevant guidelines relating to stormwater management to form the conceptual basis of the stormwater plan. The following conclusions have been made because of this study.

Stormwater Quantity

- As a result of the proposed development, the magnitude of peak runoff from the site has increased, a detention system has been incorporated into the development to limit peak flows to pre-development levels.
- In the existing case, two (2) Lawful Points of Discharge (LPD) have been prescribed for the site, the existing culvert to the north of the development area (LPD A) and the combination of the southern and south-western site boundaries (LPD B).
- In the developed case, flows from the northern catchment will be conveyed to a detention system where they will be released in a controlled manner to ensure that there is non-worsening peak flow at LPD A. The proposed detention system will have a total volume of 67m³.
- The proposed stormwater system is to be owned and maintained by the property owner.

Stormwater Quality

- The town of Goondiwindi has a population centre of less than 25,000 and is situated within the Western Queensland Climatic region hence, the development does not trigger the State Planning Policy criterion for stormwater quality management and is considered to be a low-risk development with respect to the quality of stormwater discharge.
- The development will provide some form of stormwater quality treatment through the use of vegetated swales and landscaping, however, no MUSIC modelling has been undertaken to specifically quantify the stormwater quality mitigation.



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Appendix A	Proposed Plans of Development
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1. Introduction

1.1 Background

This Conceptual Stormwater Management Plan (CSMP) has been prepared for EPO Developments Pty Ltd in accordance with the Goondiwindi Regional Council Planning Scheme Version 2 (2018), and is to accompany the development application for a Material Change of Use (MCU) at 2 Mill Street, Goondiwindi, properly described as Lots 1 and 4 on RP850853 (the subject site).

The subject site is situated within the Goondiwindi Regional Council (GRC) Local Government Area (LGA) and is zoned by the Goondiwindi Regional Council Planning Scheme Version 2 (2018) as 'Centre Zone – Highway Commercial Precinct'.

1.2 Regulatory Requirements and Technical Guidelines

The strategies proposed in this CSMP have been developed to address the requirements of the Goondiwindi Regional Council Planning Scheme Version 2, and have also been prepared in accordance with the following guidelines:

- *State Planning Policy July 2014* (DSPIP, 2014);
- *Queensland Urban Drainage Manual (QUDM) Fourth Edition* (IPWEAQ, 2017);
- *Australian Rainfall & Runoff: A Guide to Flood Estimation* (Ball J, 2016);
- *Australian Government – Bureau of Meteorology* (Bureau of Meteorology, n.d.);
- *Urban Stormwater Quality Planning Guidelines 2010* (DERM, 2010); and

1.2.1 State Planning Policy – Water Quality

As outlined in the SPP Appendix 2 – Water Quality, stormwater runoff treatment is not applicable to development areas in the Western Queensland climatic region with population centers less than 25,000 persons. As such no treatment devices (i.e. bioretention or filter cartridge) are proposed for the development. However, the development will provide some form of unquantified stormwater quality treatment through the use of vegetated swales and landscaping.

1.3 Purpose

The main objectives of this CSMP have been established from the criteria set out in the GRC Planning Scheme (2018) and are summarised as follows:

- Stormwater drainage is designed and managed during the construction and operation of development to avoid adverse impacts on surrounding development or compromise the natural health and functioning of adjoining waterway systems.



1.4 Scope

To achieve the above-mentioned objectives, this CSMP details the following:

- Site description including:
 - Topography;
 - Land Use; and
 - Vegetation.
- Stormwater Quantity:
 - Control measures to ensure no net increase in peak discharge from the subject site (up to the 1% Average Exceedance Probability (AEP)).

To minimise the impact of the proposed development on the external environment and to avoid significant and / or sustained deterioration in downstream water quality the proponent shall implement this CSMP. This CSMP may be amended as required, in response to a monitoring and maintenance program.



2. Site Details

2.1 Location

The subject site is located at 2 Mill Street, Goondiwindi which is properly described as Lots 1 and 4 on RP850853 and has a total site area of 0.655 ha. The site is identified by the Goondiwindi Regional Council Planning Scheme Version 2 as being located within a Centre Zone – Highway Commercial Precinct. Figure 2.1 below identifies the location of the subject site.



Figure 2.1 Locality Plan (Courtesy: DAMS)

2.2 Existing Land Uses and Vegetation

The subject site is currently a vacant lot with poor grass cover. The site is bound to the south by Mill Street and to the west by both Mill Street and two (2) similar vacant lots. The northern and eastern site boundaries adjoin the Marshall Street and Anderson Street reserves, respectively. Figure 2.2 (below) provides an aerial photograph of the site in its current state.





Figure 2.2 Site Aerial Photograph (Courtesy: MetroMap)

2.3 Existing Topography

The subject site is relatively flat, with a maximum vertical crossfall of 0.88m. The highest point is located in the approximate centre of the site, dividing the area into two catchments. The north-eastern catchment grades at approximately 2% towards both the northern and eastern site boundaries. Flows from this catchment discharge to an existing table drain, which conveys stormwater runoff to an existing culvert crossing on Marshall Street to the sites north. The south-western catchment is flatter by comparison, grading at approximately 1% to the south-east. Flows from this catchment discharge the site at the southern and south-eastern boundaries via overland sheet flow.

2.4 Downstream Environment

Stormwater originating from the site's north-eastern portion will discharge from the site via the northern and eastern boundaries as sheet flow into the adjoining table drain. From the drain, flows are conveyed to a culvert crossing on Marshall Street, ultimately discharging to Serpentine Lagoon, which is a tributary of the Macintyre River. Stormwater discharging from the site's south-western extents also eventually enter Serpentine Lagoon, via overland flow.



2.5 Rainfall

The mean annual rainfall for the site has been estimated at 657.5 mm from the data set obtained from the nearest Bureau of Meteorology (BOM) station number 041100 at the Texas Post Office station.

2.6 Regional Flooding

A detailed assessment of regional flooding has not been included in this CSMP however, the subject site is protected up to a 0.5% AEP flood event as per the Flood Hazard Overlay included as Figure 2.3.

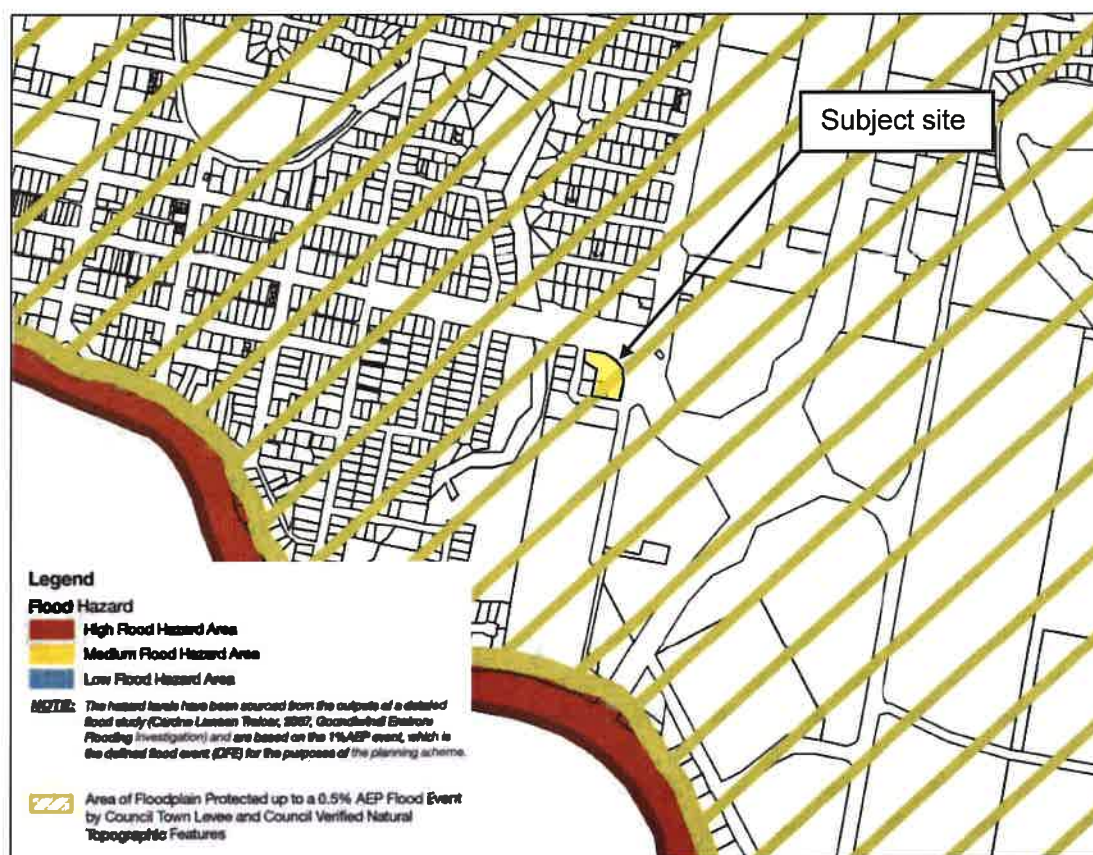


Figure 2.3 GRC Flood Hazard Overlay Map Extract (Source: GRC, 2018)

2.7 Proposed Development

The proposal seeks to establish a food and drink outlet over the site's northern extents, while the southern portion of the site has been allocated to future development. The commercial development will include the construction of an internal road network with carparking and drive-thru facilities. Access will be gained from Mill Street.

Figure 2.4 below details the proposed development site plan. For further details regarding the proposed layout, please refer to the complete site layout plan attached within Appendix A.





Figure 2.4 Proposed Site Plan (Courtesy: Verve Building Design)

3. Stormwater Quantity Management Plan

3.1 Overview

The following section of this report outlines the measures required to meet the above-mentioned objective in regard to stormwater quantity. In order to meet these objectives, it is necessary to ensure that post development discharge from the site will not create a worse situation for downstream property owners than that which existed prior to the development (i.e. non-worsening) (IPWEAQ, 2017).

Due to the increase of impervious surfaces within the proposed development, peak stormwater flow rates will increase. In order to mitigate these flow rates from the developed site it is proposed to implement an On-Site Detention (OSD) system. OSD systems temporarily store stormwater runoff and release flows at a controlled rate that is no greater than the pre-developed peak rate.

3.2 Drainage Catchment Parameters

Drainage catchments have been delineated using site survey, aerial imagery and development plans in the post developed scenario. Pre and post development catchment parameters have been summarised in Table 3.1. Catchment plans are provided in Appendix C.

Table 3.1 Catchment Parameters

Scenario	Catchment ID	Total Area (ha)	Impervious %
Pre-Developed	A	0.421	0
	B	0.237	0
Post-Developed	A1	0.261	67
	A2	0.163	0
	B	0.235	0

3.2.1 Conveyance of Flows

Important information about the conveyance of flows for the pre-development and post-development scenarios are included in Table 3.2 below.



Table 3.2 Conveyance of Flows

Subject	Description
Lawful Points of Discharge (LPD)	Two (2) Lawful Points of Discharge (LPD) are proposed for the development, defined as the point where runoff from the existing site is discharged. LPD A is located at the outlet of the Marshall Street culvert crossing immediately to the north of the proposed development. LPD B has been defined as the southern and south-eastern site boundaries. Further detail is provided in Appendix C.
Pre-development	Runoff from the northern portion of the existing vacant lot sheet flows to the existing table drain, which then conveys runoff to the Marshall Street culvert (LPD A) located immediately to the north of the subject site. Runoff produced over the site's south-western extents is conveyed overland to the southern and south-western boundaries (LPD B). A pre-development catchment plan is shown in Drawing N200 in Appendix C.
Post-development	In the post-developed scenario, flows (up to the 1 in 100 AEP event) from the northern catchment (Catchment A1) will be conveyed to a depressed area which will provide the required attenuation of flows. From the detention area, stormwater will be laterally discharged to the existing table drain via eight (8) evenly distributed 100mm PVC pipes. Runoff will then be directed towards LPD A as per the existing scenario. Flows to LPD B will remain unchanged in the post-development scenario. A post-development catchment plan is shown in Drawing N201 in Appendix C.

3.3 Rational Method Analysis

3.3.1 Peak Flow Assessment

In accordance with QUDM, the Rational Method has been used to gain an understanding of the relative impact of the proposed development on peak flow rates at the site's LPDs. The Rational Method is a basic method for assessing peak flow rates and is considered suitable given the catchment area is less than 500 ha and the time of concentration within the contributing catchments is less than 30 minutes (IPWEAQ, 2017).

A summary of key inputs of the Rational Method and the generated 1% AEP flows have been included in Table 3.3 below.

Table 3.3 Rational Method Calculation Inputs and Peak Discharges

Scenario	Catchment ID	Area (ha)	t_c (mins)	C_{10}	1% AEP Flow (m ³ /s)
Pre-developed	A	0.421	12.0	0.49	0.128
	B	0.237	12.0	0.49	0.072
Post-developed	A1	0.261	7.0	0.73	0.146
	A2	0.163	10.0	0.49	0.054
	B	0.235	12.0	0.49	0.071



The peak discharges at from catchment A1 have increased in the post-developed scenario compared with the pre-development scenario as shown in Table 3.3. This is caused by an increase in impervious surfaces. To mitigate this increase, it is proposed to implement an OSD system in the Catchment A1. Catchment optimisation has been utilised to ensure the post-development peak discharges at LPD B are non-worsening post-development.

3.3.2 Site Runoff Volume

To determine the detention volume required of the proposed OSD system, the post-development runoff volume has been computed based on the peak flow shown above. The maximum runoff volume has been defined as the product of the 1% AEP peak discharge and the time of concentration. A summary of the volume calculations is contained in Table 3.4.

Table 3.4 1% AEP Runoff Volume Summary

Catchment ID	1% AEP Peak Discharge (m3/s)	tc (mins)	Runoff Volume (m3)
A1	0.146	7.0	61.12

To ensure the post-development peak discharges at LPD A are non-worsening, the proposed OSD system for Catchment A1 will require a minimum of 61.1m³.

3.4 On Site Detention (OSD) Details

The proposed OSD system is to be implemented to ensure a non-worsening of peak discharges at LPD A. An irregular area of approximately 270 m² along the northern site boundary will be depressed by 250mm to provide attenuation of flows up to that of the 1% AEP event. A series of evenly distributed 100mm PVC outlet pipes are proposed to discharge detained stormwater to the existing table drain at a rate equal to that of the existing 0.5EY event. Figure 3.1 below shows the proposed location and footprint of the detention system.

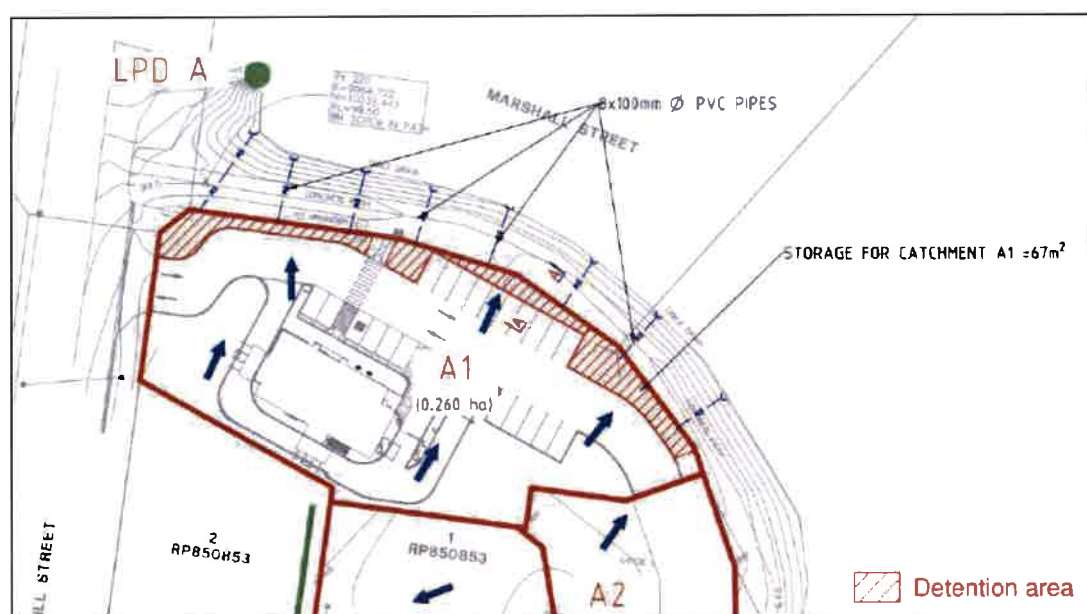


Figure 3.1 Proposed On-Site Detention System

Table 3.5 below contains the details of the proposed detention system within the subject site.

Table 3.5 OSD Details

Catchment ID	Outlet Pipes	1% AEP Detention Volume (m ³)
A1	8 x 100mm Ø PVC, 0.5% grade	67

3.5 Performance of OSD

To determine the required outlet configuration for the OSD system, Manning's equation for pipe flow was adopted. It was determined that 8 x 100mm PVC pipes would have the capacity of the 0.5EY event, and as the total detention volume is equal to the 1% AEP storm peak flow can be controlled without overtop of the OSD system.

A summary Manning's pipe flow calculation is shown in Figure 3.2. The peak discharges at LPD A for different AEP events is contained in Table 3.6. Results of the calculations indicate the proposed system is capable of maintaining the 0.5EY pre-development peak discharge for all storm events up to the 1% AEP event at LPD A.

Inputs			Results		
Pipe diameter, d _p	0.1	m	Flow, Q (See notes)	0.0052	m ³ /s
Manning roughness, n	0.013		Velocity, v	0.6577	m/s
Pressure slope (possibly ? equal to pipe slope), S ₀	0.01	rise/run	Velocity head, h _v	0.0221	m H ₂ O
Percent of (or ratio to) full depth (100% or 1 if flowing full)	1	fraction	Flow area	0.0079	m ²
			Wetted perimeter	0.3142	m
			Hydraulic radius	0.0250	m
			Top width, T	0.0000	m
			Froude number, F	0.00	
			Average shear stress (tractive force), tau	2.4515	N/m ²

Figure 3.2 Manning's Pipe Flow Computation

Table 3.6 Pre-Development vs Post-Development (Mitigated) Peak Discharges at LPD A

AEP Event (%)	Pre-Development (m ³ /s)	Post-Development (m ³ /s)
1%	0.13	0.04
2%	0.11	0.04
5%	0.08	0.04
10%	0.07	0.04
0.2 EY	0.06	0.04
0.5 EY	0.04	0.04



4. Conclusion

The stormwater management outlined in this report has addressed the objectives set by the Goondiwindi Regional Council with respect to the control of runoff quantity. Peak runoff at the proposed development's LPDs has been maintained in all AEP events through catchment optimisation and the implementation of an On-Site Detention system with a total volume of 67 m³. All stormwater infrastructure associated with the development is to be owned and maintained by the property owner.



Appendix A Proposed Plans of Development





PRELIMINARY
THIS DRAWING IS NOT
FOR CONSTRUCTION

RPD:

LOT 1 & 4 on RP850853

PARISH: GOONDIWINDI

COUNTY: MARSH

COUNCIL: GOONDIWINDI REGIONAL

DEVELOPMENT ASSESSMENT

- OVERALL SITE AREA - 6,544m²
- PROP. LOT 1 - 2,599m²
- PROP. LOT 2 - 3,945m²
- INCLUDES ACCESS EASEMENT
- LANDSCAPED AREA - 4,793m²
- BLDG SITE COVER - 3.5%
- INCLUDES ALL ROOFED AREAS

IMPERVIOUS AREAS

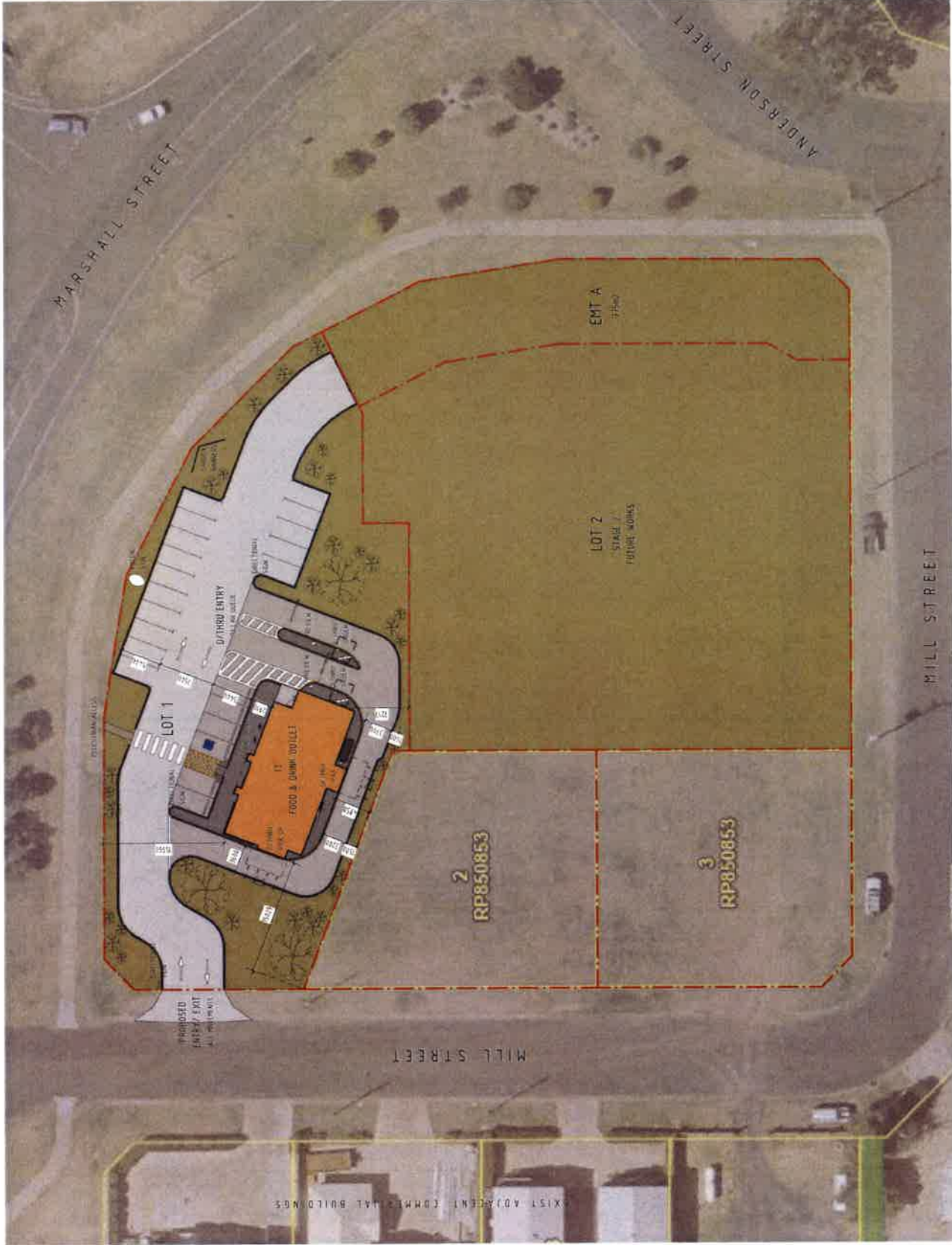
- PRE SITE DEVELOPMENT - 0m²
(INCLUDES BUILDING ROOFED AREAS)
- POST SITE DEVELOPMENT - 1,751m²
(INCLUDES BUILDING ROOFED AREAS)

BUILDING AREAS - (GFA)

- T1 FOOD & DRINK - 225m²
(INCLUDES REFUSE AREA - 10m²)


CAR PARKING

- PARKING REQUIRED - 15
(TO BE CONFIRMED)
- PARKING PROVIDED - 21



VERVE SCHEDULES DISCLAIMER
1. ALL SCHEDULES SHOULD BE CHECKED WITH THE MEMBER OF THE SHIRAS
2. SCHEDULES SHOULD BE CHECKED WITH THE MEMBER OF THE SHIRAS
3. SCHEDULES SHOULD BE CHECKED WITH THE MEMBER OF THE SHIRAS
4. SCHEDULES SHOULD BE CHECKED WITH THE MEMBER OF THE SHIRAS

EXISTING THE LAND



VERVE
LANDSCAPE ARCHITECTS
10/10-12/12/2020 - 12/12/2020
10/10-12/12/2020 - 12/12/2020

Commercial / industrial / retail / community use
Fast food restaurant design
Travel centre / service stations
Project concept to completion

PROPOSED QUICK SERVICE RESTAURANT

Proposed Site	2 MILL STREET, GOONDIWINDI QLD 4390
Proposed Use	Quick Service Restaurant
Proposed Area	2,599m ²
Proposed Date	10/10/2020

PROJ. SITE PLAN

Project No.	22092
Project Name	DA01
Project Date	B

Appendix B Time of Concentration and Rational Method Calculations

Pre-Development Hydrology

The natural hydrology of the site has been assessed in accordance with QUDM (IPWEAQ, 2017) Section 4.1. The time of concentration for all catchments has been determined using Friend's Equation as per QUDM Section 4.6.6, combined with a channel time flow calculation.

$$\text{Friend's Equation } t_c = (107nL^{0.333})/S^{0.2}$$

Table B.4.1 presents a summary of the catchment parameters used within Friend's Equation and the calculated time of concentration for the pre-development scenario.

Table B.4.1 Time of Concentration for Pre-Development Scenario

Catchment ID	A	B
Overland Flow		
Estimated Length of Sheet Flow	50	50
Hortons Roughness Value	0.035	0.035
Slope (%)	2	2
tc (minutes)	12.00	12.00
TOTAL tc (minutes)	12	12

Post-Development Hydrology – Unmitigated

Table B.4.2 presents a summary of the catchment parameters used for the calculated time of concentration for the post-development scenario. The time of concentration for the external catchment is presented in Table B.4.1 above.

Table B.4.2 Time of Concentration for Post-Development Scenario

Catchment ID	A1	A2	B
Standard Inlet Time	5		
Pipe Flow			
Slope (%)	1		
Length of Pipe Flow (m)	100		
Velocity (m/s)	1		
tc (minutes)	1.67		
Overland Flow			
Estimated Length of Sheet Flow		30	50
Hortons Roughness Value		0.035	0.035
Slope (%)		2	2
tc (minutes)		10.12	12.00
TOTAL tc (minutes)	7	10	12



Design storm event flows across the site were derived using the Rational Method as per the above-mentioned manuals. This involved:

- Determination of a C10 value (derived in accordance with QUDM Table 4.05.3(b) and Council guidelines). A value of 0.7 was applied to the pre-development catchment and 0.83 was applied to the post-development catchment;
- Adoption of design rainfall using BoM IFD data; and
- Calculation of design flows through the site for Q100, Q50, Q20, Q10, Q5, Q2, Q1 and Q3_{month}, where Q3_{month} is deemed to be 50% of Q1.

Summaries of the hydrologic calculations are contained in Table B.4.3 and Table B.4.4 for pre and post-development (un-mitigated) scenarios respectively.

Table B.4.3 Pre-Development Hydrology

Catch.	Area (ha)	tc (min)	I ₁₀₀ (mm/hr)	C	Q ₁₀₀ (m ³ /s)	I ₅₀ (mm/hr)	C	Q ₅₀ (m ³ /s)	I ₂₀ (mm/hr)	C	Q ₂₀ (m ³ /s)	I ₁₀ (mm/hr)	C	Q ₁₀ (m ³ /s)	I ₅ (mm/hr)	C	Q ₅ (m ³ /s)	I ₂ (mm/hr)	C	Q ₂ (m ³ /s)	I ₁ (mm/hr)	C	Q _{3month} (m ³ /s)
A	0.42	12.00	186.00	0.59	0.128	165.00	0.56	0.109	139.00	0.51	0.084	120.00	0.49	0.069	103.00	0.47	0.056	81.50	0.42	0.040	64.90	0.39	0.015
B	0.24	12.00	186.00	0.59	0.072	165.00	0.56	0.061	139.00	0.51	0.047	120.00	0.49	0.039	103.00	0.47	0.032	81.50	0.42	0.022	64.90	0.39	0.008

Table B.4.4 Un-Mitigated Post-Development Hydrology

Catch.	Area (ha)	tc (min)	I ₁₀₀ (mm/hr)	C	Q ₁₀₀ (m ³ /s)	I ₅₀ (mm/hr)	C	Q ₅₀ (m ³ /s)	I ₂₀ (mm/hr)	C	Q ₂₀ (m ³ /s)	I ₁₀ (mm/hr)	C	Q ₁₀ (m ³ /s)	I ₅ (mm/hr)	C	Q ₅ (m ³ /s)	I ₂ (mm/hr)	C	Q ₂ (m ³ /s)	I ₁ (mm/hr)	C	Q _{3month} (m ³ /s)
A1	0.2600	7.00	230.00	0.88	0.146	205.00	0.84	0.124	173.00	0.7665	0.096	149.00	0.73	0.079	128.00	0.69	0.064	101.00	0.62	0.045	80.60	0.58	0.017
A2	0.1630	10.00	201.00	0.59	0.054	178.00	0.56	0.045	150.00	0.5145	0.035	130.00	0.49	0.029	111.00	0.47	0.023	88.30	0.42	0.017	70.30	0.39	0.006
B	0.2350	12.00	186.00	0.59	0.071	165.00	0.56	0.061	139.00	0.5145	0.047	120.00	0.49	0.038	103.00	0.47	0.031	81.50	0.42	0.022	64.90	0.39	0.008



The experience **you deserve** 

Appendix C Burchills Engineering Solutions Conceptual Stormwater Management Drawings



PROPOSED QUICK SERVICE RESTAURANT

2 MILL STREET, GOONDIWIDI QLD 4390

CONCEPTUAL STORMWATER MANAGEMENT DRAWINGS



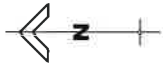
LOCALITY PLAN

SCHEDULE OF DRAWINGS	
Drawing No.	Drawing Title
N000	LOCALITY AND DRAWING INDEX PLAN
N200	PRE-DEVELOPMENT CATCHMENT PLAN
N201	POST-DEVELOPMENT CATCHMENT PLAN
N400	OPERATIONAL CONTROL PLAN

PREPARED FOR



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 Phone: +61 7 5508 6400
 Fax: +61 7 5508 6411
 Email: admin@burchills.com.au
 Coda Burchills Engineering Pty Ltd
 ABN 10 106 842 305



LPD A

MARSHALL STREET

MILL STREET

2
HP850853

3
HP850853

LPD B

A
(0.421 ha)

B
(0.237 ha)

1
HP850853

HP850853

MILL STREET

ANDERSON STREET

LEGEND

— PRE-DEVELOPMENT CATCHMENT

↑ OVERLAND FLOW DIRECTION

— LINE OF DISCHARGE

● DISCHARGE LOCATION

SCALE 10 0 10 20 30 40 50 (metres)
1 : 750 (FULL SIZE)

PROPOSED QUICK
SERVICE RESTAURANT

2 MILL STREET,
GOONDIWINDI

FOR

ORIGINAL SCALE BEFORE REDUCTION

A3



NO.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	20/01/22

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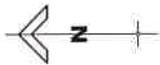


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ABN 76 166 942 365

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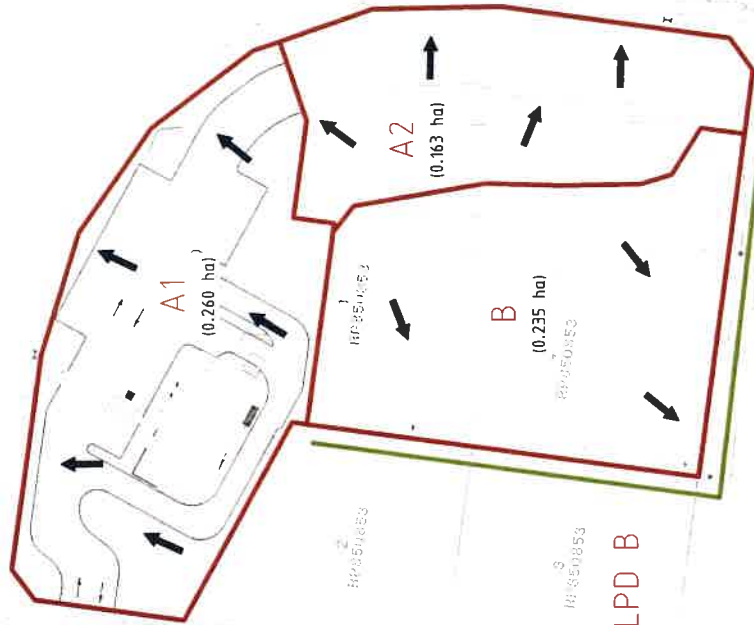
PRE-DEVELOPMENT
CATCHMENT PLAN

DEVELOPMENT NO.:	DATE: 20/01/22
PROJECT LEADER: SH	
DESIGNER: SH	
DRAWN BY: TP /	
CHECKED: SH	
APPROVED FOR AND ON BEHALF OF:	
BURCHILLS ENGINEERING SOLUTIONS ABN 76 166 942 365	
SCALE: 1:750	DATE: 20/01/22
PROJECT NO.: BE220369	DRAWING NO.: N200
	VERSION: A



LPD A

MARSHALL STREET



MILL STREET

LPD B

MILL STREET

ANDERSON STREET

LEGEND

POST-DEVELOPMENT CATCHMENT

OVERLAND FLOW DIRECTION

LINE OF DISCHARGE

DISCHARGE LOCATION

PROPOSED QUICK
SERVICE RESTAURANT

2 MILL STREET,
GOONDIWINDI

FOR

ORIGINAL SCALE BEFORE REDUCTION
A3

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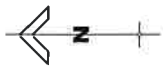


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Email: admin@burchills.com.au
Code: Burchills Engineering Pty Ltd
ABN 76 166 942 365

DRAWING TITLE

POST-DEVELOPMENT
CATCHMENT PLAN

DEVEL. APPLIC. No.	DATE	20/07/22
PROJECT LEADER: SH		
DESIGNER: SH		
CHECKED: SH		
APPROVED FOR AND ON BEHALF OF		
BURCHILLS ENGINEERING SOLUTIONS	ABN 76 166 942 365	
PROJECT No.	DRAWING No.	VERSION:
BE220369	N201	A



LEGEND

- POST-DEVELOPMENT CATCHMENT
- OVERLAND FLOW DIRECTION
- LINE OF DISCHARGE
- DISCHARGE LOCATION
- PROPOSED DRAINAGE PIPE
- STORAGE

LPD A

411x125mm Ø PVC PIPES

STORAGE FOR CATCHMENT A1 = 67m²

A1 (0.260 ha)

A2 (0.163 ha)

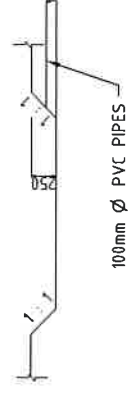
B (0.235 ha)

LPD B

MILL STREET

SON STREET

NOTE: SUBSOIL DRAINS TO BE INSTALLED AS REQUIRED TO ALLOW SEEPAGE FOLLOWING RAIN EVENT



SECTION A - A

SCALE: 1/50

PROPOSED QUICK SERVICE RESTAURANT

2 MILL STREET,
GOONDIWINDI

FOR

ORIGINAL SCALE BEFORE REDUCTION

A3

VER	DESCRIPTION	DATE
1	ORIGINAL ISSUE	20/12/22

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Website: www.burchills.com.au
Burchills Engineering Solutions Pty Ltd
ABN 78 166 942 365

DRAWING TITLE

OPERATIONAL CONTROL PLAN

DEVELOPER No.:	DATE: 20/12/22
PROJECT LEADER: SH	
DESIGNER: SH	
DRAWING PERSON: TP /	
CHECKED: SH	
APPROVED FOR AND ON BEHALF OF: BURCHILLS ENGINEERING SOLUTIONS ABN 78 166 942 365	
SCALE: 1:750	FULL SIZE A3
PROJECT No.:	VERSION:
BE220369	N400
	A



Attachment 3 – Infrastructure Charges Notice





Goondiwindi Customer Service
Centre
4 McLean Street
Goondiwindi
Inglewood Customer Service
Centre
18 Elizabeth Street
Inglewood

Locked Mail Bag 7
Inglewood QLD 4387

Telephone: 07 4671 7400
Fax: 07 4671 7433

Email: mail@grc.qld.gov.au

Infrastructure Charges Notice

Address	2 & 8 Mill Street, Goondiwindi
Owner	Jeffrey John Carter
Applicant	EPO Developments Pty Ltd C/- Town Planning Alliance
Application No.	22/32
Lot and Survey Plan	Lots 1 & 4 on RP850853
Date	28 October 2022
Approval	Development Permit – Material Change of Use & Reconfiguring a Lot

Development Application Details
<i>"Business Activities" – "Food and Drink Outlet" (Drive Through Restaurant) and Reconfiguring a Lot (Boundary Realignment) and Easement Giving Access to a Constructed Road</i>

Type of Charge	Charge Area (A, B, C, D or E)	Charge Amount	Unit	Charge (\$)
Food and Drink Outlet	A	\$8/m ² of GFA	225m ²	\$1,800
		\$1/m ² of IA	1,751m ²	\$1,751

Due Date	When Goondiwindi Regional Council approves the plan of subdivision	Total Charge (\$)	\$3,551
Charge to be paid to	Goondiwindi Regional Council		
Lapse Date	As per section 85 of the Planning Act		

Authorised by:

Print Name: **Mr Carl Manton**
Chief Executive Officer

In accordance the Planning Act 2016

Office Use – Receipt Number

Charges – 1250-1150-0000





Attachment 4 – Notice about decision - Statement of reasons



Notice about decision - Statement of reasons

The following information is provided in accordance with section 63 (5) of the Planning Act 2016 and must be published on the assessment managers website.

The development application for "Business Activities" – "Food and Drink Outlet" (Drive Through Restaurant) and Reconfiguring a Lot (Boundary Realignment) and Easement Giving Access to a Constructed Road

22/32

2 & 8 Mill Street, Goondiwindi

Lots 1 & 4 on RP850853

On 28/10/2022, the above development application was:

- ☐ approved in full or
- ☐ approved in part for _____ or
- ☒ approved in full with conditions or
- ☐ approved in part for _____, with conditions or
- ☐ refused.

1. Reasons for the decision

The reasons for this decision are:

- Having regard to the relevant criteria in the Goondiwindi Region Planning Scheme 2018, the proposed development satisfied all relevant criteria, and was approved subject to appropriate, relevant and reasonable conditions.

2. Assessment benchmarks

The following are the benchmarks applying for this development:

Benchmarks applying for the development	Benchmark reference
Centre Zone Code	PO1-PO10
Reconfiguring a Lot Code	PO1-PO12
Transport and Infrastructure Code	PO1-PO15
Natural Resources Overlay Code	PO5-PO8
Flood Hazard Overlay Code	PO1-PO4

3. Compliance with benchmarks

Benchmark reference	Reasons for the approval despite non-compliance with benchmark
Centre Zone Code AO6.4 On-site car parking is provided behind or to the side of the building alignment to the primary street frontage.	Alternative Solution The proposed car parking is provided at the front of the site towards Marshall Street. The proposal will include a pedestrian connection to the existing external footpath.



Attachment 5 – *Planning Act 2016* Extracts



**EXTRACT FROM PLANNING ACT 2016
RELATING TO APPEAL RIGHTS**

Chapter 6 Dispute Resolution, Part 1 Appeal Rights

229 Appeals to tribunal or P&E Court

(1) Schedule 1 states—

(a) matters that may be appealed to—

- (i) either a tribunal or the P&E Court; or
- (ii) only a tribunal; or
- (iii) only the P&E Court; and

(b) the person—

- (i) who may appeal a matter (the **appellant**); and
- (ii) who is a respondent in an appeal of the matter; and
- (iii) who is a co-respondent in an appeal of the matter; and
- (iv) who may elect to be a co-respondent in an appeal of the matter.

(2) An appellant may start an appeal within the appeal period.

(3) The **appeal period** is—

- (a) for an appeal by a building advisory agency—10 business days after a decision notice for the decision is given to the agency; or
- (b) for an appeal against a deemed refusal—at any time after the deemed refusal happens; or
- (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises—20 business days after a notice is published under section 269(3)(a) or (4); or
- (d) for an appeal against an infrastructure charges notice—20 business days after the infrastructure charges notice is given to the person; or
- (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given—30 business days after the applicant gives the

deemed approval notice to the assessment manager; or

- (f) for any other appeal—20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

Note—

See the P&E Court Act for the court's power to extend the appeal period.

(4) Each respondent and co-respondent for an appeal may be heard in the appeal.

(5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.

(6) To remove any doubt, it is declared that an appeal against an infrastructure charges notice must not be about—

(a) the adopted charge itself; or

(b) for a decision about an offset or refund—

(i) the establishment cost of trunk infrastructure identified in a LGIP; or

(ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

230 Notice of appeal

(1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that—

(a) is in the approved form; and

(b) succinctly states the grounds of the appeal.

(2) The notice of appeal must be accompanied by the required fee.

(3) The appellant or, for an appeal to a tribunal, the registrar must, within the service period, give a copy of the notice of appeal to—

(a) the respondent for the appeal; and

(b) each co-respondent for the appeal; and

(c) for an appeal about a development application under schedule 1, table 1, item 1—each

principal submitter for the development application; and

- (d) for an appeal about a change application under schedule 1, table 1, item 2—each principal submitter for the change application; and
- (e) each person who may elect to become a co-respondent for the appeal, other than an eligible submitter who is not a principal submitter in an appeal under paragraph (c) or (d); and
- (f) for an appeal to the P&E Court—the chief executive; and
- (g) for an appeal to a tribunal under another Act—any other person who the registrar considers appropriate.

(4) The service period is—

- (a) if a submitter or advice agency started the appeal in the P&E Court—2 business days after the appeal is started; or
 - (b) otherwise—10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
 - (6) A person elects to be a co-respondent by filing a notice of election, in the approved form, within 10 business days after the notice of appeal is given to the person

231 Other appeals

- (1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
- (2) The Judicial Review Act 1991, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the Judicial Review Act 1991 in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.

(4) In this section—

decision includes—

- (a) conduct engaged in for the purpose of making a decision; and
- (b) other conduct that relates to the making of a decision; and
- (c) the making of a decision or the failure to make a decision; and
- (d) a purported decision; and
- (e) a deemed refusal.

non-appealable, for a decision or matter, means the decision or matter—

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the Judicial Review Act 1991 or otherwise, whether by the Supreme Court, another court, a tribunal or another entity; and
- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, a tribunal or another entity on any ground.

232 Rules of the P&E Court

- (1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with rules of the P&E Court.

Part 2 Development tribunal

Division 1 General

233 Appointment of referees

- (1) The Minister, or chief executive, (the appointer) may appoint a person to be a referee, by an appointment notice, if the appointer considers the person—
 - (a) has the qualifications or experience prescribed by regulation; and
 - (b) has demonstrated an ability—
 - (i) to negotiate and mediate outcomes between parties to a proceeding; and

(ii) to apply the principles of natural justice; and

(iii) to analyse complex technical issues; and

(iv) to communicate effectively, including, for example, to write informed succinct and well-organised decisions, reports, submissions or other documents.

(2) The appointer may—

(a) appoint a referee for the term, of not more than 3 years, stated in the appointment notice; and

(b) reappoint a referee, by notice, for further terms of not more than 3 years.

(3) If an appointer appoints a public service officer as a referee, the officer holds the appointment concurrently with any other appointment that the officer holds in the public service.

(4) A referee must not sit on a tribunal unless the referee has given a declaration, in the approved form and signed by the referee, to the chief executive.

(5) The appointer may cancel a referee's appointment at any time by giving a notice, signed by the appointer, to the referee.

(6) A referee may resign the referee's appointment at any time by giving a notice, signed by the referee, to the appointer.

(7) In this section—

appointment notice means—

(a) if the Minister gives the notice—a gazette notice; or

(b) if the chief executive gives the notice—a notice given to the person appointed as a referee.

234 Referee with conflict of interest

(1) This section applies if the chief executive informs a referee that the chief executive proposes to appoint the referee as a tribunal member, and either or both of the following apply—

(a) the tribunal is to hear a matter about premises—

(i) the referee owns; or

(ii) for which the referee was, is, or is to be, an architect, builder, drainer, engineer, planner, plumber, plumbing inspector, certifier, site evaluator or soil assessor; or

(iii) for which the referee has been, is, or will be, engaged by any party in the referee's capacity as an accountant, lawyer or other professional; or

(iv) situated or to be situated in the area of a local government of which the referee is an officer, employee or councillor;

(b) the referee has a direct or indirect personal interest in a matter to be considered by the tribunal, and the interest could conflict with the proper performance of the referee's functions for the tribunal's consideration of the matter.

(2) However, this section does not apply to a referee only because the referee previously acted in relation to the preparation of a relevant local planning instrument.

(3) The referee must notify the chief executive that this section applies to the referee, and on doing so, the chief executive must not appoint the referee to the tribunal.

(4) If a tribunal member is, or becomes, aware the member should not have been appointed to the tribunal, the member must not act, or continue to act, as a member of the tribunal.

235 Establishing development tribunal

(1) The chief executive may at any time establish a tribunal, consisting of up to 5 referees, for tribunal proceedings.

(2) The chief executive may appoint a referee for tribunal proceedings if the chief executive considers the referee has the qualifications or experience for the proceedings.

(3) The chief executive must appoint a referee as the chairperson for each tribunal.

(4) A regulation may specify the qualifications or experience required for particular proceedings.

(5) After a tribunal is established, the tribunal's membership must not be changed.

236 Remuneration

A tribunal member must be paid the remuneration the Governor in Council decides.

237 Tribunal proceedings

- (1) A tribunal must ensure all persons before the tribunal are afforded natural justice.*
- (2) A tribunal must make its decisions in a timely way.*
- (3) A tribunal may—*
 - (a) conduct its business as the tribunal considers appropriate, subject to a regulation made for this section; and*
 - (b) sit at the times and places the tribunal decides; and*
 - (c) hear an appeal and application for a declaration together; and*
 - (d) hear 2 or more appeals or applications for a declaration together.*
- (4) A regulation may provide for—*
 - (a) the way in which a tribunal is to operate, including the qualifications of the chairperson of the tribunal for particular proceedings; or*
 - (b) the required fee for tribunal proceedings.*

238 Registrar and other officers

- (1) The chief executive may, by gazette notice, appoint—*
 - (a) a registrar; and*
 - (b) other officers (including persons who are public service officers) as the chief executive considers appropriate to help a tribunal perform its functions.*
- (2) A person may hold the appointment or assist concurrently with any other public service appointment that the person holds.*

Division 2 Applications for declarations

239 Starting proceedings for declarations

- (1) A person may start proceedings for a declaration by a tribunal by filing an application, in the approved form, with the registrar.*
- (2) The application must be accompanied by the required fee.*

240 Application for declaration about making of development application

- (1) The following persons may start proceedings for a declaration about whether a development application is properly made—*
 - (a) the applicant;*
 - (b) the assessment manager.*
- (2) However, a person may not seek a declaration under this section about whether a development application is accompanied by the written consent of the owner of the premises to the application.*
- (3) The proceedings must be started by—*
 - (a) the applicant within 20 business days after receiving notice from the assessment manager, under the development assessment rules, that the development application is not properly made; or*
 - (b) the assessment manager within 10 business days after receiving the development application.*
- (4) The registrar must, within 10 business days after the proceedings start, give notice of the proceedings to the respondent as a party to the proceedings.*
- (5) In this section—*

respondent means—

- (a) if the applicant started the proceedings—the assessment manager; or*
- (b) if the assessment manager started the proceedings—the applicant.*

241 Application for declaration about change to development approval

- (1) This section applies to a change application for a development approval if—*
 - (a) the approval is for a material change of use of premises that involves the use of a classified building; and*
 - (b) the responsible entity for the change application is not the P&E Court.*
- (2) The applicant, or responsible entity, for the change application may start proceedings for a*

declaration about whether the proposed change to the approval is a minor change.

- (3) The registrar must, within 10 business days after the proceedings start, give notice of the proceedings to the respondent as a party to the proceedings.

- (4) In this section—

respondent means—

(a) if the applicant started the proceedings—the responsible entity; or

(b) if the responsible entity started the proceedings—the applicant.

Division 3 Tribunal proceedings for appeals and declarations

242 Action when proceedings start

If a document starting tribunal proceedings is filed with the registrar within the period required under this Act, and is accompanied by the required fee, the chief executive must—

- (a) establish a tribunal for the proceedings; and
- (b) appoint 1 of the referees for the tribunal as the tribunal's chairperson, in the way required under a regulation; and
- (c) give notice of the establishment of the tribunal to each party to the proceedings.

243 Chief executive excusing noncompliance

- (1) This section applies if—

(a) the registrar receives a document purporting to start tribunal proceedings, accompanied by the required fee; and

(b) the document does not comply with any requirement under this Act for validly starting the proceedings.

- (2) The chief executive must consider the document and decide whether or not it is reasonable in the circumstances to excuse the noncompliance (because it would not cause substantial injustice in the proceedings, for example).

- (3) If the chief executive decides not to excuse the noncompliance, the chief executive must give a notice stating that the document is of no effect,

because of the noncompliance, to the person who filed the document.

- (4) The chief executive must give the notice within 10 business days after the document is given to the chief executive.

- (5) If the chief executive does excuse the noncompliance, the chief executive may act under section 242 as if the noncompliance had not happened.

244 Ending tribunal proceedings or establishing new tribunal

- (1) The chief executive may decide not to establish a tribunal when a document starting tribunal proceedings is filed, if the chief executive considers it is not reasonably practicable to establish a tribunal.

Examples of when it is not reasonably practicable to establish a tribunal—

- there are no qualified referees or insufficient qualified referees because of a conflict of interest
- the referees who are available will not be able to decide the proceedings in a timely way

- (2) If the chief executive considers a tribunal established for tribunal proceedings—

(a) does not have the expertise to hear or decide the proceedings; or

(b) is not able to make a decision for proceedings (because of a tribunal member's conflict of interest, for example); the chief executive may decide to suspend the proceedings and establish another tribunal, complying with section 242(c), to hear or re-hear the proceedings.

- (3) However, the chief executive may instead decide to end the proceedings if the chief executive considers it is not reasonably practicable to establish another tribunal to hear or re-hear the proceedings.

- (4) If the chief executive makes a decision under subsection (1) or (3), the chief executive must give a decision notice about the decision to the parties to the proceedings.

- (5) Any period for starting proceedings in the P&E Court, for the matter that is the subject of the tribunal proceedings, starts again when the chief

executive gives the decision notice to the party who started the proceedings.

- (6) The decision notice must state the effect of subsection (5).

245 Refunding fees

The chief executive may, but need not, refund all or part of the fee paid to start proceedings if the chief executive decides under section 244—

- (a) not to establish a tribunal; or
- (b) to end the proceedings.

246 Further material for tribunal proceedings

- (1) The registrar may, at any time, ask a person to give the registrar any information that the registrar reasonably requires for the proceedings.

Examples of information that the registrar may require—

- material about the proceedings (plans, for example)
- information to help the chief executive decide whether to excuse noncompliance under section 243
- for a deemed refusal—a statement of the reasons why the entity responsible for deciding the application had not decided the application during the period for deciding the application.

- (2) The person must give the information to the registrar within 10 business days after the registrar asks for the information.

247 Representation of Minister if State interest involved

If, before tribunal proceedings are decided, the Minister decides the proceedings involve a State interest, the Minister may be represented in the proceedings.

248 Representation of parties at hearing

A party to tribunal proceedings may appear—

- (a) in person; or
- (b) by an agent who is not a lawyer.

249 Conduct of tribunal proceedings

- (1) Subject to section 237, the chairperson of a tribunal must decide how tribunal proceedings are to be conducted.

- (2) The tribunal may decide the proceedings on submissions if the parties agree.

- (3) If the proceedings are to be decided on submissions, the tribunal must give all parties a notice asking for the submissions to be made to the tribunal within a stated reasonable period.

- (4) Otherwise, the tribunal must give notice of the time and place of the hearing to all parties.

- (5) The tribunal may decide the proceedings without a party's submission (written or oral) if—

- (a) for proceedings to be decided on submissions—the party's submission is not received within the time stated in the notice given under subsection (3); or

- (b) for proceedings to be decided by hearing—the person, or the person's agent, does not appear at the hearing.

- (6) When hearing proceedings, the tribunal—

- (a) need not proceed in a formal way; and
- (b) is not bound by the rules of evidence; and
- (c) may inform itself in the way it considers appropriate; and
- (d) may seek the views of any person; and
- (e) must ensure all persons appearing before the tribunal have a reasonable opportunity to be heard; and
- (f) may prohibit or regulate questioning in the hearing.

- (7) If, because of the time available for the proceedings, a person does not have an opportunity to be heard, or fully heard, the person may make a submission to the tribunal.

250 Tribunal directions or orders

A tribunal may, at any time during tribunal proceedings, make any direction or order that the tribunal considers appropriate.

Examples of directions—

- a direction to an applicant about how to make their development application comply with this Act
- a direction to an assessment manager to assess a development application, even though the referral agency's response to the assessment manager was to refuse the application

251 Matters tribunal may consider

- (1) This section applies to tribunal proceedings about—
 - (a) a development application or change application; or
 - (b) an application or request (however called) under the Building Act or the Plumbing and Drainage Act.
- (2) The tribunal must decide the proceedings based on the laws in effect when—
 - (a) the application or request was properly made; or
 - (b) if the application or request was not required to be properly made—the application or request was made.
- (3) However, the tribunal may give the weight that the tribunal considers appropriate, in the circumstances, to any new laws.

252 Deciding no jurisdiction for tribunal proceedings

- (1) A tribunal may decide that the tribunal has no jurisdiction for tribunal proceedings, at any time before the proceedings are decided—
 - (a) on the tribunal's initiative; or
 - (b) on the application of a party.
- (2) If the tribunal decides that the tribunal has no jurisdiction, the tribunal must give a decision notice about the decision to all parties to the proceedings.
- (3) Any period for starting proceedings in the P&E Court, for the matter that is the subject of the tribunal proceedings, starts again when the tribunal gives the decision notice to the party who started the proceedings.

- (4) The decision notice must state the effect of subsection (3).

- (5) If the tribunal decides to end the proceedings, the fee paid to start the proceedings is not refundable.

253 Conduct of appeals

- (1) This section applies to an appeal to a tribunal.
- (2) Generally, the appellant must establish the appeal should be upheld.
- (3) However, for an appeal by the recipient of an enforcement notice, the enforcement authority that gave the notice must establish the appeal should be dismissed.
- (4) The tribunal must hear and decide the appeal by way of a reconsideration of the evidence that was before the person who made the decision appealed against.
- (5) However, the tribunal may, but need not, consider—
 - (a) other evidence presented by a party to the appeal with leave of the tribunal; or
 - (b) any information provided under section 246.

254 Deciding appeals to tribunal

- (1) This section applies to an appeal to a tribunal against a decision.
- (2) The tribunal must decide the appeal by—
 - (a) confirming the decision; or
 - (b) changing the decision; or
 - (c) replacing the decision with another decision; or
 - (d) setting the decision aside, and ordering the person who made the decision to remake the decision by a stated time; or
 - (e) for a deemed refusal of an application—
 - (i) ordering the entity responsible for deciding the application to decide the application by a stated time and, if the entity does not comply with the order, deciding the application; or
 - (ii) deciding the application.

(3) However, the tribunal must not make a change, other than a minor change, to a development application.

(4) The tribunal's decision takes the place of the decision appealed against.

(5) The tribunal's decision starts to have effect—

(a) if a party does not appeal the decision—at the end of the appeal period for the decision; or

(b) if a party appeals against the decision to the P&E Court—subject to the decision of the court, when the appeal ends.

255 Notice of tribunal's decision

A tribunal must give a decision notice about the tribunal's decision for tribunal proceedings, other than for any directions or interim orders given by the tribunal, to all parties to proceedings.

256 No costs orders

A tribunal must not make any order as to costs.

257 Recipient's notice of compliance with direction or order

If a tribunal directs or orders a party to do something, the party must notify the registrar when the thing is done.

258 Tribunal may extend period to take action

(1) This section applies if, under this chapter, an action for tribunal proceedings must be taken within a stated period or before a stated time, even if the period has ended or the time has passed.

(2) The tribunal may allow a longer period or a different time to take the action if the tribunal considers there are sufficient grounds for the extension.

259 Publication of tribunal decisions

The registrar must publish tribunal decisions under the arrangements, and in the way, that the chief executive decides.

Schedule 1 Appeals

section 229

Appeal rights and parties to appeals

(1) Table 1 states the matters that may be appealed to—

(a) the P&E court; or

(b) a tribunal.

(2) However, table 1 applies to a tribunal only if the matter involves—

(a) the refusal, or deemed refusal of a development application, for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(b) a provision of a development approval for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(c) if a development permit was applied for—the decision to give a preliminary approval for—

(i) a material change of use for a classified building; or

(ii) operational work associated with building work, a retaining wall, or a tennis court; or

(d) a development condition if—

(i) the development approval is only for a material change of use that involves the use of a building classified under the Building Code as a class 2 building; and

(ii) the building is, or is proposed to be, not more than 3 storeys; and

(iii) the proposed development is for not more than 60 sole-occupancy units; or

(e) a decision for, or a deemed refusal of, an extension application for a development approval that is only for a material change of use of a classified building; or

(f) a decision for, or a deemed refusal of, a change

application for a development approval that is only for a material change of use of a classified building; or

(g) a matter under this Act, to the extent the matter relates to the Building Act, other than a matter under that Act that may or must be decided by the Queensland Building and Construction Commission; or

(h) a decision to give an enforcement notice—

(i) in relation to a matter under paragraphs (a) to (g); or

(ii) under the Plumbing and Drainage Act; or

(i) an infrastructure charges notice; or

(j) the refusal, or deemed refusal, of a conversion application; or

(l) a matter prescribed by regulation.

(3) Also, table 1 does not apply to a tribunal if the matter involves—

(a) for a matter in subsection (2)(a) to (d)—

(i) a development approval for which the development application required impact assessment; and

(ii) a development approval in relation to which the assessment manager received a properly made submission for the development application; or

(b) a provision of a development approval about the identification or inclusion, under a variation approval, of a matter for the development.

(4) Table 2 states the matters that may be appealed only to the P&E Court.

(5) Table 3 states the matters that may be appealed only to the tribunal.

(6) In each table—

(a) column 1 states the appellant in the appeal; and

(b) column 2 states the respondent in the appeal; and

(c) column 3 states the co-respondent (if any) in the appeal; and

(d) column 4 states the co-respondents by election (if any) in the appeal.

(7) If the chief executive receives a notice of appeal under section 230(3)(f), the chief executive may elect to be a co-respondent in the appeal.

(8) In this section—

storey see the Building Code, part A1.1.

Table 1

Appeals to the P&E Court and, for certain matters, to a tribunal

1. Development applications

For a development application other than a development application called in by the

Minister, an appeal may be made against—

(a) the refusal of all or part of the development application; or

(b) the deemed refusal of the development application; or

(c) a provision of the development approval; or

(d) if a development permit was applied for—the decision to give a preliminary approval.

**EXTRACT FROM THE PLANNING ACT 2016
RELATING TO LAPSE DATES**

***Division 4 Lapsing of and extending
development approvals***

85 Lapsing of approval at end of current period

- (1) *A part of a development approval lapses at the end of the following period (the **currency period**)—*
- (a) *for any part of the development approval relating to a material change of use—if the first change of use does not happen within—*
- (i) *the period stated for that part of the approval; or*
- (ii) *if no period is stated—6 years after the approval starts to have effect;*
- (b) *for any part of the development approval relating to reconfiguring a lot—if a plan for the reconfiguration that, under the Land Title Act, is required to be given to a local government for approval is not given to the local government within—*
- (i) *the period stated for that part of the approval; or*
- (ii) *if no period is stated—4 years after the approval starts to have effect;*
- (c) *for any other part of the development approval if the development does not substantially start within—*
- (i) *the period stated for that part of the approval; or*
- (ii) *if no period is stated—2 years after the approval starts to take effect.*
- (2) *If part of a development approval lapses, any monetary security given for that part of the approval must be released.*