

Meander Valley Council

W O R K I N G T O G E T H E R

# **ORDINARY AGENDA**

**COUNCIL MEETING**

**Tuesday 16 January 2018**

# **COUNCIL MEETING VISITORS**

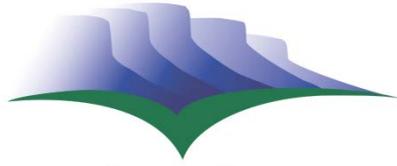
Visitors are most welcome to attend Council meetings.

Visitors attending a Council Meeting agree to abide by the following rules:-

- Visitors are required to sign the Visitor Book and provide their name and full residential address before entering the meeting room.
- Visitors are only allowed to address Council with the permission of the Chairperson.
- When addressing Council the speaker is asked not to swear or use threatening language.
- Visitors who refuse to abide by these rules will be asked to leave the meeting by the Chairperson.

## **SECURITY PROCEDURES**

- Council staff will ensure that all visitors have signed the Visitor Book.
- A visitor who continually interjects during the meeting or uses threatening language to Councillors or staff, will be asked by the Chairperson to cease immediately.
- If the visitor fails to abide by the request of the Chairperson, the Chairperson shall suspend the meeting and ask the visitor to leave the meeting immediately.
- If the visitor fails to leave the meeting immediately, the General Manager is to contact Tasmania Police to come and remove the visitor from the building.
- Once the visitor has left the building the Chairperson may resume the meeting.
- In the case of extreme emergency caused by a visitor, the Chairperson is to activate the Distress Button immediately and Tasmania Police will be called.



Meander Valley Council

WORKING TOGETHER

PO Box 102, Westbury,  
Tasmania, 7303

Dear Councillors

I wish to advise that an ordinary meeting of the Meander Valley Council will be held at the Westbury Council Chambers, 26 Lyall Street, Westbury, on **Tuesday 16 January 2018 at 1:30pm.**

Martin Gill  
**GENERAL MANAGER**

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**Evacuation and Safety:**

At the commencement of the meeting the Mayor will advise that,

- Evacuation details and information are located on the wall to his right;
- In the unlikelyhood of an emergency evacuation an alarm will sound and evacuation wardens will assist with the evacuation. When directed, everyone will be required to exit in an orderly fashion through the front doors and go directly to the evacuation point which is in the car-park at the side of the Town Hall.

Agenda for an Ordinary Meeting of the Meander Valley Council to be held at the Council Chambers Meeting Room, 26 Lyall Street, Westbury, on Tuesday 16 January 2018 at 1.30pm.

**PRESENT:**

**APOLOGIES:** Cr Ian Mackenzie

**IN ATTENDANCE:****CONFIRMATION OF MINUTES:**

Councillor xx moved and Councillor xx seconded, ***“that the minutes of the Ordinary Meeting of Council held on Tuesday 12 December, 2017, be received and confirmed.”***

**COUNCIL WORKSHOPS HELD SINCE THE LAST MEETING:**

Nil

**ANNOUNCEMENTS BY THE MAYOR:****Tuesday 12 December 2017**

Prospect High School end of year presentation evening

**Wednesday 13 December 2017**

End of year lunch with Premier Will Hodgman

Deloraine High School end of year presentation evening

**Thursday 14 December 2017**

Mole Creek Primary School end of year presentation evening

**Friday 15 December 2017**

Northern Police District end of year morning tea

**Saturday 16 December 2017**

Official opening of Kooparoona Niara Cultural Trail

**Tuesday 19 December 2017**

Hagley Farm Primary School end of year presentation

**Thursday 21 December 2017**

Ashley School end of year presentation

**Sunday 7 January 2018**

Fesitval of Small Halls Concert, Rosevale

**Thursday 11 January 2018**

Official opening, Australian Junior Darts Championship, Westbury

**Saturday 13 January 2018**

Australian Men's World Cup Darts Team, Westbury

**DECLARATIONS OF INTEREST:**

**TABLING OF PETITIONS:**

# **PUBLIC QUESTION TIME**

## **General Rules for Question Time:**

Public question time will continue for no more than thirty minutes for 'questions on notice' and 'questions without notice'.

At the beginning of public question time, the Chairperson will firstly refer to the questions on notice. The Chairperson will ask each person who has a question on notice to come forward and state their name and where they are from (suburb or town) before asking their question(s).

The Chairperson will then ask anyone else with a question without notice to come forward and give their name and where they are from (suburb or town) before asking their question.

If called upon by the Chairperson, a person asking a question without notice may need to submit a written copy of their question to the Chairperson in order to clarify the content of the question.

A member of the public may ask a Council officer to read their question for them.

If accepted by the Chairperson, the question will be responded to, or, it may be taken on notice as a 'question on notice' for the next Council meeting. Questions will usually be taken on notice in cases where the questions raised at the meeting require further research or clarification. These questions will need to be submitted as a written copy to the Chairperson prior to the end of public question time.

The Chairperson may direct a Councillor or Council officer to provide a response.

All questions and answers must be kept as brief as possible.

There will be no debate on any questions or answers.

In the event that the same or similar question is raised by more than one person, an answer may be given as a combined response.

Questions on notice and their responses will be minuted.

Questions without notice raised during public question time and the responses to them will not be minuted or recorded in any way with exception to those questions taken on notice for the next Council meeting.

Once the allocated time period of thirty minutes has ended, the Chairperson will declare public question time ended. At this time, any person who has not had the opportunity to put forward a question will be invited to submit their question in writing for the next meeting.

## **Notes**

- Council officers may be called upon to provide assistance to those wishing to register a question, particularly those with a disability or from non-English speaking cultures, by typing their questions.
- The Chairperson may allocate a maximum time for each question, depending on the complexity of the issue, and on how many questions are asked at the meeting. The Chairperson may also indicate when sufficient response to a question has been provided.

- Limited Privilege: Members of the public should be reminded that the protection of parliamentary privilege does not apply to local government, and any statements or discussion in the Council Chamber or any document, produced are subject to the laws of defamation.

For further information please telephone 6393 5300 or visit [www.meander.tas.gov.au](http://www.meander.tas.gov.au)

## **PUBLIC QUESTION TIME**

### **1. PUBLIC QUESTIONS TAKEN ON NOTICE – DECEMBER 2017**

Nil

### **2. PUBLIC QUESTIONS WITH NOTICE – JANUARY 2018**

### **3. PUBLIC QUESTIONS WITHOUT NOTICE – JANUARY 2018**

## **COUNCILLOR QUESTION TIME**

### **1. COUNCILLOR QUESTIONS TAKEN ON NOTICE – DECEMBER 2017**

#### **1.1 Cr Andrew Connor**

(a) Advertising costs

Can council officers advise on the yearly cost to Council of printed advertising that is required by law for activities such as Development Applications, Road Closures, animal seizures, land sales and similar advertising? A detailed cost breakdown for each category would be appreciated.

***Response by Jon Harmey, Director Corporate Services***

***The following advertising costs are provided for the 2016/2017 financial year:***

<b>Statutory Planning Applications</b>	<b>\$38,633</b>
<b>Planning Scheme Review</b>	<b>\$3,453</b>
<b>Property Rates and Collection</b>	<b>\$6,852</b>

<b>Council Meetings and AGM</b>	<b>\$1,537</b>
<b>Animal Control</b>	<b>\$744</b>
<b>Road Closure – Deloraine Car Show</b>	<b>\$775</b>
<b>Road Closure – Westbury Cycling Criterium</b>	<b>\$910</b>
<b>Road Closure – Anzac Day Services</b>	<b>\$944</b>

***Additional road closure advertising has been capitalised as part of project construction costs and not identified in the above table. Additional advertising considered non-statutory have not been included.***

## **2. COUNCILLOR QUESTIONS WITH NOTICE – JANUARY 2018**

### **2.1 Cr Bob Richardson**

This question concerns building activity in mid-Meander Valley. Could Council please be advised of residential building activity for each of the following postcode for the years 2000 – 2017:

- 7290 - Hadspen
- 7291 - Carrick
- 7292 - Hagley
- 7303 - Westbury

### ***Response Martin Gill, General Manager***

***Council does not have electronic building data records prior to 2006. Work to extract the data from archived material for the period prior to 2006 would be resource intensive. If officers were provided a supplementary question outlining the why the data is required we may be able to provide some broader observations that address the interest in the data. For instance, state wide building approval data for the period between 2000 and 2005 shows a significant dip in building approval numbers during 2000 and 2001, followed some slow growth in the following four years and another shallow dip in 2006. However, the overall number of annual building approvals across this period is similar to the following period. This would suggest that we would not see a lot of variation to the trends observed in data we have for 2006 – 2017.***

<b>Building Approvals/Occupancy Permits</b>				
	<b>Carrick</b>	<b>Hadspen</b>	<b>Hagley</b>	<b>Westbury</b>
2006	0	4	0	6
2007	2	10	5	9

2008	0	6	0	8
2009	5	7	1	15
2010	3	11	2	11
2011	2	3	0	14
2012	1	2	1	13
2013	2	7	0	8
2014	3	15	1	5
2015	2	28	2	11
2016	2	11	1	5
2017	3	5	0	10
<b>Totals</b>	<b>25</b>	<b>109</b>	<b>13</b>	<b>115</b>

***Total building approvals for 'mid Meander Valley' since 2005 - 262. This is an average of 21.8 building approvals per year.***

### **3. COUNCILLOR QUESTIONS WITHOUT NOTICE – JANUARY 2018**

## **DEPUTATIONS BY MEMBERS OF THE PUBLIC**

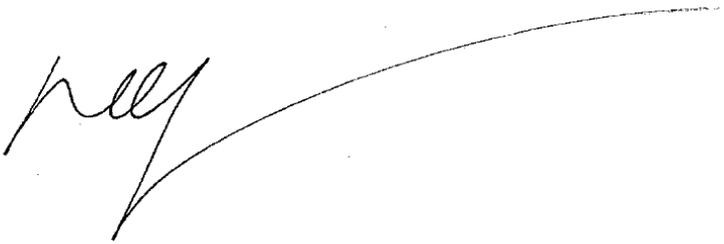
## **NOTICE OF MOTIONS BY COUNCILLORS**

Nil

## CERTIFICATION

"I certify that with respect to all advice, information or recommendation provided to Council with this agenda:

1. the advice, information or recommendation is given by a person who has the qualifications or experience necessary to give such advice, information or recommendation, and
2. where any advice is given directly to Council by a person who does not have the required qualifications or experience that person has obtained and taken into account in that person's general advice the advice from an appropriately qualified or experienced person."



**Martin Gill**  
**GENERAL MANAGER**

"Notes: S65(1) of the Local Government Act requires the General Manager to ensure that any advice, information or recommendation given to the Council (or a Council committee) is given by a person who has the qualifications or experience necessary to give such advice, information or recommendation. S65(2) forbids Council from deciding any matter which requires the advice of a qualified person without considering that advice."

## COUNCIL MEETING AS A PLANNING AUTHORITY

The Mayor advises that for items C&DS 1 and C&DS 3 Council is acting as a Planning Authority under the provisions of the *Land Use Planning and Approvals Act 1993*.

# **C&DS 1 18 INTEGRITY DRIVE, WESTBURY – LEVEL 2 ACTIVITY – MANUFACTURING AND PROCESSING (AQUA FEED PRODUCTION FACILITY)**

## **1) Introduction**

This report considers application PA\18\0018 for Level 2 Activity - Manufacturing & Processing (Aqua Feed Production Facility) on land located at 18 Integrity Drive, Westbury (CT: 174186/1).

## **2) Background**

### **Applicant**

Ridley AgriProducts Pty Ltd

### **Planning Controls**

The subject land is controlled by the *Meander Valley Interim Planning Scheme 2013* (referred to in this report as the 'Scheme').

The use and development is scheduled as a Level 2 Activity under the Environmental Management and Pollution Control Act 1994 (EMPCA). As such, it is subject to an assessment by the Environment Protection Authority (EPA) under that Act combined with the assessment under the Scheme.

### **Use & Development**

The proposal is to develop an aqua feed production facility at 18 Integrity Drive, Westbury. The production of aqua feed involves the delivery and storage of raw materials, grinding, mixing and drying feed into pelleted product and packaging (AECOM Australia Pty Ltd 2017). The development includes the construction of one main mill building, silos, biofilter, boiler, raw and finished materials storage and weighbridge (AECOM Australia Pty Ltd 2017). Two signs are also proposed, one on the wall of the building and one pylon sign at the entrance. The subject lot has an area of 4.91ha with a development area of approximately 2.88ha.

Figures 1 to 3 below show the proposed site plan and three-dimensional models.



Figure 1: proposed development site plan (Source: Aecom) – detailed plans attached

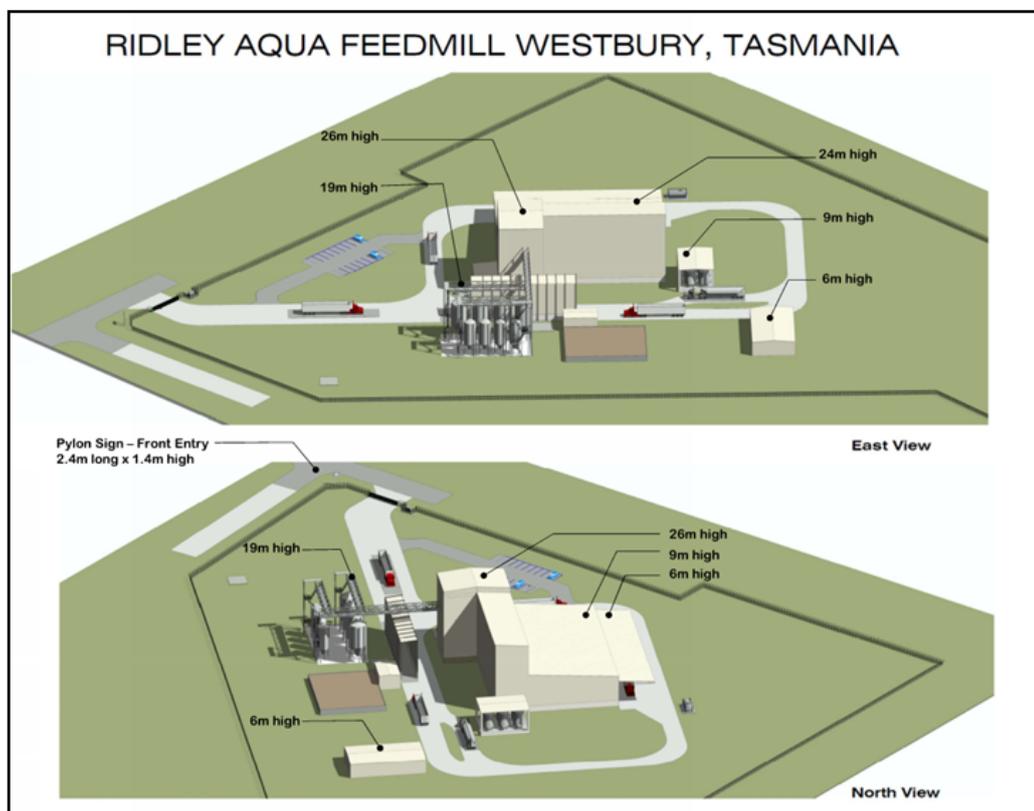


Figure 2: proposed development elevations (Source: Aecom)

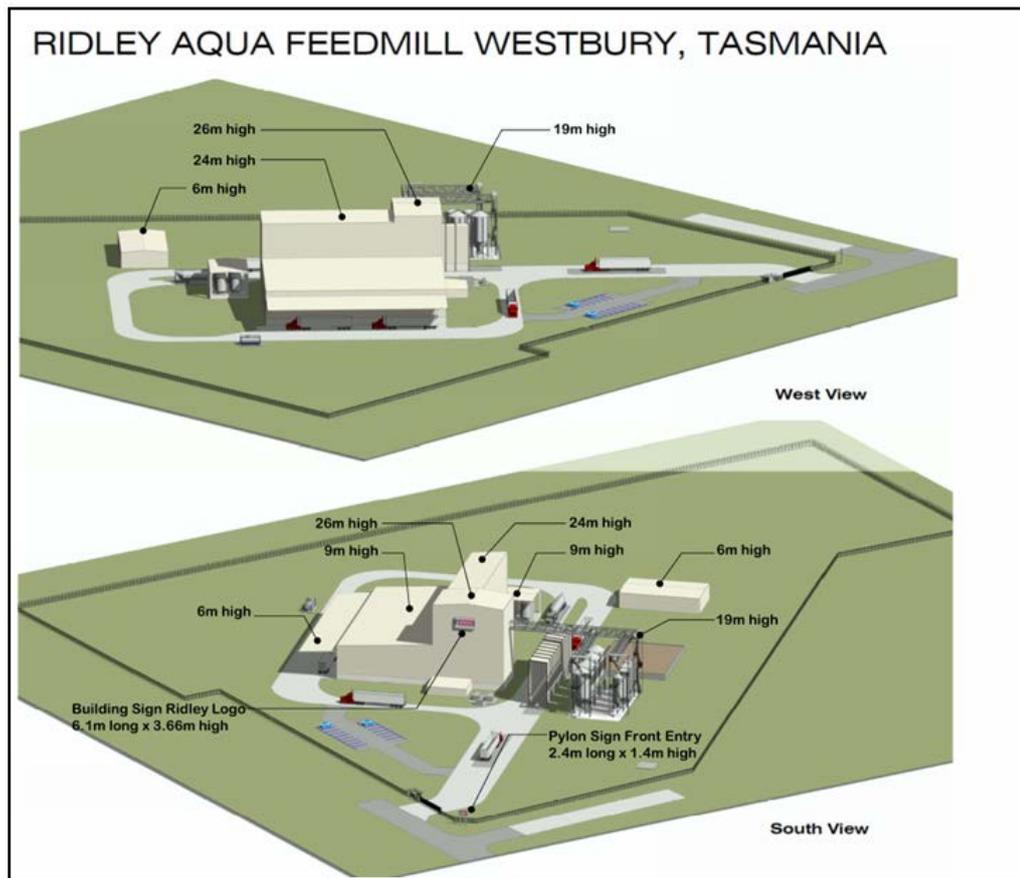


Figure 3: proposed development elevations (Source: Aecom)

### **Site & Surrounds**

The site is located in the Valley Central industrial precinct, north of Westbury. The subject lot is cleared land, located on the northern boundary of the precinct with access off Integrity Drive. To the south of the site, there are several established manufacturing and processing businesses located off Integrity Drive, Roxford Avenue, Gatenby Drive and Birralee Road. The adjoining land to the north is used for agriculture with the dwelling being located approximately 725m from the title boundary.

The lot is connected to reticulated water, sewer and stormwater systems. The land rises gently to the north-east with an approximate 5m slope across the lot. The proposed development will be cut into the slope to create a level area. A 'man-made' drainage line crosses the subject property. The lot has the benefit of a 4.5m wide Right of Drainage easement on the adjoining land to the east.



Photo 1: aerial photo showing the subject site and surrounding land  
(Source: [www.thelist.tas.gov.au](http://www.thelist.tas.gov.au))



Photo 2: view north east across the subject lot, taken from the corner of Integrity Drive and the unnamed road



Photo 3: view south from site entrance to other industrial uses in the precinct



Photo 4: view south west from site to manufacturing use opposite

### **Statutory Timeframes**

Date EPA Determination:	21 December 2017
Request for further information:	Not applicable.
Information received:	Not applicable.
Advertised:	16 September 2017
Closing date for representations:	16 October 2017
Extension of time granted:	Not applicable.
Extension of time expires:	Not applicable.
Decision due:	16 January 2018

### **3) Strategic/Annual Plan Conformance**

Council has a target under the Annual Plan to assess applications within statutory timeframes.

### **4) Policy Implications**

Not applicable

## **5) Statutory Requirements**

Council must process and determine the application in accordance with the *Land Use Planning Approval Act 1993 (LUPAA)* and the Meander Valley Interim Planning Scheme 2013. The application is made in accordance with Section 57 of LUPAA.

The use and development is scheduled as a Level 2 Activity under EMPCA. Section 25(1) of EMPCA requires a planning authority to refer all Level 2 development applications to the Board of the Environment Protection Authority (EPA) for assessment. In accordance with Section 25(2)(f) of EMPCA, the planning authority is not to assess any matter addressed in the Board's assessment.

The EPA completed its determination (Environmental Assessment Report and Permit Part B Permit Conditions – Environmental No. 9310 attached), with Council receiving these documents on 2 January 2018. Any permit issued by the planning authority must include the EPA conditions and any permit conditions of the planning authority cannot be inconsistent with, or contradict, those issued by the EPA. The planning authority statutory timeframe commences upon receipt of the EPA determination.

## **6) Risk Management**

Management of risk is inherent in the conditioning of the permit.

## **7) Consultation with State Government & Other Authorities**

The application was referred to TasWater. A Submission to Planning Authority Notice (TWDA 2017/01206-MVC) was received on 8 October 2017 (attached document).

The application was referred to the Board of the Environment Protection Authority on 28 July 2017. The Determination on the Environmental Impact Assessment and Permit Conditions were received by Council on 2 January 2018.

## **8) Community Consultation**

Authorisation to notify the application was received by the EPA on 14 September 2017. The application was advertised on 16 September 2017 for a period of 28 days.

One (1) representation was received (attached document). The representation is discussed in the assessment below. In accordance with EMPCA, the representation was forwarded to the EPA on 17 October 2017. The EPA assess all environmental matters raised in the representation. The EPA Environmental Assessment Report is included as an attached document.

## 9) Financial Impact

Not applicable

## 10) Alternative Options

Council can either approve the application with amended conditions, or refuse the application.

## 11) Officers Comments

### Zone

The subject property is located in the General Industrial Zone within the Birralea Road Industrial Precinct Specific Area Plan. The land surrounding the site is located in the General Industrial Zone and Rural Resource Zone.

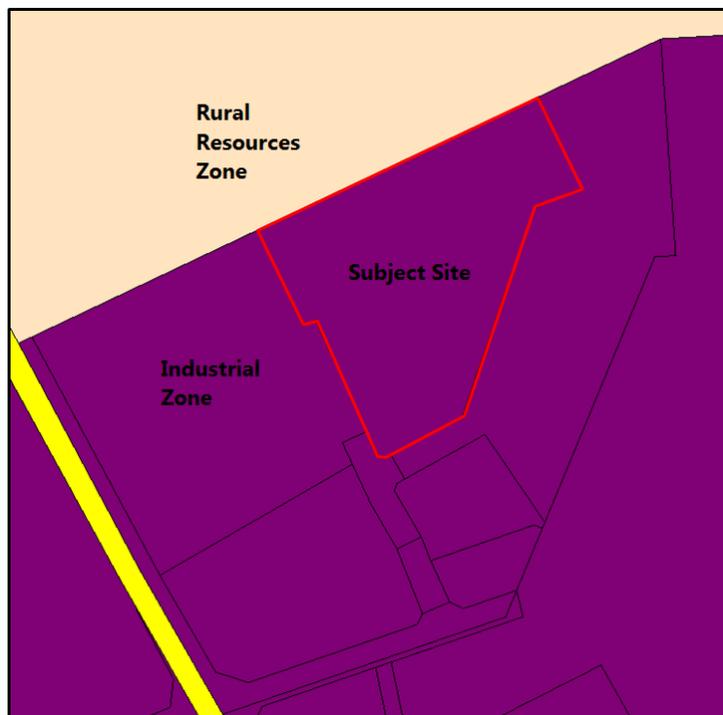


Figure 4: Zoning map of subject and adjoining land

## **Use Class**

Table 8.2 of the Scheme, categorises the proposed use class as:

- Manufacturing & Processing

Manufacturing & Processing is specified in section 25.2 - Use Table as being Permitted. The Permitted status is dependent on the use and development meeting all of the applicable Acceptable Solutions in the planning scheme.

In this instance:

- The development is a scheduled Level 2 Activity which is subject to a Discretionary permit process under section 57 of LUPAA.
- The use and development relies on Performance Criteria under the Planning Scheme.

## **Applicable Standards**

This assessment considers all applicable planning scheme standards.

In accordance with the statutory function of the State Template for Planning Schemes (Planning Directive 1), where use or development meets the Acceptable Solutions it complies with the planning scheme, however it may be conditioned if considered necessary to better meet the objective of the applicable standard.

Where use or development relies on performance criteria, discretion is applied for that particular standard only. To determine whether discretion should be used to grant approval, the proposal must be considered against the objectives of the applicable standard and the requirements of Section 8.10.

A brief assessment against all applicable Acceptable Solutions of the General Industrial Zone, Codes and the Birralee Road Industrial Precinct Specific Area Plan is provided below. This is followed by a more detailed discussion of any applicable Performance Criteria and the objectives relevant to the particular discretion.

## **Compliance Assessment**

The following table is an assessment against the applicable standards of the Meander Valley Interim Planning Scheme 2013.

<b>Birrilee Road Industrial Precinct</b>			
Scheme Standard		Comment	Assessment
<b>F1.3 Use Standards</b>			
A1	No direct access to Birrilee Road except where: a) the existing farm accesses to CT151111/1 are not intensified by more than an additional 20 vehicle movements per day or new access to a side road. b) access to the fuel depot located on CT103017/1 is not intensified. c) for existing accesses other than those described in the above clauses, any intensification of an existing use is to be accompanied by the consent of the Department of Infrastructure, Energy and Resources.	No direct access to Birrilee Road is proposed	Complies
A2	Access on side roads is to be located a minimum distance of 50m from any junction with Birrilee Road.	Access is greater than 50 m from a junction with Birrilee Road, via Integrity Drive	Complies
<b>F1.4.1 Building Design and Siting</b>			
A1	The maximum height of buildings must not exceed 15 metres, with ancillary structures such as towers, stacks and the like to be a maximum height of 30m.	Building heights are listed below: <ul style="list-style-type: none"> <li>• Silo – 18m</li> <li>• Truck Intake – 15m</li> <li>• Process building – 26m</li> <li>• Raw Materials/ Finished Goods – 12m</li> </ul>	The height of the process building relies on Performance Criteria

		<ul style="list-style-type: none"> <li>• Liquid Storage – 9m</li> <li>• Admin &amp; Amenities – 3.5m</li> <li>• Workshop &amp; Spare Parts – 6m</li> </ul>	
A2	Buildings must be setback a minimum distance of: <ul style="list-style-type: none"> <li>a) 15 metres to the Birralelee Road frontage; and</li> <li>b) 8 metres to the primary frontage to all other roads;</li> <li>c) 3 metres to the secondary frontage to all other roads.</li> </ul>	Buildings are located 28m from the frontage and greater than 3m from the future secondary frontage	Complies
A3	Buildings must be setback a minimum distance of: <ul style="list-style-type: none"> <li>a) 3 metres to a side boundary; and</li> <li>b) 6 metres to the rear boundary.</li> </ul>	<ul style="list-style-type: none"> <li>• Buildings are located 26m from the side boundary</li> <li>• Buildings are located greater than 100m from the rear boundary</li> </ul>	Complies
A4	The predominant building materials are to be non-reflective.	The materials of the predominant buildings are 'Pale Eucalypt' Colorbond	Complies
<b>F1.3.4 Signage</b>			
A1	A1.1 Signage must not be visible from the Bass Highway; and A1.2 Signage fronting Birralelee Road shall be limited to those premises with direct access to Birralelee Road.	<ul style="list-style-type: none"> <li>• Signage will not be visible from the Bass Highway</li> <li>• The angle of view from the highway is screened by</li> </ul>	Complies

		topography and standing vegetation <ul style="list-style-type: none"> <li>• The lot does not have frontage to Birralee Road and all signage is contained on the subject site</li> </ul>	
<b>F1.3.5 Stormwater</b>			
A1	Development must include stormwater treatment devices or systems to which all surface water is directed prior to discharge.	Stormwater treatment devices are proposed and will capture all surface water prior to discharge into the reticulated stormwater system	Complies

<b>Road and Railway Assets Code</b>			
Scheme Standard		Comment	Assessment
<b>E4.6.1 Use and road or rail infrastructure</b>			
A1	Sensitive use within 50m of a category 1 or 2 road with a speed limit of more than 60km/h, a railway or future road or railway, does not increase the annual average daily traffic movements by more than 10%.	Not applicable	
A2	For roads with a speed limit of 60km/h or less the use must not generate more than 40 movements per day.	<ul style="list-style-type: none"> <li>• 20 daily truck movements</li> <li>• Eight normal hour workers equating to 16 daily movements</li> <li>• Three eight-hour shifts of</li> </ul>	Relies on Performance Criteria

		<p>four employees equating to 16 vehicle movements plus four for the third shift.</p> <ul style="list-style-type: none"> <li>• Total of 56 vehicle movements per day</li> </ul>	
A3	For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic movements by more than 10%.	Not applicable	
<b>E4.7.2 Management of Road Accesses and Junctions</b>			
A1	For roads with a speed limit of 60km/h or less the development must include one access providing both entry and exit, or two accesses providing separate entry and exit.	One access serving as both entry and exit	Complies
A2	For roads with a speed limit of more than 60km/h the development must not include a new access or junction.	Not applicable	
<b>E4.7.4 Sight Distance at Accesses, Junctions and Level Crossings</b>			
A1	<p>Sight distances at</p> <ol style="list-style-type: none"> <li>an access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.7.4; and</li> <li>rail level crossings must comply with <i>AS1742.7</i>; or</li> <li>If the access is a</li> </ol>	There is greater than 105m of sight distance to the intersection with Roxford Avenue	Complies

	temporary access, the written consent of the relevant authority has been obtained.		
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<b>Car Parking and Sustainable Transport Code</b>			
Scheme Standard		Comment	Assessment
<b>6.6.1 Car Parking Numbers</b>			
A1	The number of car parking spaces must not be less than the requirements of:  a) Table E6.1; or b) a parking precinct plan.	<ul style="list-style-type: none"> <li>• 20 car parking spaces proposed</li> <li>• Manufacturing and Processing - 1 space per 200m<sup>2</sup> of net floor area or 2 spaces per 3 employees (whichever is the greater)</li> <li>• 26 car parking spaces required</li> </ul>	Relies on Performance Criteria
<b>E6.6.3 Taxi Drop-off and Pickup</b>			
A1	One dedicated taxi space must be provided for every 50 car spaces required by Table E6.1 or part thereof (except for dwellings in the General Residential Zone.	There is area available in the car park for taxi drop-off and pick-up	Complies
<b>E6.6.4 Motorbike Parking Provisions</b>			
A1	One motorbike parking space must be provided for each 20 car spaces required by Table E6.1 or part thereof.	One motorbike parking space has been provided	Complies
<b>E6.7.1 Construction of Car Parking Spaces and Access Strips</b>			
A1	All car parking, access strips manoeuvring and circulation spaces must be:  a) formed to an adequate level and drained; and	<ul style="list-style-type: none"> <li>• The car parking, access strips, manoeuvring and circulation</li> </ul>	Complies

	<p>b) except for a single dwelling, provided with an impervious all weather seal; and</p> <p>c) except for a single dwelling, line marked or provided with other clear physical means to delineate car spaces.</p>	<p>spaces are sealed in asphalt and concrete and appropriately drained</p> <ul style="list-style-type: none"> <li>• Car parking spaces are shown as being delineated</li> </ul>	
<b>E6.7.2 Design and Layout of Car Parking</b>			
A1	<p>A1.1 Where providing for 4 or more spaces, parking areas (other than for parking located in garages and carports for dwellings in the General Residential Zone) must be located behind the building line; and</p> <p>A1.2 Within the General Residential Zone, provision for turning must not be located within the front setback for residential buildings or multiple dwellings.</p>	<ul style="list-style-type: none"> <li>• The car parking spaces will be located forward of the building line</li> <li>• A1.2 - Not applicable</li> </ul>	Relies on Performance Criteria
A2	<p>A2.1 Car parking and manoeuvring space must:</p> <p>a) have a gradient of 10% or less; and</p> <p>b) for more than 4 cars, enter and exit the site in a forward direction; and</p> <p>c) have access width not less than and not 10%</p>	<p>A2.1</p> <ul style="list-style-type: none"> <li>• The gradient is less than 10%</li> <li>• Vehicles enter and exit the site in a forward direction</li> <li>• The access is 12m width which is more than 10%</li> </ul>	Relies on Performance Criteria

	<p>greater than Table E6.2; and</p> <p>d) have a width of access and manoeuvring space to parking spaces not less than Table E6.3 where:</p> <p>(i) there are three or more spaces; and</p> <p>(ii) where parking is more than 30m from the road; or</p> <p>(iii) the sole vehicle access is to a category 1, 2, 3 or 4 road; and</p> <p>A2.2</p> <p>The layout of car spaces and access ways must be designed in accordance with <i>Australian Standard AS 2890.1</i>.</p>	<p>greater than the required 4.5m when providing 6-20 car parking spaces</p> <p>A2.2</p> <ul style="list-style-type: none"> <li>Car parking spaces comply with the standard</li> </ul>	
<b>E6.7.4 Parking for Persons with a Disability</b>			
A1	All spaces designated for use by persons with a disability must be located closest to the main entry point to the building.	The disability car park is located closest to the main entry point to the building	Complies
A2	Accessible car parking spaces for use by persons with disabilities must be designed and constructed in accordance with AS/NZ 2890.6 2009 Parking facilities – Off-street parking for people with disabilities.	The disability car park is designed to meet the standard	Complies
<b>E6.7.6 Loading and Unloading of Vehicles, Drop-off and Pickup</b>			
A1	For retail, commercial, industrial, service industry, warehouse or storage uses: <p>a) at least one loading bay</p>	<ul style="list-style-type: none"> <li>An area of approximately 12 m by 55m (660m<sup>2</sup>) by 6</li> </ul>	Complies

	<p>must be provided in accordance with Table E6.4; and</p> <p>b) loading and bus bays and access strips must be designed in accordance with <i>Australian Standard AS/NZS 2890.3 2002.</i></p>	<p>m in height is allocated for loading</p> <ul style="list-style-type: none"> <li>• Loading bays have been provided in accordance with the standard</li> </ul>	
<b>E6.8.1 Pedestrian Walkways</b>			
A1	Pedestrian access must be provided for in accordance with Table E6.5.	The 1m wide pedestrian walkway meets the table	Complies

### Signage Code

Scheme Standard	Comment	Assessment	
<b>E14.6.7 Pole Signs</b>			
A1	Pole signs must only be erected in Urban Mixed Use Zone, Local Business, General Business Zones, Light Industrial Zone, General Industrial Zone and Rural Resource Zone.	The pole sign is located in the General Industrial Zone	Complies
A2	<p>Pole Signs must:</p> <p>a) be the only type of pole sign on the premises; and</p> <p>b) not be illuminated other than by baffled lights; and</p> <p>c) be double sided or erected so the back of the sign is not visible from a public space; and</p> <p>d) have a maximum area of 4 square metres per side with no more than 2 display sides; and</p> <p>e) have a maximum height of 8 metres.</p>	<ul style="list-style-type: none"> <li>• The pole sign is the only pole sign on the site and is illuminated with baffled lights</li> <li>• The back of the sign is not visible from public space.</li> <li>• The sign is 2.4m by 1.4m having an area of 3.36m<sup>2</sup></li> <li>• The height of</li> </ul>	Complies

		the sign is 6m	
<b>E14.6.12 Wall Signs</b>			
A1	<p>Wall Signs in all zones must:</p> <p>a) not extend further than the height of the building; and</p> <p>b) not be illuminated by other than baffled lights; and</p> <p>c) not project further than 0.4 metres from the wall to which it is affixed; and</p> <p>d) have a maximum display area 25% of the area of the wall.</p>	<ul style="list-style-type: none"> <li>• The wall sign will not extend further than the height of the building</li> <li>• It will not be illuminated</li> <li>• It will not project further than 0.4m from the wall</li> <li>• The display area is 6.1 m by 3.66 m having an area of 22.32m<sup>2</sup>, less than 25% of the area of the wall</li> </ul>	Complies

### **Performance Criteria**

#### **Birrlee Road Industrial Precinct- Specific Area Plan**

##### F1.4.1 Building Design and Siting

#### **Objective**

- a) *To ensure that larger building elements are not obtrusive within the broader landscape.*

#### **Performance Criteria P1**

*Buildings must be designed to be complementary to the character of the industrial precinct and not be individually obtrusive within the broader rural landscape.*

#### **Comment:**

The proposed process building will be 26m in height. The maximum height prescribed in the Acceptable Solution is 15m for buildings. As such the increase in height requires assessment against the performance criteria.

Valley Central is a growing industrial estate, designed to accommodate large-scale, industrial uses. A formed building cluster is establishing within

the precinct with finished heights for the buildings and towers already constructed and large scale manufacturing buildings. This character is consistent with the long established form and scale of the Tasmanian Alkaloids site. The development will be an addition to the building cluster and will not be individually obtrusive as the development will be consistent with surrounding and nearby structures. Whilst a proportion of the proposed development is higher than the prescribed height, the additional height is required for the manufacturing and processing of the product. This is consistent with other processing structures in the precinct.

The cladding of the building in 'pale eucalypt' (green) Colorbond which is consistent with other buildings in the precinct and will assist to integrate the building into the broader landscape of surrounding pasture and remnant stands of eucalypt. There is one main building of various heights being 26m, 24m, 9m and 6m. The changing height and shape of the building articulates an otherwise large surface area, reducing the visual bulk of the building. The topography of the site and surrounding land also assists to minimise the viewed extent of the buildings, given that the development area is cut into the slope.

The building is designed for a specific industrial use and located in an industrial estate for which tall buildings are expected. The additional height is not considered to be individually obtrusive within the broader rural landscape as it will blend in with other buildings in the wider precinct and is also partly screened by vegetation from various viewpoints.

The proposed development will be visible, however it is considered to be a reasonable impact. From the longer vistas the buildings will be less visible as views from roads are variously obscured by the profile of the road alignment, topography or remnant vegetation. Within the industrial precinct it will be highly visible, however this is the existing and anticipated character of the precinct.



Photo 5 – view south east on the northern approach from Birrale Road



Photo 6 – view east from Birrale Road where the bulk of development will be screened behind the hill and trees



Photo 7 – view north east from Birralea Road roundabout, where the bulk of development will be screened behind the hill, landscape plantings and existing buildings



Photo 8 – view north east from Bass Highway where the bulk of development will be screened behind the hill and vegetation

## Road and Railway Assets Code

### E4.6.1 Use and road or rail infrastructure

#### Objective

*To ensure that the safety and efficiency of road and rail infrastructure is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.*

#### Performance Criteria P2

*For roads with a speed limit of 60km/h or less, the level of use, number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.*

#### Comment:

The proposed development will generate 56 movements per day based on the number of people employed and the number of trucks making deliveries to the site.

Council's Director Infrastructure Services provided the following comments:

*The subject land falls within the Birralee Specific Area Plan and the access point is suitable within the planned road network for this area. This network has already been endorsed by Council and has been subject to previous assessment.*

*The extension of Integrity Drive will terminate in a cul-de-sac with no through traffic and access to the Ridley Agriproducts title only at this stage, in addition to TasBuilt Homes and the fuel depot. As such, vehicle movements will be limited to local traffic only. The proposed access is 12m wide, caters for the turning movements of large vehicles and will have a direct line of sight for the full length of Integrity Drive.*

*The proposed access is considered to be acceptable, considering the low traffic volumes, low speed environment, the standard of the road network and satisfactory sight distances.*

*The access will be required to be formed to Council standard.*

Recommended Condition:

- **Prior to the commencement of use, the proposed vehicle crossover must be designed and constructed to the satisfaction of Council's Director Infrastructure Services (Refer Note 1).**

**Note 1 - Prior to the construction of the vehicular crossover, separate consent is required by the Road Authority. A Driveway Crossover**

**Application Form is enclosed. All enquiries should be directed to Council's Infrastructure Department on telephone 6393 5312.**

## **Car Parking and Sustainable Transport Code**

### **6.6.1 Car Parking Numbers**

#### **Objective**

*To ensure that an appropriate level of car parking is provided to service use.*

#### **Performance Criteria P1**

*The number of car parking spaces provided must have regard to:*

- a) the provisions of any relevant location specific car parking plan; and*
- b) the availability of public car parking spaces within reasonable walking distance; and*
- c) any reduction in demand due to sharing of spaces by multiple uses either because of variations in peak demand or by efficiencies gained by consolidation; and*
- d) the availability and frequency of public transport within reasonable walking distance of the site; and*
- e) site constraints such as existing buildings, slope, drainage, vegetation and landscaping; and*
- f) the availability, accessibility and safety of on-road parking, having regard to the nature of the roads, traffic management and other uses in the vicinity; and*
- g) an empirical assessment of the car parking demand; and*
- h) the effect on streetscape, amenity and vehicle, pedestrian and cycle safety and convenience; and*
- i) the recommendations of a traffic impact assessment prepared for the proposal; and*
- j) any heritage values of the site; and*
- k) for residential buildings and multiple dwellings, whether parking is adequate to meet the needs of the residents having regard to:
  - i) the size of the dwelling and the number of bedrooms; and*
  - ii) the pattern of parking in the locality; and*
  - iii) any existing structure on the land.**

#### **Comment:**

It is calculated that 26 car parking spaces are required to comply with Table E6.1 of the planning scheme. The application is proposing 20 car parking spaces. As such, the reduction in parking spaces requires assessment against the performance criteria.

The nature of the use as a bulk producer is such that there is no direct sale of product to the public from the site. Actual parking demand is a factor of the daily staff requirements, including shift changeover, and a small number of visitor car parks for sales representatives, clients and the like, who account for only intermittent visitation.

An empirical assessment of maximum car parking required is:

- eight day staff;
- two shifts of four staff; and
- visitor spaces.

Staff parking accounts for 16 spaces with four spaces remaining (including one disability space) for visitor demand. Given the nature of visitor demand, this is considered to be sufficient provision of car parking.

It is noted that the nature of the development site, being a large facility, will not need to rely on any external car parking provision or shared arrangement. The proposal is a response to actual demand for spaces which is reasonably known due to the operations of other Ridley operations. The configuration of the car park and access driveway readily provides for expansion with additional spaces if necessary in the future without any impact on surrounding properties or public services.

#### E6.7.2 Design and Layout of Car Parking

##### **Objective**

*To ensure that car parking and manoeuvring space are designed and laid out to an appropriate standard.*

##### **Performance Criteria P1**

*The location of car parking and manoeuvring spaces must not be detrimental to the streetscape or the amenity of the surrounding areas, having regard to:*

- a) the layout of the site and the location of existing buildings; and*
- b) views into the site from the road and adjoining public spaces; and*
- c) the ability to access the site and the rear of buildings; and*
- d) the layout of car parking in the vicinity; and*
- e) the level of landscaping proposed for the car parking.*

##### **Comment:**

Car parking spaces located forward of the building line requires assessment against the performance criteria.

The site layout is arranged on the basis of process function with vehicle movements that circle the central development area to provide for loading

and unloading, servicing and weighing. The alignment of buildings and structures is to facilitate the unencumbered movement of large vehicles, a critical function of the site. The location and arrangement of car parking is to facilitate convenient parking for staff and visitors without impeding key functions of the facility, which requires vehicles to access the parking area as soon as possible after entering the site.

The development is a large facility which will be visible from many locations within the precinct, consistent with other uses within the precinct that also have parking forward of the building line.

Currently Integrity Drive is not formed beyond the access to the property. However, the Specific Area Plan for the General Industrial Precinct shows that there is potential for the road to be constructed further to service two lots to the west. Whilst the car park will be visible from the road, its siting will not be detrimental to the future streetscape as the road will be used only by the end lots and the car park is also setback approximately 8m from the boundary.

A landscape plan has not been submitted with the development application. Given the industrial nature of the area, landscaping to minimise impact on the streetscape or the surrounding area is not required. The Specific Area Plan has requirements for landscaping at the western and Birralee Road boundaries of the precinct and intentionally does not require internal landscaping.

The proposed location of the car parking area is consistent with the objective.

***Performance Criteria P2***

*Car parking and manoeuvring space must:*

- a) be convenient, safe and efficient to use having regard to matters such as slope, dimensions, layout and the expected number and type of vehicles; and*
- b) provide adequate space to turn within the site unless reversing from the site would not adversely affect the safety and convenience of users and passing traffic.*

**Comment:**

The access width of 12m exceeds the 10% increase to the standard of 4.5m and as such is assessed under the performance criteria.

The standard assumes a direct relationship between the access point to the

site and the car park. In this instance, the car park is safely distant from the access to the road to provide for movements of heavy vehicles and clear visibility in the interactions between small and large vehicles.

The car parking and manoeuvring space is considered convenient, safe and efficient. The design is to enable vehicles to enter and exit the site in a forward direction.

The following condition is recommended:

- **Prior to the commencement of use:**
  - a) **the car park shall be constructed in accordance with AS2890.1 - 2004 – Parking Facilities Part 1: Off Road Car Parking ;**
  - b) **the disability car parking space shall be designed constructed in accordance with AS/NZ 2890.6 - 2009 Parking facilities –Off-street parking for people with disabilities.**

The design of the car parking and manoeuvring space complies with the objective, subject to the recommended condition.

### **Recommendations Arising From Acceptable Solutions**

#### **F1 Birralee Road Industrial Precinct Specific Area Plan**

##### **F1.3.5 Stormwater**

The objective requires that stormwater runoff from development sites is managed to achieve appropriate water quality prior to discharge to the reticulated system.

The proposal includes an open drain around the plant area and will direct 'clean' storm water runoff from this drain to the nominated discharge point to the reticulated system via a sediment interceptor pit. The liquid storage and loading area will be bunded, with stormwater from these areas being collected for off-site discharge. It appears that the application is suggesting that other hard stand areas of runoff such as the silos, parking and driveways will be appropriately treated through the open 'swale' drain before discharge to the reticulated system.

It is considered unlikely that a grass swale will provide appropriate treatment of stormwater run-off from significant hardstand areas, though it will be appropriate for the overland catchment of gravel areas. Sediment traps are not required for drainage of grassed areas as these are clean enough to discharge to the reticulated system. Given the large area of open hardstand, a stormwater drainage design is required that includes a triple interceptor device through which hardstand drainage is discharged. This will

ensure that the surface run-off from the site will be adequately treated for hydrocarbons and oils which is consistent with the objective.

The following condition is recommended:

- **Prior to the commencement of works, stormwater drainage design drawings for the development site must be submitted to the satisfaction of Council's Plumbing Surveyor and must include hardstand areas discharging through a triple interceptor device to the reticulated stormwater connection point.**

## **E6 Car Parking and Sustainable Transport Code**

### **E6.7.1 Construction of Car Parking Spaces and Access Strips**

It is recommended that the development is conditioned to ensure that car parking, access strips and circulation areas are sealed and the car parking spaces clearly delineated.

The following condition is recommended:

- **Prior to the commencement of the use, all car parking, access strips and circulation areas must be:**
  - a) provided with an impervious all weather seal; and**
  - b) car parking spaces must be line marked.**

## **Representations**

One (1) representation was received (attached document). A summary of the representation is as follows:

Tasmanian Alkaloids Pty. Ltd.

- Air quality - Concern that the odour emissions from the use and development will not comply with the State Air Quality Environment Protection Policy and potential impacts on Tasmanian Alkaloids site.
- Stormwater runoff - concern that stormwater from the development will enter private land resulting in discharge to Tasmanian Alkaloids land.

## **Comment:**

- Air quality

This matter is assessed by the Board of the Environment Protection Authority and as such cannot be considered by Council. The Board's assessment is included as an attached document and has found that

the proposed use is acceptable subject to conditions that are required to be included in any permit issued by Council.

- Stormwater runoff

There is a requirement in the Specific Area Plan for this precinct that all development must connect to the reticulated stormwater system, with all stormwater from individual sites being treated by water quality devices appropriate to the nature of development, prior to discharge to the reticulated system.

The application describes the interception of stormwater through open drains and the drainage of the site through an interceptor, to the reticulated system. This can be achieved either through the existing easement or directly to Integrity Drive.

Detailed stormwater engineering designs are typically provided for the plumbing permit application whereby sizing of infrastructure ensures that there is no overtopping in peak storm events, however it is clear the proposal collects all stormwater from the development area as required. An additional condition is recommended to include a triple interceptor device in the drainage design to ensure appropriate water quality prior to discharge to the reticulated system. Stormwater from the developed precinct is collected and directed under Birralee Road to the water course on the western side of Birralee Road.

There is no risk of stormwater from this development reaching the Tasmanian Alkaloids site as expressed in the representation and will actually serve to reduce overland flows by intercepting and redirecting stormwater that currently flows over undeveloped land to the reticulated system.

### **Conclusion**

In conclusion, it is considered that the application for Use and Development for Level 2 Activity - Manufacturing & Processing (Aqua Feed Production Facility) can effectively be managed by conditions and should be approved.

**AUTHORS:** Natasha Whiteley  
TOWN PLANNER

Jo Oliver  
SENIOR STRATEGIC PLANNER

## 12) Recommendation

***It is recommended that the application for Use and Development for Level 2 Activity - Manufacturing & Processing (Aqua Feed Production Facility) on land located at 18 Integrity Drive, Westbury (CT: 174186/1) by Ridley AgriProducts Pty Ltd, requiring the following discretions:***

- Clause F1.4.1 - Building design and siting
- Clause E4.6.1 - Use and road or rail infrastructure
- Clause E6.6.1 - Car parking numbers
- Clause E6.7.2 - Design and layout of car parking

**be APPROVED, generally in accordance with the endorsed plans:**

- a) AECOM Australia Pty Ltd; Date: 11 September 2017; Development Proposal and Environmental Management Proposal; Ref 60537374.
- b) Wiley & Co Pty Ltd; Date: 17/5/2017; Project No: W20661; Issue 4; Drawing No: 00A001, 00A010 & 00A011.
- c) Ridley; Ridley Signage; Signage Standard for Main Entrance (sheets 1 & 2) and Mill (sheet 3).

and subject to the following conditions:

1. **Prior to the commencement of works, stormwater drainage design drawings for the development site must be submitted to the satisfaction of Council's Plumbing Surveyor and must include hardstand areas discharging through a triple interceptor device to the reticulated stormwater connection point.**
2. **Prior to the commencement of use:**
  - a) **the proposed vehicle crossover must be designed and constructed to the satisfaction of Council's Director Infrastructure Services. (Refer Note 1)**
  - b) **the car park shall be constructed in accordance with AS2890.1 - 2004 – Parking Facilities Part 1: Off Road Car Parking ;**
  - c) **the disability car parking spaces shall be designed constructed in accordance with AS/NZ 2890.6 -2009 Parking facilities –Off-street parking for people with disabilities;**
  - d) **all car parking, access strips and circulation areas must be provided with an impervious all weather seal;**
  - e) **car parking spaces must be line marked; and**

- f) **construction of the approved stormwater drainage is to be completed in accordance with the endorsed stormwater design drawings, to the satisfaction of Council's Plumbing Surveyor.**
3. **Signage must be located within the title boundary.**
  4. **The development must be in accordance with the Submission to Planning Authority Notice issued by TasWater (TWDA No 2017/01206-MVC) attached.**
  5. **The use and development must be undertaken in accordance with Permit Part B – Permit Conditions – Environmental No. 9685 attached, issued by the Board of the Environment Protection Authority.**

**Notes:**

1. **Prior to the construction of the vehicular crossover, separate consent is required by the Road Authority. A Driveway Crossover Application Form is enclosed. All enquiries should be directed to Council's Infrastructure Department on telephone 6393 5312.**
2. Any other proposed development and/or use, including amendments to this proposal, may require a separate planning application and assessment against the Planning Scheme by Council. All enquiries can be directed to Council's Community and Development Services on 6393 5320 or via email: [mail@mvc.tas.gov.au](mailto:mail@mvc.tas.gov.au)
3. This permit does not imply that any other approval required under any other by-law or legislation has been granted. The following additional approvals may be required before construction commences:
  - a) Building approval
  - b) Plumbing approval

All enquiries should be directed to Council's Permit Authority on 6393 5322 or Council's Plumbing Surveyor on 0419 510 770.

4. This permit takes effect after:
  - a) The 14 day appeal period expires; or

- b) Any appeal to the Resource Management and Planning Appeal Tribunal is abandoned or determined; or.
  - c) Any other required approvals under this or any other Act are granted.
5. A planning appeal may be instituted by lodging a notice of appeal with the Registrar of the Resource Management and Planning Appeal Tribunal. A planning appeal may be instituted within 14 days of the date the Corporation serves notice of the decision on the applicant. For more information see the Resource Management and Planning Appeal Tribunal website [www.rmpat.tas.gov.au](http://www.rmpat.tas.gov.au)
6. If an applicant is the only person with a right of appeal pursuant to section 61 of the Land Use Planning and Approvals Act 1993 and wishes to commence the use or development for which the permit has been granted within that 14 day period, the Council must be so notified in writing. A copy of Council's Notice to Waive Right of Appeal is attached.
7. This permit is valid for two (2) years only from the date of approval and will thereafter lapse if the development is not substantially commenced. An extension may be granted if a request is received.
8. In accordance with the legislation, all permits issued by the permit authority are public documents. Members of the public will be able to view this permit (which includes the endorsed documents) on request, at the Council Office.
9. If any Aboriginal relics are uncovered during works;
- a) All works are to cease within a delineated area sufficient to protect the unearthed and other possible relics from destruction,
  - b) The presence of a relic is to be reported to Aboriginal Heritage Tasmania Phone: (03) 6233 6613 or 1300 135 513 (ask for Aboriginal Heritage Tasmania Fax: (03) 6233 5555 Email: [aboriginal@heritage.tas.gov.au](mailto:aboriginal@heritage.tas.gov.au)); and
  - c) The relevant approval processes will apply with state and federal government agencies.

## **DECISION:**

# Development Proposal and Environmental Management Plan

## Development Proposal and Environmental Management Plan

Client: Ridley AgriProducts Pty Ltd (Ridley)

ABN: N/A

Prepared by

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## Quality Information

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Date 11-Sep-2017

Prepared by Fran Crossan & Natasha Reifschneider

Reviewed by Jeff Smith

### Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
1	27-Jun-2017	Draft	Natasha Reifschneider Associate Director Environment	
2	19-Jul-2017	Final Issue 1	Natasha Reifschneider Associate Director Environment	
3	31-Aug-2017	Final Issue 2	Natasha Reifschneider Associate Director Environment	
4	05-Sep-2017	Final Issue 4	Natasha Reifschneider Associate Director Environment	
5	07-Sep-2017	Final Issue 5	Natasha Reifschneider Associate Director Environment	
6	11-Sep-2017	Final Issue 6	Natasha Reifschneider Associate Director Environment	

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## Acronyms

Abbreviation	Description
ABL	Assessment background level
AECOM	AECOM Australia Pty Ltd
AHD	Australian Height Datum
Air NEPM	National Environment Protection (Ambient Air Quality) Measure 2015
ANZECC	The Australian and New Zealand Guidelines for Fresh and Marine Water Quality document
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
AVATG	Assessing Vibration: a technical guideline'
BAL	Bushfire Attack Level
BCA	Building Code of Australia
bgs	Below ground surface
BOC	BOC Limited
BOD	Biological Oxygen Demand
BOM	Bureau of Meteorology
BS	British Standard
CASA	Civil Aviation Safety Authority
CEMP	Construction Environmental Management Plan
dB	Decibel
dB(A)	A Weighted decibel
DEFRA	Department for Environment, Food and Rural Affairs
DEWHA	Commonwealth Department of Environment, Water, Heritage and the Arts
DIN	Deutsches Institut für Normung
DPIWE	Environment Division, Department of Primary Industries, Water and Environment (DPIWE)
DPEMP	Development Proposal and Environmental Management Plan
EMP	Environmental Management Plan
EMPC Act	Environmental Management and Pollution Control Act 1994
EPA	Environmental Protection Authority
EPBC Act	Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Abbreviation	Description
FRA	Fractured Rock Aquifer
HAZOP	A hazard and operability study
HV	High Voltage
IBC	Intermediate Bulk Container
KG	Kilograms
L10	Sound pressure level exceeded for 10%
L90	Sound pressure level exceeded for 90%
Leq	Equivalent continuous sound level
LGA	Local Government Area
L <sub>Amax</sub>	Maximum sound pressure level
L <sub>min</sub>	Minimum sound pressure level
L/s	Litres/second
HV	High Voltage
IBC	Intermediate Bulk Container
KG	Kilograms
L10	Sound pressure level exceeded for 10%
L90	Sound pressure level exceeded for 90%
Leq	Equivalent continuous sound level
LGA	Local Government Area
L/s	Litres/second
HV	High Voltage
IBC	Intermediate Bulk Container
KG	Kilograms
L10	Sound pressure level exceeded for 10%

## Executive Summary

Ridley AgriProducts Pty Ltd (Ridley) is proposing to develop an Aqua Feed Mill facility that will manufacture aqua feed in the Valley Central Industrial Precinct in Westbury, Tasmania. The Aqua Feed Mill is proposed to manufacture and supply aqua feed primarily to Tasmania's aqua industry, as well as to New Zealand. Aqua feed production involves the delivery and storage of raw materials, grinding, mixing and drying feed into pelleted feed and packaging.

This Development Proposal and Environmental Management Plan (DPEMP) has been prepared by AECOM Australia Pty Ltd (AECOM) on behalf of Ridley to demonstrate that the proposal is consistent with objectives of relevant statutes, policies and to assist the Board of the Environment Protection Authority (EPA) to make an assessment of the proposal. The DPEMP has been prepared with particular reference to the 'General Guidelines for Preparing a Development Proposal and Environmental Management Plan for Level 2 and 'called in' Activities' and the 'Development Proposal and Environmental Management Plan Project Specific Guidelines for Ridley AgriProducts Pty Ltd Aquaculture Feed Mill (Produce Processing Works)' May 2017 issued by the Board of the EPA.

The DPEMP will also inform the decision making process of the Meander Valley Council in giving consideration to the issue of a Planning Permit for the facility.

### Existing Environment

The proposed site of the Aqua Feed Mill is Lot 17 Integrity Drive (as per the current land title) within the Valley Central Industrial Precinct, Westbury on vacant land within the General Industrial Zone. The Industrial Precinct was established by Meander Valley Council with a view to attracting industries like the proposed Ridley Aqua Feed Mill to the area. The site is approximately 2 kilometres from the Westbury Township.

The site of the proposed Aqua Feed Mill is surrounded by several existing industrial uses, the most significant being the Tasmanian Alkaloids plant approximately 500 metres to south of the site. The closest residence is located approximately 900 metres to the north-east of the site, with the next closest residents being located over 1.4km from the site boundary.

The site is relatively flat with ground rising from approximately 186 metres (AHD) in the south-west to approximately 191 metres (AHD) in the north-east. The site is dominated by exotic grasses as a result of previous agricultural land use. The shallow man-made drain that crosses the subject site contains scattered native sedge species. The remainder of the site contains little native vegetation.

The site is surrounded by a number of water bodies (dams, drains and rivers), including Quamby Brook located approximately 1.4km to the south east of the site and the Meander River approximately 1.1km to the north.

### Potential Effects

As required by the General and Project Specific Guidelines, a range of potential environmental effects of the proposed Aqua Feed Mill have been assessed in this DPEMP, including odour, noise, traffic, greenhouse gas, waste, water impacts, and flora and fauna.

The Project Specific Guidelines identified one Key Issue, the 'Potential impacts of air emissions on sensitive receptors' which 'should be the principal focus of the DPEMP'.

A summary of the conclusions of each potential environmental impact assessment is as follows:

#### Air Emissions

Odour emissions generated in the plant from the production process are directed to a biofilter which uses moist organic materials to adsorb and then biologically degrade odorous compounds. Three odour emission scenarios have been modelled for the project, the first assuming maximum operating conditions of 95,000 m<sup>3</sup>/hr of airflow through the biofilter and an odour concentration of 500 OU, the second, standard operating conditions of 70,000 m<sup>3</sup>/hr of air flow through the biofilter and an odour concentration of 500 OU and the third with 70,000 m<sup>3</sup>/hr of air flow through the biofilter and an odour concentration of 250 OU.

The EPA odour assessment criteria states that 2 OU (Odour Units) as the maximum 1 hour value over a full year period should not be exceeded at the site boundary. Eight discrete receptors (residences) are located within 2km of the proposed source. The modelling showed that none of these sensitive receptors had odour levels which exceeded the 2 OU assessment criteria. The highest concentration recorded at any of the sensitive receptors was at Receptor A of 0.78 OU for Scenario 1, 0.57 OU for Scenario 2 and 0.29 for Scenario 3.

However, the peak odour concentration at the Aqua Feed Mill site boundary exceeds the 2 OU limit at 73 OU, 54 OU and 32 OU for Scenarios 1, 2 and 3 respectively.

Further evaluation of alternative technologies with the potential to reduce odour concentrations at the site boundary including adsorption, thermal treatment and wet scrubbers was carried out by Ridley. It was concluded that the considerably higher capital and maintenance costs associated with technologies other than the proposed biofilter were not warranted.

This contention is on the basis that odour concentration compliance is achieved at all sensitive receptors and that the odour itself is a neutral, non-offensive odour. This was established by an independent air quality company (The Odour Unit) who were commissioned to carry out odour intensity and hedonic tone testing of air samples collected from the biofilter located at Ridley's Narangba facility in South East Queensland.

The report prepared by The Odour Unit indicates that the biofilter odour is unlikely to cause an environmental nuisance based on its neutral to slightly unpleasant hedonic tones at weak and distinct perceived intensities.

In order to meet the requirement of the Air EPP that an environmental nuisance is not created, an odour management plan will be developed and implemented.

### **Liquid Waste and Surface Water**

The proposed Aqua Feed Mill is not expected to generate any unacceptable impacts on surface water.

Clean stormwater resulting from rainfall will be diverted into the natural drainage system on and around the site and pass through an interceptor and swale system for treatment.

Areas within the plant where there is the potential for a spill to contaminate stormwater will be fully bunded and any contaminated water disposed of offsite.

The three wastewater streams generated by the operation (boiler blow down, biofilter seepage and wash water) will all be contained and disposed of to the sewer system under a Trade Waste Agreement and have no potential to enter the environment.

Ridley is currently in discussions with Taswater to obtain a Trade Waste Agreement (TWA). As a contingency measure, Ridley will consider flow balancing and/or pre-treatment if required to meet sewer discharge requirements. Any such system will be enclosed to minimise fugitive odour emissions.

### **Groundwater**

The proposed Aqua Feed Mill is not anticipated to impact on groundwater quality or potential users of groundwater.

The facility is not generating any contaminated wastewater that will be discharged to the environment and which could potentially enter the aquifer (wastewater will be discharged to sewer via a Trade Waste Agreement).

Uncontaminated stormwater will be discharged into the natural drainage system on and around the site and would not have a negative impact on groundwater quality if it reached the aquifer.

The risk of water quality impacts to the aquifer beneath the site is very low due to the presence of low permeability clay across the top 3 metres of the site which would inhibit the flow of any contaminated water towards the aquifer.

### **Noise Emissions**

Noise levels from all construction phase activities are within the required regulatory limits at all receptors (residences and industrial offices).

Additional noise associated with construction traffic will be negligible.

The distance between the proposed plant and receptors means there will be no adverse effects associated with construction vibration.

The noise modelling showed that noise levels associated with operation of the Aqua Feed Mill are within the required regulatory noise limits at all receptors except Receptor A, a residence approximately 900 metres from the site. Exceedances at Receptor A would only occur in the evening and night if delivery roller doors on the north-western side of the building were left open. As there are no deliveries to the plant in the evening or night, roller doors will be closed for security reasons and compliance at Receptor A is readily achieved.

Night time  $L_{Amax}$  noise levels are within the required regulatory limits for sleep disturbance.

### **Waste Management**

Solid waste generated by the proposed Aqua Feed Mill is not considered to create any unacceptable environmental impact.

Any solid or semi-solid wastes generated by the aqua feed production process are recycled back into the process with no disposal required.

Bag-in-boxes and bulk feed bags which are the main waste stream and intermediate bulk container (IBC) will either be fully recycled or returned to the supplier or to a third party re-conditioner.

Small amounts of waste from dust collection and general office and staff wastes will be disposed of to landfill via traditional municipal or industrial waste collections.

### **Dangerous Goods**

The potential for Dangerous Goods and Environmentally Hazardous Materials to create unacceptable risks or impacts as a result of the proposed Aqua Feed mill is low.

LPG is the only classified Dangerous Good to be stored on site, and the storage facility will be designed in accordance with relevant Australian Standards and emergency protocols.

Mitigation measures have been incorporated into the plant layout and design such that liquid storage and handling areas will be designed with bunds to accommodate 120% capacity of the largest tank volume, tanks will be fitted with level alerts, and the internal stormwater system will have an isolation valve that can be closed in the event of a spill.

### **Biodiversity and Natural Values**

The proposed Aqua Feed Mill should have no adverse impacts on biodiversity or natural values.

The site is highly degraded by past agricultural use and is characterised by exotic pasture species and weeds.

With the exception of the Green and Gold Frog, no Matters of National Environmental Significance (NMES) species listed under the Environment Protection and Biodiversity Conservation Act 1999 are known to occupy the site and there is an absence of suitable habitat for these species.

The Green and Gold Frog is known to exist in the wider area but is not present on the Aqua Feed Mill site as the only potential habitat (Drainage Line C) has been assessed as not suitable as habitat.

### **Marine and Coastal**

The proposed site for the Aqua feed Mill is located approximately 50 kilometres south of the nearest coastal area. The likelihood of the proposal impacting on marine and coastal areas is considered to be negligible.

### **Greenhouse Gas**

The proposed Aqua Feed Mill should have minimal impacts on Greenhouse gases and ozone depleting substances.

The total estimated annual greenhouse gas emission is 4,588 t CO<sub>2</sub>-e per year, with natural gas use making up the majority of the emissions. Total estimated emissions are well below National Greenhouse and Energy Reporting Regulation (NGER) thresholds.

The potential generation of ozone depleting substances associated with the facility are well below NGER reporting thresholds.

### **Heritage**

The proposed Aqua Feed Mill should have no adverse impacts on Heritage values.

The locality of the subject site has a long history of significant disturbance due to ongoing agricultural activities prior to subdivision. As a result of this site history, it is considered unlikely that the proposed Ridley Aqua Feed Mill would have impact on Aboriginal heritage.

In the event that Aboriginal artefacts are found during construction activities, legislative requirements would be followed to assess and protect these relics as appropriate.

The proposed Ridley Aqua Feed Mill is highly unlikely to impact on any area, place or site of non-Aboriginal cultural heritage. No listed sites have been identified within the Aqua Feed Mill site.

### **Land Use**

The proposed Aqua Feed Mill complies with the Industrial zoning of the land and is unlikely to impact on the amenity of surrounding industrial land uses.

The facility has significant buffer distances from other land uses and should not have any unacceptable amenity impacts on adjacent land uses.

The studies conducted as part of this DPEMP such as noise and air quality show that the Aqua Feed Mill can readily comply with regulatory requirements at the nearest sensitive receptors (residences).

### **Visual Impact**

The proposed Aqua Feed Mill should not have any material adverse impacts on visual amenity in the locality.

The proposal is located in a planned industrial precinct and is in keeping with the general scale and type of development already existing in the estate.

The overall dimensions of the structures proposed are consistent with current industrial setting.

The proposed exterior colour of the facility has been selected to minimise contrast with landscape elements.

Only two of eight receptors (residences and industrial offices) in the wider vicinity have views of the proposed Aqua Feed Mill and these residences already experience views of the industrial estate and will not see a material change in their current outlook.

### **Socio-Economic**

The proposed Aqua Feed Mill will have a positive socio-economic benefit to Westbury and the wider region.

The facility will create both construction and permanent jobs during the operational life of the facility, and provide economic benefits to the transport sector with trucks being utilised to transport materials to and from the facility.

Ridley's local customer base will also benefit from reduced supply chain costs when compared with the current import of aqua feed from plants elsewhere in Australia.

### **Health and Safety**

Safety, health and environmental (SHE) issues will be managed to a high standard and comply with all regulatory requirements and Ridley corporate commitments.

A detailed SHE plan (currently in preparation) will be adopted for operation of the Aqua Feed Mill covering employees, contractors and visitors.

A reputable contractor will be engaged for construction of the facility and will be responsible for implementation of a detailed Construction HSE Plan compliant with regulations and Ridley expectations.

Site security protocols will also be adopted to ensure a safe and secure working environment.

### **Hazard and Risk Analysis**

The proposed Aqua Feed Mill facility is not considered 'high risk' as there is only one Dangerous Good being stored or used on site which is LPG.

Any potential hazards and risks will be effectively managed at the site through preliminary onsite risk assessments for new activities and the Risk Register provided in this DPEMP.

Where risks and hazards are above a low risk ranking, additional measures will be identified and implemented to achieve an acceptable risk level.

### **Fire Risk**

The location of buildings on the site means that the facility is in the low bushfire risk category.

Fire risk will be managed to a high standard and in compliance with all regulatory requirements. The facility will be fitted with fire safety systems required to satisfy the performance requirements of the National Construction Code – Building Code of Australia (BCA).

Site vegetation maintenance and general housekeeping will be undertaken to reduce fire risk.

A detailed Fire Response plan will be developed during the detailed design phase of the project.

### **Traffic Impacts**

The proposed Aqua Feed Mill will have no adverse impacts on the road network or other ancillary services.

The Bass Highway and Birralelee Road as the two main access roads have more than sufficient capacity to accommodate the relatively small number of trucks and cars associated with the Aqua Feed Mill.

Traffic studies have confirmed that the traffic associated with rezoning and growth of the industrial precinct will be within the capacity of existing roads and that truck access and egress to the precinct can be accommodated.

Services are available to current and future users of the industrial precinct and Ridley has engaged with relevant providers to ensure that Aqua Feed Mill utility connections and requirements can be met.

## 1.0 Introduction

This Development Proposal and Environmental Management Plan (DPEMP) has been prepared by AECOM on behalf of Ridley AgriProducts Pty Ltd (Ridley) for the proposed development and use of an Aqua Feed Mill within the Valley Central Industrial Precinct in Westbury, Tasmania. The DPEMP has been prepared in accordance with the *'Development Proposal and Environmental Management Plan Project Specific Guidelines for Ridley AgriProducts Pty Ltd.'* May 2017 (Refer to Appendix A ) and the *'General Guidelines for preparing a Development Proposal and Environmental Management Plan for Level 2 Activities and called in Activities'*.

The Project Specific Guidelines identified one Key Issue (Potential impacts of air emissions on sensitive receptors) and outlined a number of other matters requiring attention. The Guidelines indicated that the DPEMP should be 'principally focused' on the Key Issue with the level of detail provided on the other issues being 'appropriate to the level of significance' of that issue for the proposal.

The DPEMP has addressed all matters outlined in both the Project Specific Guidelines and General Guidelines and provides a comprehensive assessment of all potential impacts and mitigation measures.

As required by the Tasmanian EPA, the general structure and headings incorporated into this DPEMP follow those outlined in the General Guidelines.

### 1.1 Project Title

The Project title is the Ridley Aqua Feed Mill.

### 1.2 Project Proponent Details

<b>Name of proponent (legal entity).</b>	Ridley AgriProducts Pty Ltd (Ridley)
<b>Name of proponent (trading name).</b>	Ridley AgriProducts Pty Ltd (Ridley)
<b>Registered address of proponent</b>	Level 4, 565 Bourke Street Melbourne Victoria 3000
<b>Postal address of proponent.</b>	Level 4, 565 Bourke Street Melbourne Victoria 3000
<b>ABN number</b>	94 006 544 145
<b>ACN number (where relevant)</b>	006 544 145

### 1.3 Contact Details

Contact details are as follows:

<b>Contact Name</b>	David Coward - Engineering Projects Manager
<b>Contact Telephone</b>	0477 326 525
<b>Contact Email address</b>	david.coward@ridley.com.au
<b>Activity operator details (if the operator will be a different entity to the proponent).</b>	N/A

## 1.4 Project Background

### 1.4.1 Proponent Background

The project has been developed and funded by Ridley to build a new state of the art, fit for purpose Aqua Feed Mill that will manufacture extruded aqua feed.

Ridley AgriProducts Pty Ltd is Australia's leading supplier of stockfeed. Ridley AgriProducts produces a range of world-class, high performance animal nutrition products for the beef, dairy, pig, poultry, horse, sheep, pet food and aquaculture industries. Major brands include Barastoc, Rumevite and Cobber. These scientifically-formulated products are fully supported by one of the most experienced nutritional and technical teams in the Australian livestock industry to ensure optimal animal health and performance.

Ridley AgriProducts operates feed mills and supplement manufacturing plants throughout Australia.

### 1.4.2 Project Rationale

Ridley is Australia's leading supplier of stockfeed and produces a range of high performance animal nutrition products including feedstock for the aquaculture industry. Ridley currently manufactures and supplies aqua feed to the Tasmanian market from its Narangba facility near Brisbane. The primary rationale for the project is to locate the Ridley Aqua feed production process closer to its main source of demand being the Tasmanian aquaculture industry. Customer benefits include reduced supply chain costs and improved capability to service demand.

The proposed Aqua Feed Mill will be capable of producing 50,000 tons per year (12 tons per hour) of finished feed. Deliveries of raw ingredients will be via bulk tankers and trucks with smaller quantities being delivered in one ton bulk bags and 25kg bags. Outgoing finished feed will be packaged in one ton bulk bags and taken from the site on trucks sized to suit the delivery.

This proposal does not directly relate to any other proposals that have been or are being developed or have been approved in the region.

## 1.5 Project Components

The plant and equipment necessary to manufacture aqua feed will be entirely contained within the site, the majority enclosed within a large warehouse. Section 2.1.1 of this DPEMP provides a detailed description of the plant and equipment.

In summary, the key plant and equipment within the facility are:

- Bulk intake and product cleaning
- Silos for bulk storage
- Batching and weighing equipment
- Micro/macro addition system
- Pre breaker and pre mixing equipment
- Grinders
- Mixers
- Extruders
- Driers
- Liquid storage and addition
- Vacuum coating equipment
- Coolers
- Sieves – fines management
- Finished product remix equipment
- Final product storage and packing areas
- Process control

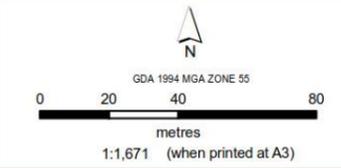
## 1.6 Site Location

The site is located at Lot 17 Integrity Drive within the Valley Central Industrial Precinct in Westbury. The site is located within the General Industrial Zone adjacent to Birralee Road, approximately 500 metres north-west of Bass Highway, Westbury and is within the municipality of Meander Valley. The site location is shown in Figure 1. The subject site is currently undeveloped farmland with neighbouring industrial and assembly businesses to the south including Tasbuilt Homes, Delmade, LNG Refuellers and BOC's Liquefied Natural Gas Facility. Figure 2, supplied by Meander Valley Council, further illustrates the existing and proposed industrial uses and developments within the industrial precinct. The closest residence to the site is approximately 900 metres to the north of the site.

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- LEGEND**
- Biofilter points (4)
  - Other Locations (1)
  - Subdivision Plan
  - ▭ Biofilter\_20170707 (1)

BIOFILTER BOUNDARY COORDINATES:  
GDA 1994 MGA ZONE 55

Point	Easting	Northing
1	485718.02	5404966.38
2	485709.11	5404940.72
3	485687.80	5404947.88
4	485696.91	5404973.45



**Biofilter location**

Ridley Aqua Feed Mill  
 Westbury, Tasmania  
**Figure 1**

Map Document: (laumel1f001\projects\60537374\4. Tech work area\4.99 GIS\02\_Maps\60537374\_Ridley Feed Mill\_Biofilter.mxd) Plotted by: sam.schroder on 7/07/2017 3:27:00 PM

A3 size

**Figure 1 Site Overview**

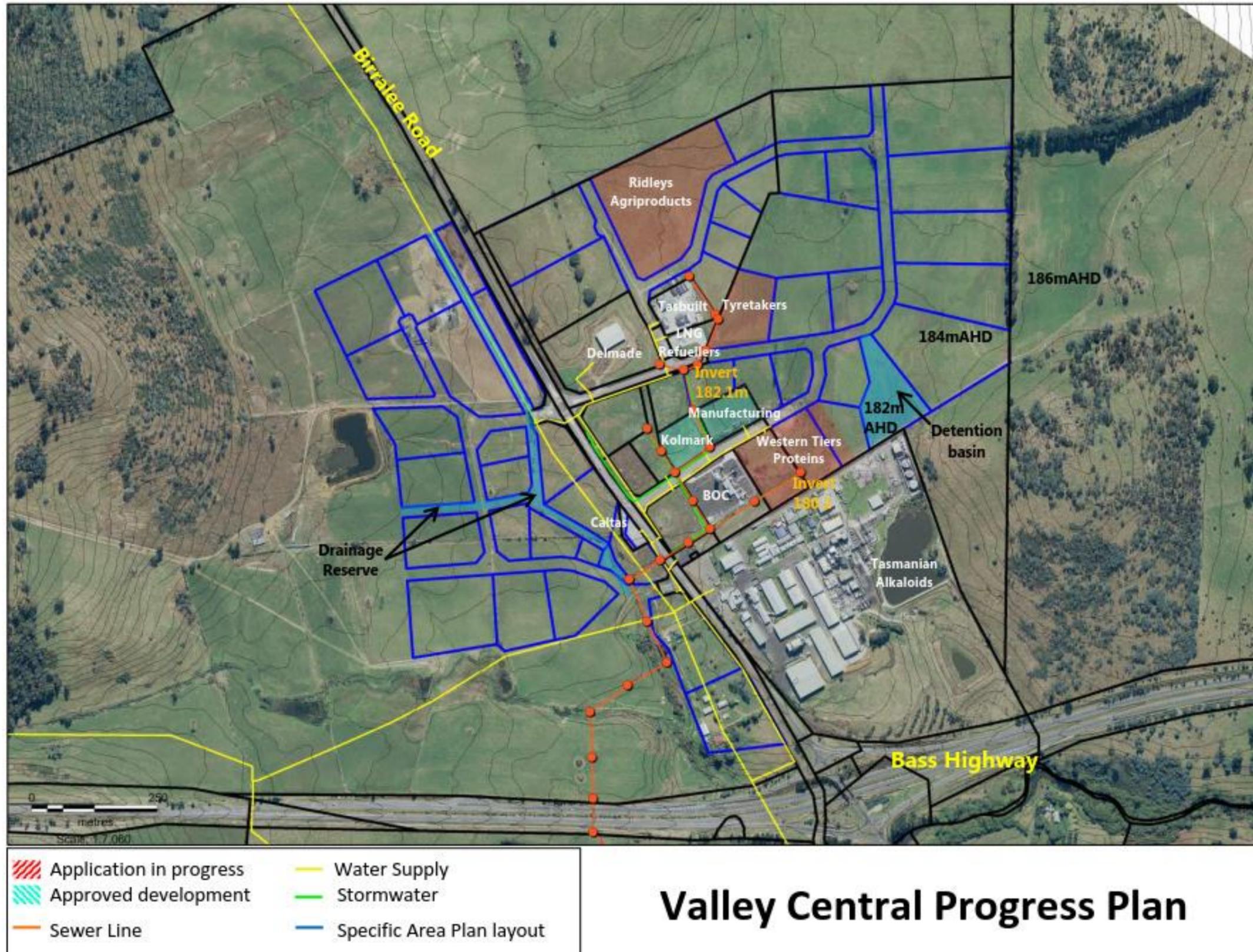


Figure 2 Valley Central Progress Plan

## 1.7 Statutory Requirements

### 1.7.1 Commonwealth Legislation

#### Environment Protection and Biodiversity Conservation Act 1999

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires that actions that have, will have, or are likely to have a significant impact on matters of national environmental significance, be referred to the Commonwealth Environment Minister for a determination on the level of assessment that would be required.

The use and development of the land to facilitate the Valley Central Industrial Precinct subdivision was referred to the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) by the Meander Valley Council at the time of subdivision application assessment. The proposed subdivision was not considered a 'Controlled Action' at the time of assessment.

Given the outcome of the subdivision assessment under the EPBC Act, and the current assessment of Matters of National Environmental Significance (MNES) included in this application in Section 6.7, it is considered that the proposed development will not have a significant impact on any of the Matters of National Environmental Significance (MNES). The proposed facility is to be constructed entirely within the Industrial Precinct area previously assessed as not constituting a 'Controlled Action' and accordingly a referral to DEWHA is not considered necessary.

### 1.7.2 Tasmanian Legislation

The Tasmanian environmental and planning assessment and approval process is pursuant to the following key legislation:

- Land Use Planning and Approvals Act 1993 (LUPA Act) and subsidiary legislation in the form of Planning Schemes; and
- Environmental Management and Pollution Control Act 1993 (EMPC Act).

The LUPA Act guides development approvals in Tasmania and provides for the preparation of Planning Schemes by planning authorities, typically local Councils, to regulate land use and development. A permit may be required from the relevant planning authority for land use and development under the provisions of the planning scheme.

The Environmental Management and Pollution Control Act 1994 (EMPC Act) is the legislation providing for the management of the environment and the management of pollution in Tasmania.

Both of these Acts operate such that the environmental impact assessment is conducted under the provisions of the EMPC Act and the land use planning assessment is carried out under the provisions of the LUPA Act and relevant Planning Scheme (Meander Valley Interim Planning Scheme 2013 for this project). The final project approval document for this project will be the Planning Permit issued by Meander Valley Council under the LUPA Act; however, this permit cannot be issued until the DPEMP is approved by the Board of the Tasmanian EPA.

A Notice of Intent was submitted to the Board of Environmental Protection Authority (EPA Board) to determine the level of environmental assessment that would be required for the proposed Aqua Feed Mill. It was determined that the proposed Aqua Feed Mill requires Level 2B environmental assessment.

A planning permit application will be lodged with Meander Valley Council, at this same time the final DPEMP is lodged to the Board of the EPA under the Environmental Management and Pollution Control Act 1994 (EMPC Act).

### 1.7.3 Other Tasmanian Legislation

Other Tasmanian legislation that may be relevant to the proposal is as follows:

- Aboriginal Relics Act 1975
- Dangerous Goods Act 1998
- Fire Services Act 1979

- Groundwater Act 1985
- Historical Cultural Heritage Act 1995
- Public Health Act 1997
- Resource Management and Planning Appeal Tribunal Act 1993
- Threatened Species Protection Act 1995
- Water Management Act 1999
- Weed Management Act 1999
- Work Health and Safety Act 2012.

#### **1.7.4 Environmental Standards and Guidelines**

Environmental Standards and guidelines which may be relevant to this project include:

- *National Environment Protection (Ambient Air Quality) Measure 2015 (Air NEPM) - Commonwealth*
- *Environment Protection Policy (Air Quality) 2004 - Tasmania*
- *Environmental Management and Pollution Control (Noise) Regulations 2016*
- *Environmental Management and Pollution Control (Waste Management) Regulations 2010*
- *National Greenhouse Strategy*
- *Environmental Guidelines for the Use of Recycled Water in Tasmania, December 2002, Environment Division, Department of Primary Industries, Water and Environment (DPIWE).*
- *Australian Code for the Transport of Dangerous Goods by Road and Rail*
- *Tasmanian Forest Practices Code 2015*
- *State Policy for the Protection of Agricultural Land 2009.*

#### **1.7.5 Policies, Strategies and Management Plans**

Policies, Strategies and Management Plans which may be relevant to this project include:

- *National Strategy for Ecologically Sustainable Development - Commonwealth*
- *Tasmanian Resource Management and Planning System - Tasmania*
- *Environmental Management and Pollution Control System – Tasmania*
- *State Policy on Water Quality Management 1997*
- *National Strategy for the Conservation of Australia's Biological Diversity*
- *Natural Heritage Strategy for Tasmania (2013-2030)*
- *Threatened Species Strategy*
- *Tasmanian Regional Forest Agreement (Tasmanian RFA)*
- *Tasmanian Fire Service Local Area Fire Management Plan*
- *Forestry Tasmania Fire Management Plan.*

## 2.0 Proposal Description

This section of the DPMP provides a description of the proposed Aqua Feed Mill facility, including the construction, operational and decommissioning phases of the project, and offsite ancillary facilities required to support the project.

### 2.1 Proposal Description General

The Aqua Feed Mill is proposed to manufacture extruded aqua feed. Aqua feed production involves the delivery and storage of raw materials, grinding, mixing and drying manufactured products into pelleted feed and packaging prior to dispatch. This section of the report provides a general description of the plant, equipment and manufacturing process within the Aqua Feed Mill. A detailed description of the process is provided in Section 2.1.5.

#### 2.1.1 Major Equipment Items and Onsite Facilities

The proposed Aqua Feed Mill will consist of one main mill building, silos, biofilter, boiler, raw and finished materials storage and weighbridge as shown in Figure 3.

The overall facility footprint including driveways, truck intake bays, raw material storage, boiler and liquid storage area is expected to be approximately 28,800m<sup>2</sup>.

Site surfaces surrounding the production area will include concrete roadways, hardstand areas and concrete process areas including bunds. The remaining vacant area will be covered with grass and gravel. The following areas will be bunded to contain spills and prevent stormwater contamination; bunded bulk liquid (canola and fish oils) storage located in tank farm and bunded liquid ingredients unloading area.

Any impacted water from these areas will be collected for off-site disposal. (Refer to Section 6.2 for more detail).

#### Buildings & Structures

The proposed Aqua Feed Mill will consist of one main Mill building with a footprint of approximately 4500m<sup>2</sup>. The structures and buildings onsite are summarised in Table 1.

Table 1 Building Schedule (dimensions and heights)

Space	Approx. Dimension (m) L x W	Height (m)
Silos	30 x 17	18
Truck Intake	35 x 5	15
Process Building	55 x 22	28
Raw Materials / Finished Goods	60 x 56	12
Liquid Storage	16 x 12	9
Admin & Amenities	12 x 8	3.5
Workshop & Spare Parts	25 x 14	9

#### Machinery

The proposed Aqua Feed Mill will consist of plant and equipment generally located in the main Mill building. A detailed description of the manufacturing process within the Mill building is found in Section 2.1.5. The key items of machinery are:

- Conveying equipment
- Raw material handling and processing systems
- Extrusion, drying and vacuum coating equipment

- Packaging equipment
- Weighbridge to weigh incoming and outgoing goods
- 3MW Boiler – (14359 MJ/hour at full load, or approximately 325 kg/hour of natural gas)
- Biofilter that will handle excess process air
- Waste and stormwater treatment system.

### **Security Gates and Fences**

The site will be contained by a security fence with automated gates located at the front of the site requiring swipe cards for access. The access gates will be monitored by CCTV and activated for visitors via the control room.

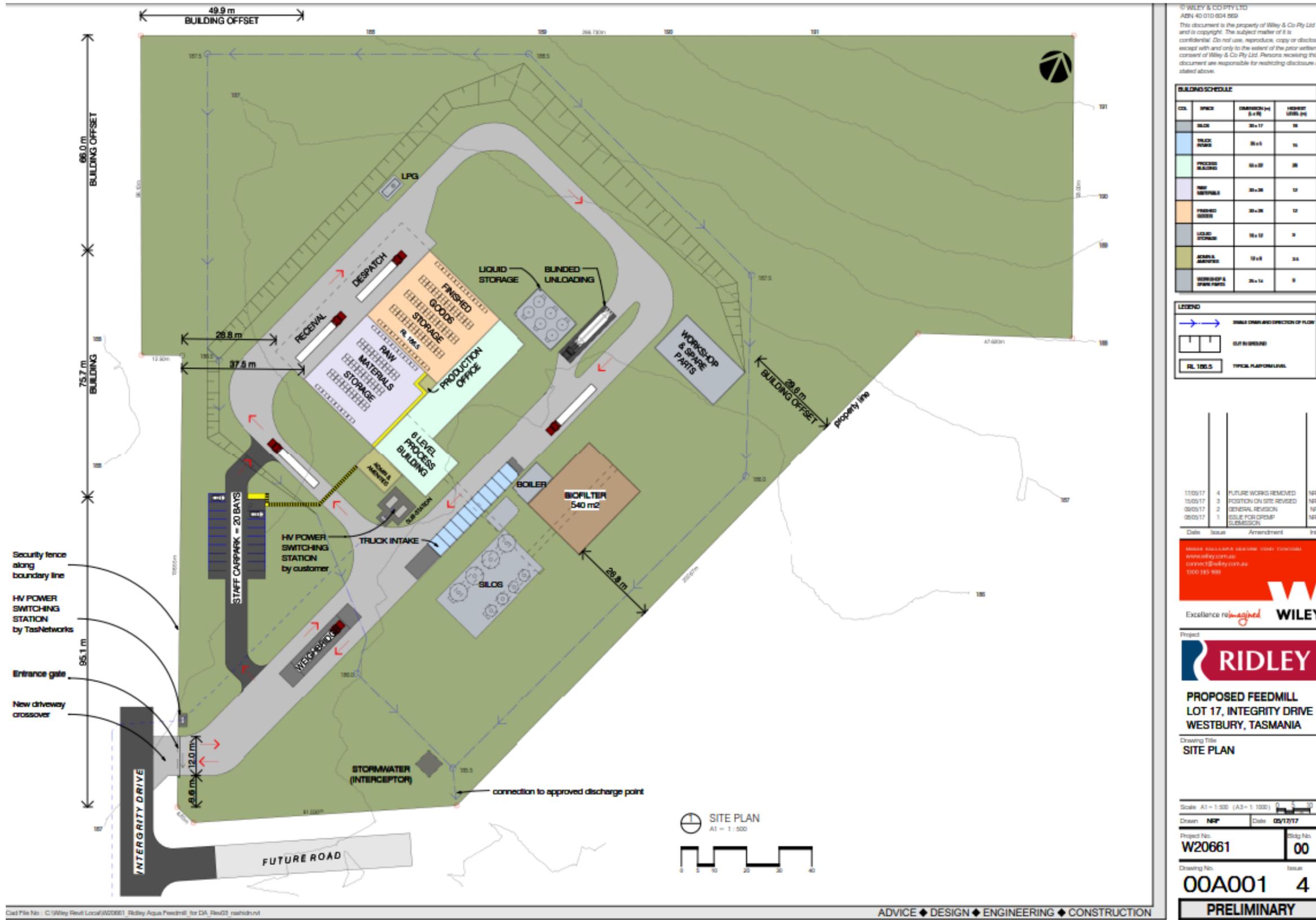


Figure 3 Proposed Ridley Site Layout Plan

## 2.1.2 Car Parking and Site Access

### Car Parking

The proposed Aqua Feed Mill includes provision for 20 car parking bays located adjacent to Integrity Drive as illustrated in Figure 3. As per Meander Valley Council guidelines, 1 motorbike space and 1 disabled space have been provided per 20 car spaces.

### Access Roads

Access and egress to the site is proposed from Integrity Drive in the south-west corner of the site as shown in Figure 3. The main driveway is 12m in width and has been designed with an appropriate alignment to allow for ease of access and egress for all vehicles.

### 2.1.3 Setbacks

As shown in Figure 3, the design layout of the facility meets the Meander Valley Council mandatory setback requirement of an 8 metre setback from Integrity Drive and a 3 metre setback from the east-west unnamed road which runs along the southern boundary of the site. Setbacks from Integrity Drive are over 38 metres before the weighbridge building commences and 26 metres from the southern unnamed road.

### 2.1.4 Materials and Surfaces

The building materials are proposed to be non-reflective in nature and designed to minimise the visual appearance of structures from the surrounding landscape. A pale eucalyptus Colourbond colour is proposed for the exterior of the buildings as shown in Appendix B. Silos will have a standard galvanised appearance.

The ground surface of the site is proposed to be concrete footings for structures with the remaining hardstand areas proposed to be concrete or gravel.

### 2.1.5 Process Description

The aqua feed production process is based on processing of organic raw materials. Raw materials can be stored onsite allowing the production output to be controlled by customer demand.

The key constituents of aqua feed are grains, protein, meals, fat, vitamins and minerals. This type of raw material is transported to the site and stored in silos at the mill. The oil is transported to the site and pumped into storage tanks. Vitamins and minerals are packaged in 20Kg bags and proposed to be transported in one tonne bulk bags stored in the storage mill, before being transferred to different small dosing silos.

Figure 4 gives an overview of the aqua feed production process. The process steps can be generally summarised as:

1. Dosing, grinding/milling and mixing batches of dry ingredients;
2. Addition of moisture such as water or steam;
3. Pellet production.

The pellets are dried before entering a vacuum coater where the main oil content is added. After cooling and sieving, the pellets are packed into one tonne bulk bags ready for delivery to the customer.

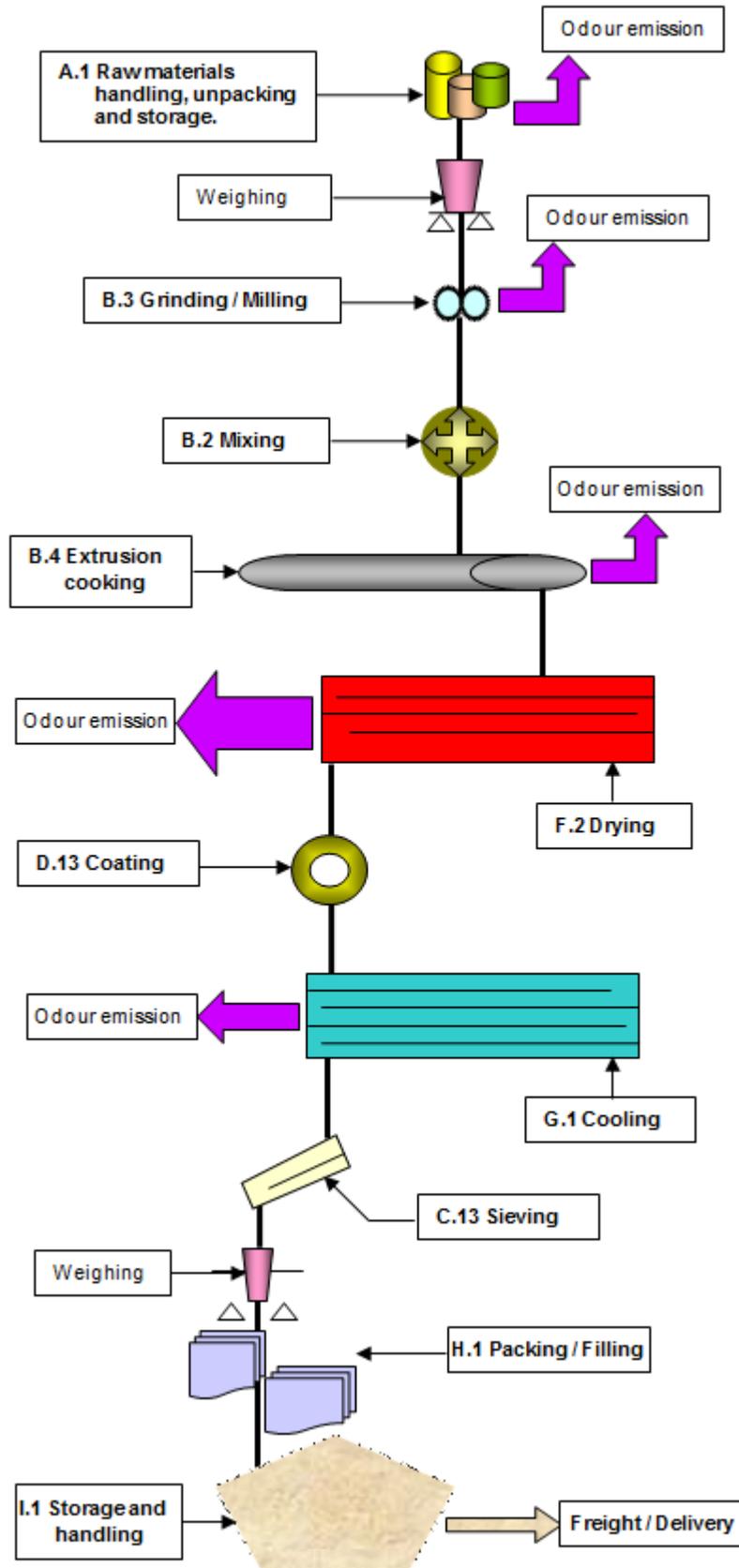


Figure 4 Flow diagram of aqua feed production

### 2.1.6 Description of Processing Techniques

This section provides a detailed description of the production steps outlined in the flow diagram in Figure 4.

#### Raw Material Handling (A.1)

The main sources of raw materials are protein meals and oils of animal, aqua and plant origin. Other raw material ingredients are wheat, minerals, vitamins and other additives.

A bulk truck intake will receive loads of grains and meals from tipper trailers and / or containers on tippers delivered by road. The intake pit is proposed to be a drive-through design and incorporate dust and odour collection systems.

#### Bulk Raw Storage

All bulk storage silos will be able to be accessed from the bulk intake pit.

All bulk meal storage silos will have the capability to recirculate product back into the same bin or other storage bins to manage material integrity. This recirculation process will not have any impact on bulk deliveries or withdrawal of material for production.

Storage silos and conveyors will include explosion relief systems as required and will discharge into a weigh hopper from where it is conveyed to the grinding, milling and mixing process.

#### Bulk Liquid Intake & Storage

A liquid unloading area is incorporated into the facility design to enable unloading of bulk oil trucks (tankers). This area is for trucks only and will be bunded to prevent the spread of liquids in the event of a spill.

Oils/liquids are also proposed be delivered in totes or bag-in boxes. These will be unloaded by forklift for storage and then moved to the liquid unloading area for emptying.

#### Grinding/Milling and Mixing (B.2, B.3)

Input ingredients are automatically weighed according to a recipe and transferred to grinding.

After grinding, the batch of ingredients is thoroughly mixed and any required supplement added. The blended batch of ingredients will then be held for extrusion.

#### Extrusion Cooking (B.4)

The blend of ingredients is then cooked and extruded into pellets of various diameters. The ingredients are usually pre-conditioned by use of steam.

When the ingredients pass through the extruder, they are conditioned and melted by high temperatures and pressure. The ingredients are transported (in melted form) to the die in the outlet end of the extruder, and then under high pressure, forced out through the openings in the die. A rotating knife mounted on the die then cuts the pellets into the appropriate lengths.

#### Drying (F.2) and Coating (D.13)

After passing through the extruder, the pellets enter a gas fired hot-air dryer.

After this stage of the process, the pellets are coated with fish and/or vegetable oil to increase the fat content and energy level in the pellets. This oil coating is partly done under atmospheric and vacuum pressure by use of vacuum-coaters.

#### Cooling (G.1)

After coating, the pellets are cooled in a cold-air counter flow cooler. The cooling process is to harden and stabilise the pellets as well as reducing the risk of mould and oil leakage.

#### Sieving (C.13), Weighing and Packing (H.1)

The pellets are then sieved to remove free dust from the outer skin of the pellets before being packed and stored in large bags.

### Storage and Handling of End Products (I.1)

Packed aqua feed ready for shipping to customers is stored within the mill building to protect the product from sunshine and inclement weather. The final stage of the process involves loading selected product via forklift onto trucks for dispatch to customers.

#### Biofilter

The sources of odorous air have been identified and each will be fitted with extraction fans that will discharge into a header that discharges to the biofilter as shown in Figure 4. The biofilter comprises of a plenum floor (e.g. polyethylene crates) that are used to distribute the air across the bottom of the biofilter. The biofilter comprises a mixture of an oversized partially-composted fraction, mixed with bark nuggets and other organic materials that is irrigated with water to maintain moisture content. The media provide a substrate for bacteria to grow that utilise the organics and nutrients in the odorous air as nutrients. The odorous compounds are adsorbed onto the bacterial slime/media and are degraded by the bacteria. The media provide a "tortuous" path for the odorous air, which results in a large surface area for contact, adsorption and degradation. The design is based on a biofilter used at another Ridley site in Queensland. The learnings from that unit have been incorporated into the design for the proposed odour control system.

#### 2.1.7 Raw Materials

The raw materials required for the production process of the Aqua Feed Mill, including quantities and characteristics, are listed in Table 2.

**Table 2 Raw Material list and storage**

Raw Material	Indicative tonnage %	Bulk Storage		Batching bins	
		Delivery Mode	Total Storage (tons)	Total Storage (m <sup>3</sup> )	Total Storage (tons)
Dry Bulk	22	Bulk	200	0	0
Bulk Meals	30	Bulk	400	0	0
Macros	21	Big Bags / Bulk / 25KG Bags	0	300	162.5
Bulk Liquids	24	Bulk	120	0	0
Packaged Liquids	2	20 Kg Bags / SPK Boxes	0	100	120.1
Micros	1	6 Kg / 20Kg / 25Kg Bags	0	40	31.9

#### 2.1.8 Waste

Detailed descriptions of the wastes associated with the Aqua Feed Mill are found in Section 6.0 of this DPEMP with this section providing only a brief overview of the main waste streams.

The main sources of wastewater generated by the facility are from:

- The biofilter;
- The boiler blowdown process, and;
- The wash bay area where cleaning of grinder screens takes place.

The majority of waste from processing will be captured by a wet slurry system which is a part of the extrusion process. This process will capture and manage the feed waste (wet and/or dry, mash and/or formed pellets) from pre conditioning and the extruder. All wet slurry will be reintroduced into the process at the pre conditioner in an accurately controlled manner.

All collected feed waste (including dusts) from sieves, cyclones and dryer shall be weighed, recorded and conveyed automatically to designated macro batching bins for weighing and inclusion into production.

Wastewater generated by the production process not able to be recycled will be discharged as trade waste to the sewer.

Ridley has analysed the wastewater stream from its current plant in Narangba as a basis for assessing the potential water quality from the proposed Westbury facility. The Narangba plant produces aqua feed as well as other products and laboratory analysis indicates that the wastewater has several minor exceedances when compared to the TasWater guidance for receipt of trade waste. This may be attributable to the wider range of products produced at Narangba and a more detailed analysis of the wastewater stream from the plant is currently being undertaken.

Discussions have been held with TasWater regarding a Trade Waste agreement. In the event that further evaluation of the Narangba wastewater suggests that exceedances may still occur, further onsite treatment will be implemented into the detailed plant design to satisfy Trade Waste requirements.

As the majority of solid waste derived from the manufacturing process is reused in the production process, solid waste will be largely comprised of packaging materials and general waste disposed of through normal industrial waste collection services.

Waste streams and management practices are outlined in more detail in Section 6.0 of this DPEMP.

### 2.1.9 Air Emissions

Under normal operating conditions, atmospheric emissions from the proposed Aqua Feed Mill will occur from the production process. An assessment of the impacts on air quality of emissions to air is in Section 6.1 of this DPEMP.

All process air flows will be contained and recycled as far as practicable. Process emissions will be contained and ducted to the biofilter proposed for odour mitigation.

Further information can be found in section 6.1.

### 2.1.10 Noise

The proposed Aqua Feed Mill will include various operational plant and equipment with the potential for noise emissions noting that most noise generating elements of the facility are located within the mill building. Plant and equipment with noise emissions will include:

**Table 3 Plant and equipment list**

Equipment	Noise Level
Hammermill unit	Up to 100 dbA
Horizontal Mixer	Below 70 dbA
Extruder	Higher than 80 dbA
Dryer	90-100 dbA at ventilators with full speed

Potential noise emissions are assessed in Section 6.4.

### 2.1.11 Water Supply and Usage

The Aqua Feed Mill will be supplied with potable water from the municipal system.

Water mains consumption is estimated to be 23,000kLpa which is similar to existing Ridley production facilities located at Narangba, Brisbane.

Potable water will be used on site for a variety of uses as follows:

- Biofilter
- Cooling water system make-up
- Utility hose usage
- Domestic water use
- Intermittent process cleaning; and
- Firewater.

#### **2.1.12 Energy Requirements**

The Aqua Feed Mill has been predicted to require the following energy inputs:

- Natural gas 50,000GJ p.a
- Electricity 2875kVA is required to run the facility
- LPG gas – 25,000kL pa.

#### **2.1.13 Production Capacity and Rates**

Production of aqua feed from the Ridley Plant is largely dependent on market demand.

During initial phases of operation production may be in the vicinity of approximately 40,000 tonnes with the potential to increase to around 50,000 tonnes per annum.

#### **2.1.14 Hours of Operation**

Ridley proposes that during the initial phases of operation it is expected the plant will operate up to 24 hours per day 5 days per week with the potential to operate 24 hours per day 7 days per week based on market demand.

#### **2.1.15 Unforeseen Shutdown**

Ridley does not foresee any circumstance that would result in the proposed Aqua Feed Mill being closed and decommissioned within its working life. The facility has been purposely located at Westbury in response to market demand and proximity to customers and the company anticipates a strong and sustainable business.

However, in the event that the plant was closed at some future date, Ridley would decommission the facility in a responsible manner and in accordance with regulatory requirements.

#### **2.1.16 Transport**

The Aqua Feed Mill will generate low levels of transport accessing and egressing the site with an expected average of 10 daily truck visits each year.

Freight will consist of bulk tankers and trucks travelling to and from the site via the Bass Highway to and from either Burnie or Devonport or regional Tasmania.

Raw material stock will come from a variety of sources and will be transported by road. Finished feed is proposed to be transported by road to by road to the customer on trucks sized according to the delivery. Feed transported outside of Tasmania will be transported by road to either Devonport or Burnie for distribution.

Primary access is via the Bass Highway and the local road network has been assessed by Meander Valley Council as capable of accommodating traffic volumes expected with development of the industrial precinct. (Refer to Section 6.20 for more detail).

## 2.2 Construction

### 2.2.1 Construction Schedule

Table 4 provides a summary of a proposed project construction schedule. The start date of construction is dependent on approval of the DPEMP by the EPA Board and the issue of a Planning Permit by Meander Valley Council. At present, Ridley is aiming for commencement of site preparation works as early as possible in 2017. Table 4 shows indicative timelines for each major component of construction and would apply from any commencement date.

Table 4 Construction Timeline Estimate

	MONTH																			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 - 24
<b>Development Approval</b>	█																			
<b>Site Establishment</b>		█	█																	
Early Works (civil, drainage, stormwater, electrical)		█	█																	
<b>Delivery</b>			█	█	█	█	█	█	█	█	█	█	█	█	█	█				
In ground services			█	█	█	█														
Structure construction, internal services					█	█	█	█	█	█	█	█	█	█						
Finishes and External works													█	█	█	█				
<b>Equipment Delivery and Installation</b>		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█				
<b>Equipment mechanical installation</b>						█	█	█	█	█	█	█	█	█	█	█				
Boiler										█	█	█	█	█						
Weighbridge						█	█	█	█	█	█	█	█							
Biofilter						█	█	█	█	█	█	█	█							
Liquid tanks										█	█	█	█							
Silos Dry Tanks										█	█	█	█	█						
<b>Practical Completion</b>															█	█	█			
Training and Commissioning																█	█	█	█	
<b>Contract Close Out</b>																	█	█	█	█

## 2.3 Commissioning

It is anticipated that the Aqua Feed Mill would be commissioned within 18 months of receipt of the Development Approval.

The following major commissioning activities are proposed:

- Visual inspection at completion of mechanical installation to confirm that the equipment has been installed correctly in the plant and is now ready for dry and wet testing (testing without and with product)
- Wet testing (testing with product) of the plant for functionality. Wet testing will determine whether the plant is in accordance with the contract performance specification including all amendments
- Capacity testing the plant on commercial production. This test is proposed to take place within a period of 4 – 8 weeks after start of commercial production and be executed to demonstrate the capacity of plant production. This is dependent on market demand at the given time.

## 2.4 General Location Map

Figure 5 provides a general location map of the site. Figure 6 provides the surrounding land zoning as per the Meander Valley Planning scheme. Details of the surrounding land uses and planning provisions are included in Section 5.0 of this report.

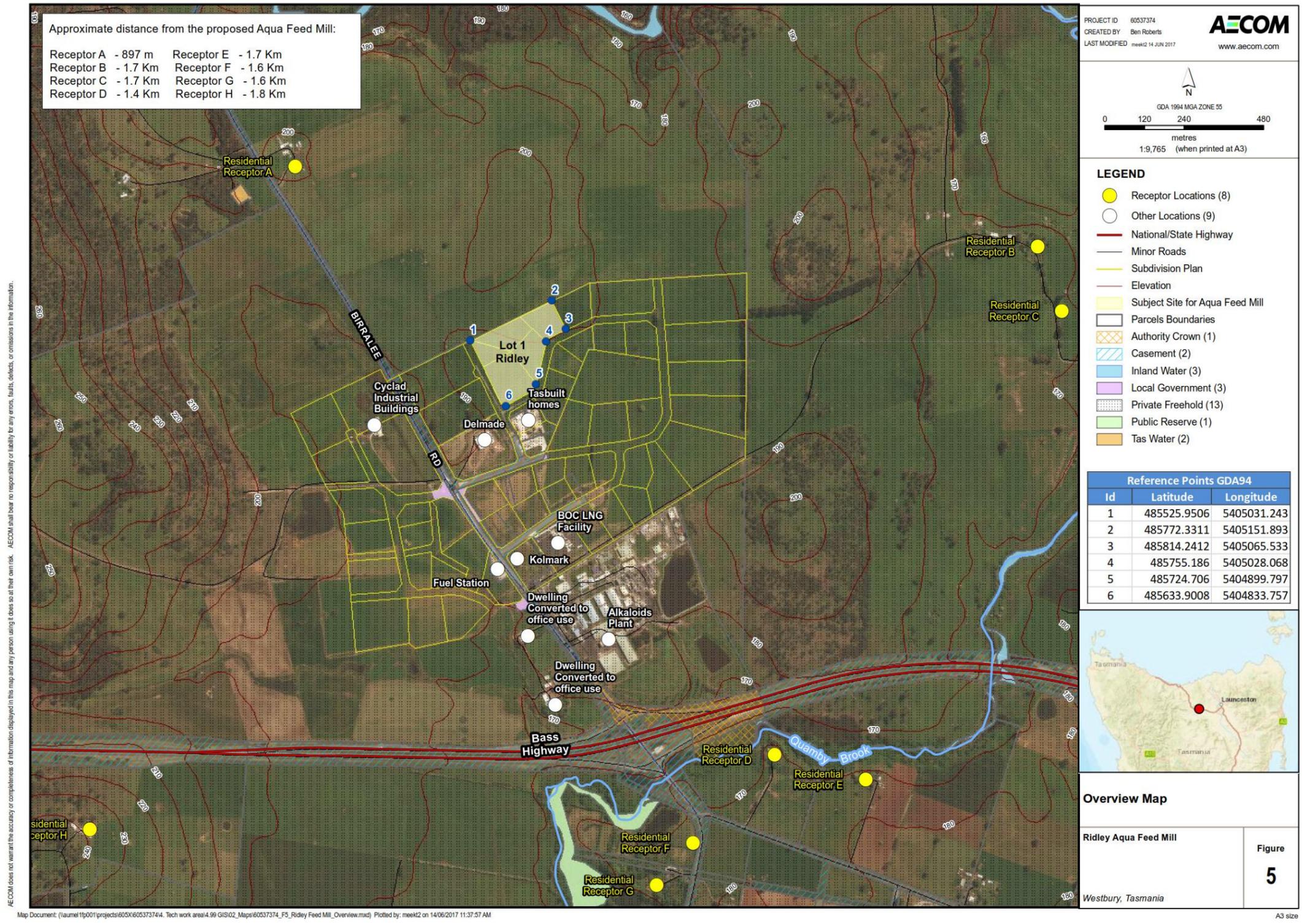


Figure 5 General Location Map

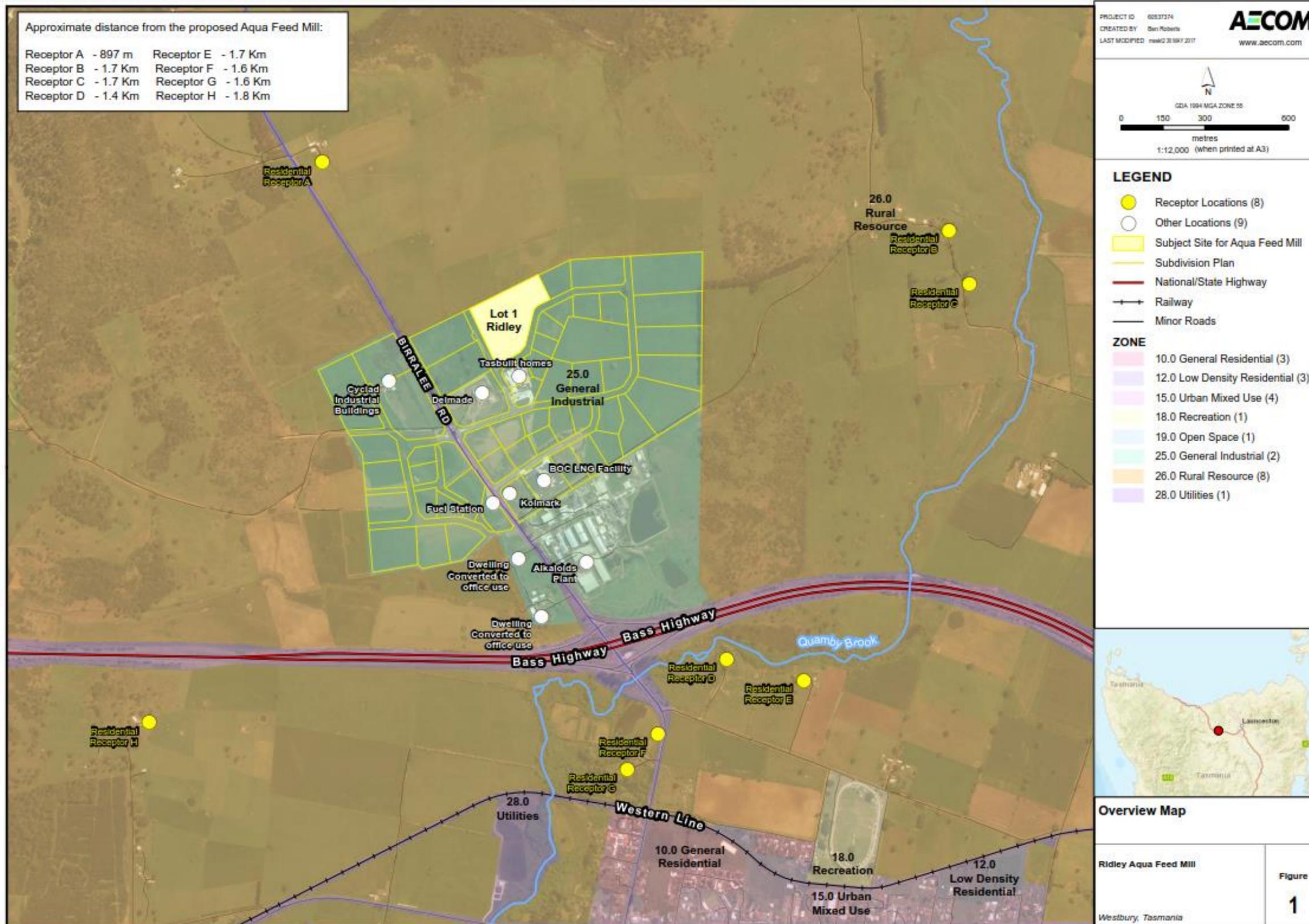


Figure 6 Land Use and Zoning Map

## 2.5 Site Plan

A Site Plan of the proposed Aqua Feed Mill is found in Section 2.1.1 (Figure 3).

## 2.6 Off-site Infrastructure

A reticulated water supply, gas, High Voltage power access and sewer connection is available to connect at the site boundary.

Ridley is in discussions with the services providers and Meander Valley Council to obtain access to these services to facilitate the project.

## 3.0 Project Alternatives

In conducting its feasibility study for the proposed Aqua Feed Mill, Ridley considered several alternative site locations and different options for management of wastewater and odour emissions.

### 3.1 Site Alternatives

As outlined earlier, the proposed Aqua Feed Mill is being developed in Tasmania based on demand for its products and to enable Ridley to be located closer to a significant customer base.

As part of its detailed feasibility study, Ridley considered two alternative locations within Tasmania prior to the selection of the Westbury site. These alternatives are discussed below.

#### 3.1.1 Wesley Vale Site

*329 Mill Road, Wesley Vale, Tas 7307*

The Wesley Vale Site considered by Ridley is a former particle board mill. The site has substantial existing structures with two large warehouses offering some potential for conversion but would have required considerable modification. The structures also contained asbestos and additionally, soil contamination was evident at the site.

This site provided good access to some utilities and services however; the lack of sewer connection and the need for a power supply upgrade reduced suitability. This combined with the need for undefined remediation of asbestos and soil and a site preparation phase which would take up to 14 months did not fit within the Ridley construction and commissioning timeframe.



Figure 7 Wesley Site

### 3.1.2 Westbury Site

*Integrity Drive, Westbury Tas 7303*

This parcel of land is a Greenfield site neighbouring the currently proposed site at Lot 17 Integrity Drive. This site was considered as a potential option for the Aqua Feed Mill as it provides good access to all utilities from Birralee Road.

However, after further investigation, the site was deemed unsuitable due to the topography and presence of significant rocky outcrops which were assessed as adding significant additional construction and service connection costs when compared with the current proposed site.



Figure 8 Considered site Integrity Drive

### 3.1.3 Preferred Location

The current proposed site (Lot 17 Integrity Drive) has been selected due to its location in an area zoned as an industrial precinct, good transport links due to its proximity to the Bass Highway. Additionally, the site is relatively flat with a 2 degree slope which will reduce construction cost in terms of earth works when compared with other sites. Further, utilities have been provided up to the site boundary allowing for good connections to water, gas, electricity and sewer.



Figure 9 Proposed Lot 17 site facing North

## 3.2 Technology Alternatives

In developing the design for the proposed Aqua Feed Mill, Ridley considered several alternatives for the management of odour from the production process including incineration and chemical stripping. However, based on the company's experience at its Narangba facility and consultation through a leading engineering consultant in the aqua feed industry, Ridley have selected a biofilter as the best option for treatment of odorous emissions from the production process and considers this to be industry best practice.

Biofilters are ideal for treating large volumes of low-concentration odorants and are well suited to processing food waste. There is a significant amount of literature supporting biofilters for the removal of odours such as Hydrogen Sulphide, Dimethyl Sulphide, and Dimethyl Disulphide, gases containing sulphur, ammonia and malodorous gases.

Ridley has a long track record of managing and optimising biofilter performance at other facilities and utilises the specialist design firm, The Odour Unit (TOU) to design and optimise its biofilters.

TOU has been engaged to design the biofilter for the proposed Ridley facility which has been sized to meet the maximum design air-flow from the production process extraction systems. The onsite biofilter location has been selected to minimise potential issues associated with poor air dispersion caused by the nearby buildings by placing it down-wind of the buildings (based on prevailing wind direction).

The treated air from the biofilter will be vented from the entire 540 m<sup>2</sup> surface area proposed in the initial design and will be located at a height of 2.3m above ground level. A venting rate of 70,000 m<sup>3</sup>/hr has been developed based on design information, and used in the air emissions model.

Odour emissions and the proposed biofilter are discussed in more detail in Section 6.1 of this DPEMP.

The management options considered for the proposed Aqua feed Mill for wastewater treatment include:

- Reuse in process – this has been adopted and built into the design such that all process wastes are collected in a wet slurry system for subsequent metering back into production
- Potential for recycling of other wastewater streams - the nature of the remaining wastewater streams (boiler blow down, biofilter leachate and wash bay effluent) are such that recycling on or off-site are not feasible.

Given the anticipated small volume of 20-25 kL/day, the preferred option is for direct disposal to sewer via a Trade Waste agreement with TasWater.

## 4.0 Public Consultation

This section of the DPEMP details the community and stakeholder consultation activities undertaken to date, as well as any proposed consultation during and beyond project implementation.

As part of the community consultation at the time of subdivision of the Industrial precinct, Meander Valley Council undertook consultation with the local community. The Council has advised that the general feedback from the community was supportive of the rezoning and subdivision at the time. Council has advised Ridley that they anticipate few objections to the proposed facility given its proposed location within the Industrial precinct.

Table 5 provides a summary of the stakeholder consultation Ridley has undertaken to date to engage landowners and stakeholders on the proposed facility:

**Table 5 Summary of Stakeholder Consultation**

Consultation Date	Stakeholder	Issues Discussed	Concerns Raised
01/02/2017	Delmade	General discussion on the Ridley proposal, layout of site and update on procurement of land	None
01/02/2017	TasAlkaloids	General discussion on the Ridley proposal and layout of site	None
01/02/2017	Meander Valley Council	General discussion on the Ridley proposal, timeframes and EPA/council approvals process.	None
04/04/2017	Meander Valley Council/ AECOM/ Co-ordinator General	Notice of Intent, DPEMP process	Classification of activity by EPA. Timeframes governed by EPA
08/06/2017	Delmade	General discussion on the Ridley proposal, updated layout of site and update on subdivision of land.	None
08/06/2017	TasBuilt Homes	General discussion on the Ridley proposal, updated layout of site and manufacturing process	None, however noted that any concern raised would be discussed promptly with the Ridley Site Manager
08/06/2017	Receptor A	General discussion on the Ridley proposal, updated layout of site and manufacturing process	None
08/06/2017	Meander Valley Council	General discussion on the Ridley proposal, updated layout of site and update on subdivision of land.	None

As the DPEMP assessment and the detailed design of the proposed facility progresses, Ridley intends to engage with nearby businesses and residents to discuss final proposed plans for the facility referencing the work completed in this DPEMP.

## 5.0 The Existing Environment

This section of the DPEMP describes the existing environment and conditions which may be affected by the construction and operation of the proposal.

As outlined in Section 1.6, the proposed Aqua Feed Mill is located within the Valley Central Industrial Precinct, approximately two kilometres north of the Westbury town centre.

As shown in Figure 2, the proposed site for the Aqua Feed Mill is Lot 17, Integrity Drive located on the northern side of the southern access road into the precinct.

### 5.1 Planning Aspects

#### 5.1.1 Land Tenure & Title Details

Figure 2 illustrates the Valley Central Progress Plan for the Industrial Precinct. Ridley is in the process of purchasing land known as Lot 17 Integrity Drive. Lot 17 is in the process of being subdivided off the parent title. A copy of the parent title which is the current Title of the Land for the subject site is included in Appendix C.

For the purpose of this project, the subject site is referred to as Lot 17, Integrity Drive as per the Subdivision Permit application (PA\17\0115) lodged with Council dated March 2017.

#### 5.1.2 Property Dimensions

The subject site has the following dimensions:

- Northern Boundary: approximately 287 metres
- Eastern Boundary: 93 metres
- Southern Boundary: 48 metres, 203 metres, 81 metres
- Western Boundary: 139 metres.

#### 5.1.3 Site History

##### Land Use History

The site of the proposed Aqua Feed Mill was formerly a part of an agricultural property known as "Roxford", which was primarily used for grazing.

The report prepared by the Meander Valley Council to support the amendment to the Meander Valley Planning Scheme to facilitate the industrial rezoning and subdivision states:

*"An analysis of historic and current land uses indicates that there is likely to be no contamination issues [and] as a future Industrial Zone, the site will not be subject to any sensitive uses.*

*There have been no land uses that will result in any long term residues that may be cause for concern, with agricultural chemicals such as pesticides, herbicides and fertilisers being the only applied substances. Due to the likely low levels, any residues from these substances are not regarded as a concern when considering future earth works."* (Meander Valley Council, 2007)

No soil testing has been conducted onsite, however based on a site inspection where there was no visible evidence of contamination from past uses, the conclusions of the Council report appear reasonable.

##### Planning History

The proposed Aqua Feed Mill site was formerly zoned Rural Zone under the former Meander Valley Planning Scheme 1995. This zoning supported the agricultural use of the land.

Amendment 1/2008 to the Meander Valley Planning Scheme 1995 provided for:

- Rezoning 127 hectares of land at Birralee Road, Westbury from Rural Zone to Industrial Zone;
- Incorporating an 'Outline Development Plan' with development standards to guide future development on the rezoned area; and
- Deleting the existing Special Use Zone Delineated Area (3) from Clause 3.13.4 of the ordinance and the Planning Scheme Plans.

Under the Meander Valley Interim Planning Scheme 2013, the Aqua Feed Mill is now zoned within a General Industrial Zone.

#### **5.1.4 Surrounding Land Uses**

##### **5.1.4.1 Industrial Land Use**

The proposed Aqua Feed Mill is located within the General Industrial Zone. There are several existing industrial land uses neighbouring the proposed site within the industrial subdivision. These are shown in Figure 2 of this report. A description of these land use is as follows:

##### **Delmade**

Delmade is a machinery fabrication, repairs and sales business located approximately 540 metres south-west of the proposed Aqua Feed Mill. Delmade has frontage onto Birralee Road. The site has access onto Birralee Road via an access road (shared with neighbouring Tasbuilt Homes).



**Figure 10 Delmade**

**Tasbuilt Homes**

*Tasbuilt Manufactured Homes and Cabins* manufacture portable buildings and are located approximately 150 metres south of the proposed Aqua Feed Mill, to the east of Delmade. Access from Tasbuilt Homes onto Birralea Road is by a shared access road (with Delmade) which is the northern access road into the subdivision.



**Figure 11 Tasbuilt Homes**

**Caltas Filling Station**

An un-manned fuel filling station is located on the western side of Birralea Road approximately 535 metres south-west of the proposed Aqua Feed Mill. The filling station is used by heavy vehicles for refuelling.



**Figure 12 Caltas Refuelling Station**

### Kolmark Steel Fabrication Facility

At the time of a recent site visit, a new facility was under construction to the south-east of the Ridley site. The business type was identified by Council as steel fabrication.



Figure 13 Kolmark Steel Fabrication – Under construction

### BOC – LNG Facility

BOC Limited (BOC) operates a Liquid Natural Gas Facility located on Lot 7 within the industrial precinct. Lot 7 is located approximately 540m south of the proposed Aqua Feed Mill. This facility sources natural gas from the Tasmanian Gas Pipeline and converts it into Liquid Natural Gas for use as a heavy vehicle fuel. The refuelling station for the facility is located on the corner of Integrity Drive and the northern access road into the site.



Figure 14 BOC LNG Plant

### Tasmanian Alkaloids - Pharmaceutical

Approximately 600 metres south of the proposed Aqua Feed Mill is the Tasmanian Alkaloids operations plant where poppies are processed into pharmaceutical products. The plant occupies a 23 hectare lot between the industrial subdivision and the Bass Highway and comprises storage and processing sheds, processing infrastructure, office facilities, car parking and plant, and wastewater dams.



Figure 15 Tasmanian Alkaloids Plant

#### 5.1.4.2 Sensitive Land Uses

Figure 5 identifies the location of sensitive adjacent uses known as receptors (residences) surrounding the proposed Ridley site.

##### Residences

The closest residence to the proposed Aqua Feed Mill is identified on Figure 5 as Receptor A. Receptor A is located approximately 900 metres from the Ridley northern site boundary on Birralee Road.

The next closest residents to the site are located approximately 1.7km to the east of the site (Receptors B & C) and approximately 1.4km to the south of the site to the south of Bass Highway.

## Converted Dwellings

It should be noted that two dwellings located opposite Tasmanian Alkaloids are owned by Australian Therapeutic Products and were leased as residences until 2009. Meander Valley council has confirmed that the properties are no longer occupied for residential purposes and are utilised as site offices.



Figure 16 Dwellings converted to Office on Birralee Road

## Other Sensitive Uses

There are no other sensitive land uses such as schools, hospitals and caravan parks located within one kilometre of the proposed Aqua Feed Mill.

### 5.1.4.3 Recreational and Tourism Related Land Use

There are no recreational or tourism related land uses, such as camping areas, picnic areas, walking tracks or historic tourist routes located within the vicinity of the proposed Aqua Feed Mill.

The “village” of Westbury contains over 20 places listed on the Register of the National Estate, and 28 places on the Tasmanian Heritage Register. The Great Western Tiers historic route follows the old Bass Highway through the centre of Westbury in an east-west direction.

### 5.1.5 Land Use Zoning

Figure 6 illustrates the land use zoning for the Ridley site and surrounds. The Ridley site and neighbouring properties within the Valley Central Industrial Precinct are located within the General Industrial Zone.

Outside of the industrial subdivision the land is zoned Rural Residential Zone.

The Bass Highway and Birralee Road are within the Utilities Zone.

## 5.2 Existing Environment - Environmental Aspects

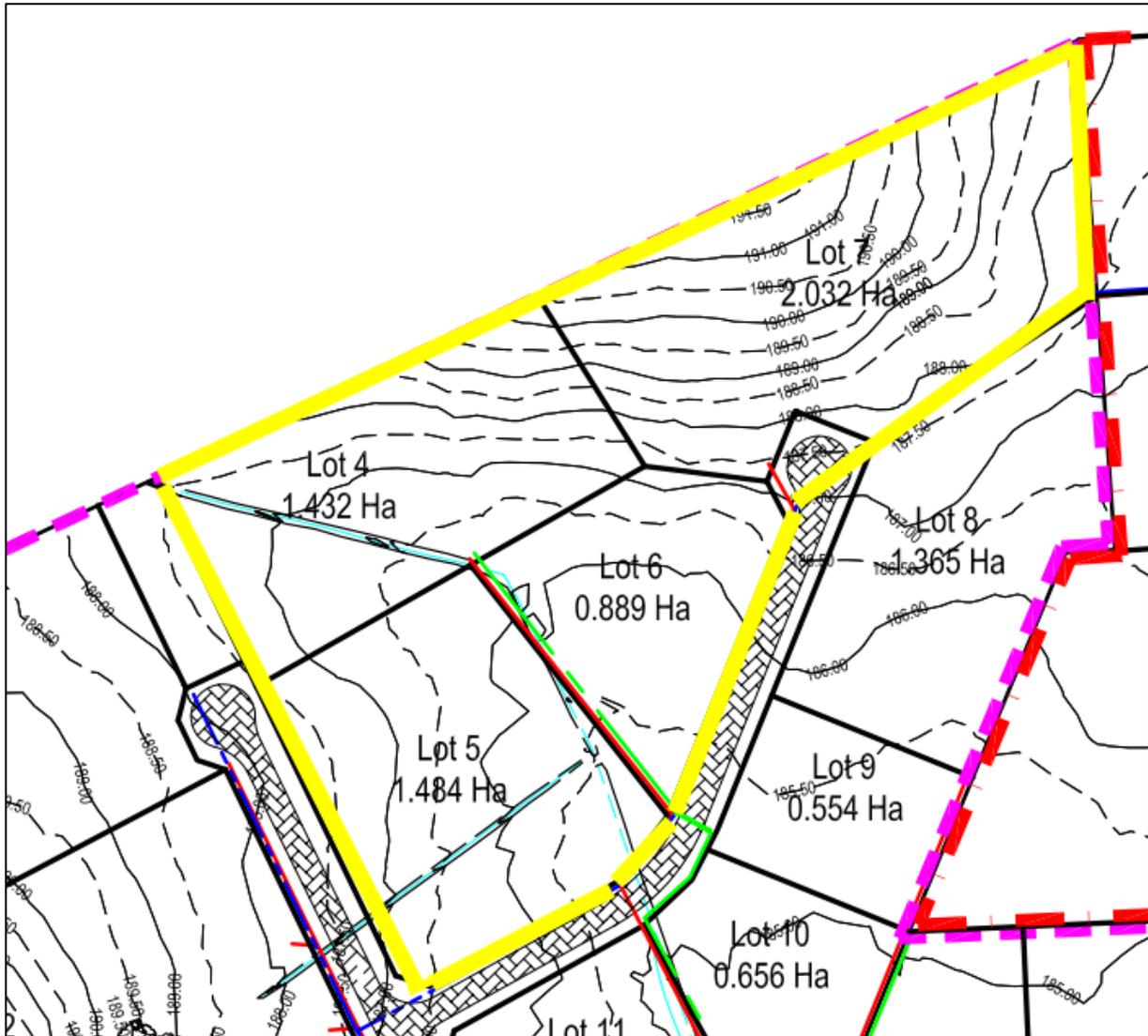
### Meteorology

Please refer to Appendix E for meteorology information.

### Topography

The proposed Aqua Feed Mill site is relatively flat with ground slopes less than 2°, rising from approximately 186 metres (AHD) in the south-west of the site to approximately 191 metres (AHD) in the north-east of the site as shown in Figure 17 (Proposed amendment to the Meander Valley Planning Scheme 1995). The topography to the north of the site (outside of the site boundary) rises to a higher elevation providing natural valley in which the site is located. A shallow man-made drainage line crosses the middle portion of the site from north-west to south.

The site is surrounded by a number of water bodies (dams, drains and rivers), including Quamby Brook located approximately 1.4km to the south east of the site and the Meander River approximately 1.1km to the north.



**Figure 17 Site Topography**

(Note: Figure 17 is showing topography only, disregard the lot numbering)

**Geology, Geomorphology and Soils**

Regionally, the site lies close (<2.0 km) to a geological boundary comprising to the east Tertiary aged non-marine sequences (gravel, sand, silt, clay and regolith) and to the west predominantly igneous geology consisting of Jurassic aged dolerite and Tertiary aged basalt, all overlain by Quaternary aged sediments (sands, gravels and muds are mapped) adjacent to drainage lines.

The site is entirely underlain Basalt, with alluvium observed adjacent to the nearby Meander River and Quamby Brook.

The Soil is generally described as being of the following nature:

- Top Soil layer - Up to 1m of brown, sandy/clayey topsoil, overlying
- Under layer - High plasticity, clay with sand to sandy clay, mottled orange/brown, grey or olive, very stiff to hard.

Further details of geology and groundwater are included in Section 6.3

### 5.2.1 Vegetation Flora and Fauna

As shown in Figure 9, the Ridley Site is dominated by exotic grasses as a result of previous agricultural land use. The shallow man-made drain that crosses the subject site contains scattered native sedge species. The remainder of the site contains little or no significant native vegetation. Further details on flora and fauna are provided in Section 6.7.

## 5.3 Socio-Economic Aspects

### 5.3.1 Social

#### *Meander Valley Municipality*

The proposed Aqua Feed Mill site is located in the Meander Valley Local Government Area (LGA) in Northern Tasmania. The Meander Valley LGA covers an area of approximately 3,320km<sup>2</sup> extending from outer-suburban Launceston in the east, across the Meander River Valley to the Western Tiers in the south and the Upper Mersey Valley in the east. The two main centres in the municipality are Deloraine and Westbury, located in the centre of the municipality approximately 15 kilometres apart.

#### *Westbury*

Westbury is the seat of government of the Meander Valley LGA and is located in the centre of the municipality on the main transport corridor between Devonport to the north-west and Launceston to the east. The urban area of Westbury is located south of the Bass Highway (which bypasses Westbury).

### 5.3.2 Economy

The Meander Valley economy largely consists of agriculture (including downstream agricultural manufacturing) and tourism.

#### *Regional Economy*

At a regional scale, the economy of Meander Valley is intertwined with the regional centre of Launceston to the east, and the industrial and port access at Devonport to the north-west. Approximately one-third of the Meander Valley population is based in the far eastern portion of the municipality, which is located within, or adjacent to the urban area of Launceston. This part of the municipality consists of commercial and light industrial areas that are reliant on the economy of the Greater Launceston area. The economy of the remainder of the municipality mainly consists of small business spread throughout the rural areas, concentrated around the towns of Deloraine and Westbury.

The Bass Highway has improved accessibility of the Meander Valley to the rest of Tasmania and seaports, and enabled the creation of the Great Western Tiers Tourist Route, a key driver of tourism related business.

#### *Local Economy*

Tasmanian Alkaloids, the largest single manufacturing business in Meander Valley, employs over 200 people and is the main non-agricultural commercial operation in the area. The remainder of the Westbury economy mainly consists of small agricultural, industrial and tourism related businesses.

## 6.0 Potential Impacts and their Management

### 6.1 Air Quality

The Project Specific Guidelines for the proposed Aqua Feed Mill identified 'potential impacts of air emissions on sensitive receptors' as the Key Issue to be assessed in the DPMP. This section of the DPMP outlines the following aspects of the air quality assessment and contains summarised information with more detail provided in the full Air Quality Impact Assessment (AQIA) found in Appendix E:

- Process Background and Air Pollutant Emission Sources
- Odour Control Equipment Outages Management
- Odour Modelling Results Summary
- Factors Mitigating the Predicted Odour Concentration
- Alternative Source or Treatment Methodologies.

#### 6.1.1 Process Background and Air Pollutant Emission Sources

The Aqua Feed production process is a staged batch process whereby raw materials are sequentially passed through different process operations to produce the final product for shipping to customers. An air treatment process flowsheet outlining the different stages of the process where odour is emitted and captured is shown in Figure 18 with an explanation of the individual stages provided below. Process air is collected at each of the production stages and vented through a biofilter prior to being emitted to the environment.

The enclosed nature of the processing equipment means that fugitive odour emissions from within the building are minimised. Although the proposed facility is not designed as a negative air-pressure building, the air flow required by specific items of equipment detailed in Figure 18 assist with the capture of unlikely fugitive odours into the process.

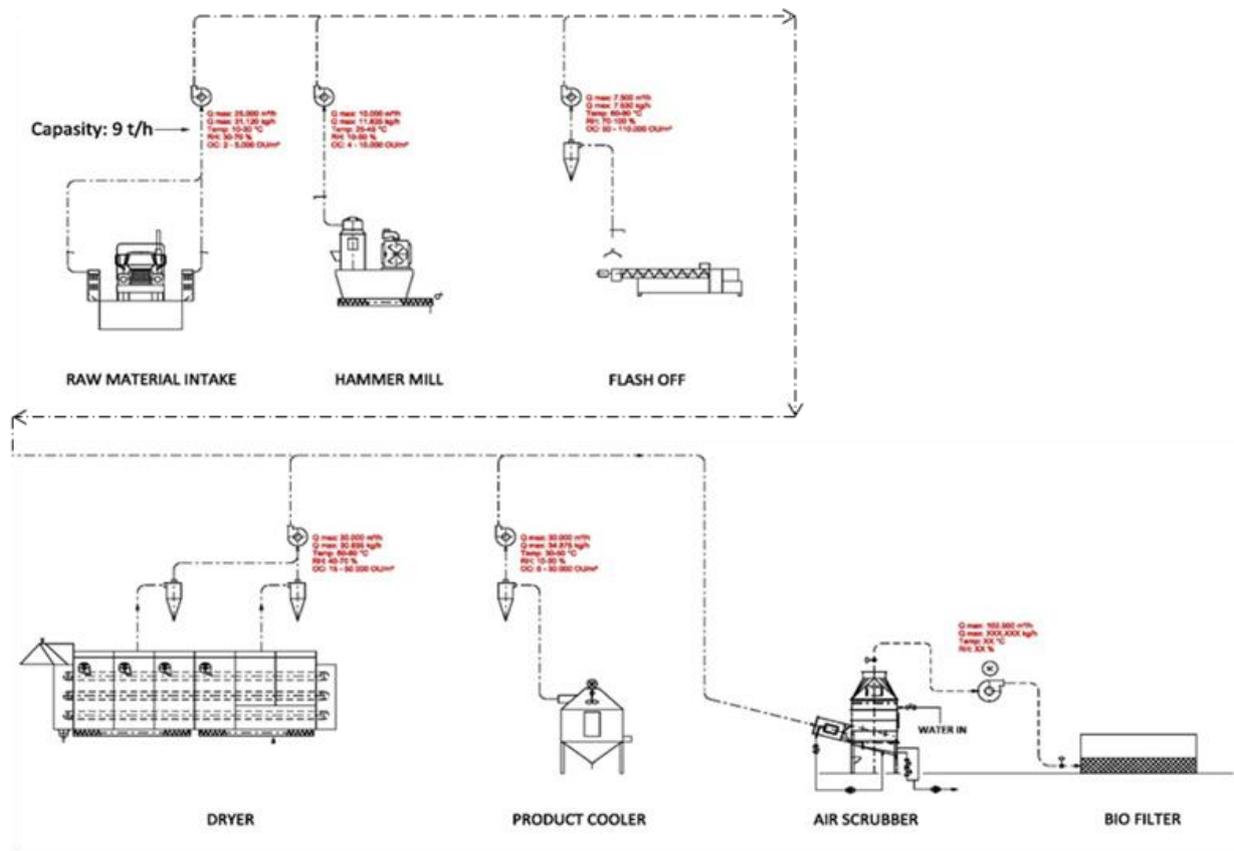


Figure 18 Air treatment process

From an air quality perspective, the sources of emissions from the Aqua Feed Mill are derived from a number of process stages as follows:

- Raw Materials Intake – air drawn off from around the area from which the raw material is dumped
- Hammer Mill – air is extracted directly from the hammer mill
- Flash-off – air is extracted directly above the Flash-off area
- Dryer – air is extracted directly from the dryer system
- Product Cooler – air is extracted directly from the cooler system.

Details of the individual process stages have been discussed in greater detail in the Air Quality Impact Assessment (AQIA) included as Appendix E.

The AQIA assumes that the process system operates efficiently and that all air is extracted according to the above specification and that there are no fugitive emissions from the building or process. Emissions are assumed to be vented through the biofilter at the rates outlined in the AQIA and vented at a concentration of either 250 OU or 500 OU. The proposed biofilter is located to the south-eastern corner of the site as shown in Figure 19 and is described in more detail later in this section of the report.

Biofilters are an accepted technology for the control of odour emissions and have proven to be effective in odour control at a number of other Ridley facilities in Australia. Contingency and management measures for the proposed biofilter and odour collection systems proposed for the plant can be found in the detailed AQIA found in Appendix E.



Figure 19 Aqua Feed Mill Site Plan

**6.1.2 Odour Modelling Results Summary**

The odour concentrations predicted from the operation of the Aqua feed facility have been outlined in Appendix E. The odour emissions outlined above in Section 6.1.1 indicate that on the basis of concentration alone, the Aqua feed facility is expected to result in concentrations in excess of the 2 OU criteria listed in the Tasmania EPA Policy (Air Quality) 2004, Schedule 3 document (2 OU at or beyond the facility boundary).

The dispersion modelling scenarios are shown below with further detail provided in Table 6.

Scenario Number	Assumptions
1	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 95,000 m <sup>3</sup> /hr Odour Concentration of 500 OU
2	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 70,000 m <sup>3</sup> /hr Odour Concentration of 500 OU
3	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 70,000 m <sup>3</sup> /hr Odour Concentration of 250 OU

A summary of the findings from the assessment (Scenarios 1-3) has been provided in Table 6 and the odour contour showing the facility operating at the projected facility configuration (70,000m<sup>3</sup>/hr process air flow vented through the biofilter and emitted at an odour concentration of 250 OU) is shown in Figure 20 below.

**Table 6 Odour concentrations at sensitive receptors (residential homes) surrounding the proposed facility**

Discrete Receptor Name	Odour Concentration (OU)					
	Scenario 1		Scenario 2		Scenario 3	
	Max 1 hr	99.5% 1 hr	Max 1 hr	99.5% 1 hr	Max 1 hr	99.5% 1 hr
Boundary <sup>1</sup>	<b>90.5</b>	<b>87.0</b>	<b>66.7</b>	<b>64.1</b>	<b>33.4</b>	<b>32.0</b>
Receptor A	0.78	0.37	0.57	0.28	0.29	0.14
Receptor B	0.30	0.16	0.22	0.12	0.11	0.06
Receptor C	0.36	0.20	0.27	0.14	0.14	0.07
Receptor D	0.51	0.36	0.38	0.26	0.19	0.13
Receptor E	0.46	0.29	0.34	0.22	0.17	0.11
Receptor F	0.37	0.23	0.27	0.16	0.14	0.08
Receptor G	0.33	0.20	0.24	0.15	0.12	0.08
Receptor H	0.29	0.11	0.19	0.08	0.10	0.04
Industrial 1	0.42	0.25	0.31	0.19	0.16	0.10
Industrial 2	<b>20.65</b>	<b>15.59</b>	<b>15.51</b>	<b>11.49</b>	<b>7.76</b>	<b>5.75</b>
Industrial 3	<b>2.80</b>	<b>1.94</b>	<b>2.05</b>	1.44	1.03	0.72
Industrial 4	<b>2.53</b>	1.86	1.86	1.36	0.93	0.68
Industrial 5	<b>10.64</b>	<b>10.89</b>	<b>7.84</b>	<b>8.03</b>	<b>3.92</b>	<b>4.02</b>

<sup>1</sup> Maximum concentration at the boundary  
**Bold text denote exceedance of the criteria**



**Figure 20 Scenario 3 – 99.5th Percentile Concentrations**

Note: the 2 OU assessment criteria value is shown in magenta. The turquoise isopleth represents 10 OU; the green isopleth represents 20 OU and the orange represents 30 OU.

The modelling shows that in the immediate area surrounding the biofilter the odour concentration falls rapidly and by the time the plume reaches the edge of the new industrial estate (northern boundary of the existing industrial estate) the odour concentration has fallen below the 2 OU criteria and is not likely to be detected (1 OU contour infers the extent of the odour detection).

In accordance with the requirements in the Tasmania EPA Policy (Air Quality) 2004, the odour assessment only takes into account the odour concentration and does not consider other factors that affect the perception of odour nor its potential to elicit a negative response (cause an odour complaint or affect amenity at a receptor). As odour is a complex mixture of gases and its affect is based on perception of the odour, other characteristics of the odour need to be considered. The following section outlines other factors that should be understood when considering the potential impacts from odour. The section outlines independent biofilter odour investigations conducted by The Odour Unit at Ridley's Narangba facility in South East Queensland which suggests that odours from the proposed biofilter at Westbury are unlikely to create environmental nuisance or illicit adverse reactions.

### 6.1.3 Factors Mitigating the Predicted Odour Concentration

There are a range of factors affecting the perception of odour which need to be examined either through testing or through an analysis of the data around the proposed source of an odour. The most commonly referenced odour characteristics (other than simple odour concentration) are known as the FIDOL factors, which are summarised as follows:

- Frequency of an odour occurrence, and refers to how often a person may be exposed to an odour. A highly fluctuating low level odour may be perceived as more of a nuisance than a constant low level odour.
- Intensity of an odour is the strength of that odour.
- Duration of the odour experienced by a receiver. This relates to how long the concentration may remain above the odour threshold at a receiver.
- Offensiveness of an odour (which can be subjective) refers to a mixture of an odours character and hedonic tone at a given odour concentration.
- Location of the odour i.e. is the source of odour in an area unlikely to be affected by that odour.

### 6.1.4 Frequency of the odour

Given the nature of the Aqua Feed Mill process and the mitigation equipment i.e. biofilter operating continuously emitting an odour that is not expected to vary significantly, the odour from the Ridley facility is expected to be low. Although the odour may be detectable at a low level for much of the time, its low variability and expected neutral character and hedonic tone suggest that there will be low variability in the odour occurrence and as such, the frequency is not expected to be a negative factor for the Aqua feed mill.

Note:

- Hedonic Tone can be broadly defined as " the degree of pleasantness or unpleasantness associated with an experience or state", which when extended to odour means that an odour scale can extend from pleasant to unpleasant. A neutral hedonic tone is one where the odour is neither pleasant nor unpleasant
- Odour Character is broadly what something smells like. It is different to Hedonic tone as it is not a pleasantness rating; rather it is a recognition factor. For odours that have low recognition factors it often means that they are not intense strong odours that are likely to elicit a response.

### 6.1.5 Odour Intensity and Hedonic tone

The odour intensity and hedonic tone factors are able to be measured and applied to the dispersion modelling results to try and ascertain whether these odour characteristics assist with the understanding of the odour modelling results.

The Odour Unit was commissioned to undertake odour intensity and hedonic tone testing of air samples collected from the biofilter located at Ridley's Narangba facility in South East Queensland. This plant was selected as a surrogate for the proposed Aqua Feed mill plant in Tasmania. The aim of the testing was to understand the correlation between biofilter-treated odour concentration and the actual perceptibility (i.e. intensity) and pleasantness or otherwise (i.e. hedonic tone).

Four samples were collected from the Ridley Narangba plant and tested for intensity and Hedonic Tone in The Odour Unit Brisbane laboratory on 23 June 2017. The results of this testing are summarised in Table 21 below.

In the case of the proposed Tasmanian plant, the Environment Protection Authority has indicated that the plant would need to comply with its Schedule 3 Environment Protection Policy (Air Quality) 2004 odour performance criterion of 2 odour units (99.5th percentile, 1 hour averaging) at the boundary of the property, regardless of the fact that the only odour emissions from the site will be from the biofilter.

The Odour Unit uses a modified version of the method described in the German Standard VDI 3882.1 Olfactometry - Determination of Odour Intensity and VDI 3882.2 Olfactometry - Determination of Hedonic Odour Tone to generate odour intensity and hedonic tone results. Odour concentration is determined by finding the point of detection of odour where you can just sense it (i.e. sub-threshold testing). Intensity and hedonic tone is determined by analysing the odour's quality, beyond the point of detection, at concentrations where its character is clearly recognised (i.e. super-threshold testing).

The intensity and hedonic tone score results are graphed against concentration above threshold value. This method offers a different interpretation and clearly shows the relationship between an odour's perceived qualities above threshold.

**Figure 21 The Odour Unit Hedonic Tone Tests at Narangba Bio filter in South East Queensland.**

Sample Location	TOU ID	Concentration at weak intensity (ou)	Concentration at distinct intensity (ou)	Hedonic tone at weak intensity	Hedonic tone at distinct intensity
Biofilter surface #1	BC17111	4	8.2	Slightly unpleasant	Slightly unpleasant
Biofilter Surface #2	BC17112	3.2	7	Neutral	Slightly unpleasant
Biofilter Surface #3	BC17113	6	12	Slightly unpleasant	Slightly unpleasant
Biofilter Surface #4	BC17114	5.3	11	Neutral	Slightly unpleasant
Average		4.6	9.6	-	-

*Note: Four samples were collected and tested for Intensity and Hedonic Tone.*

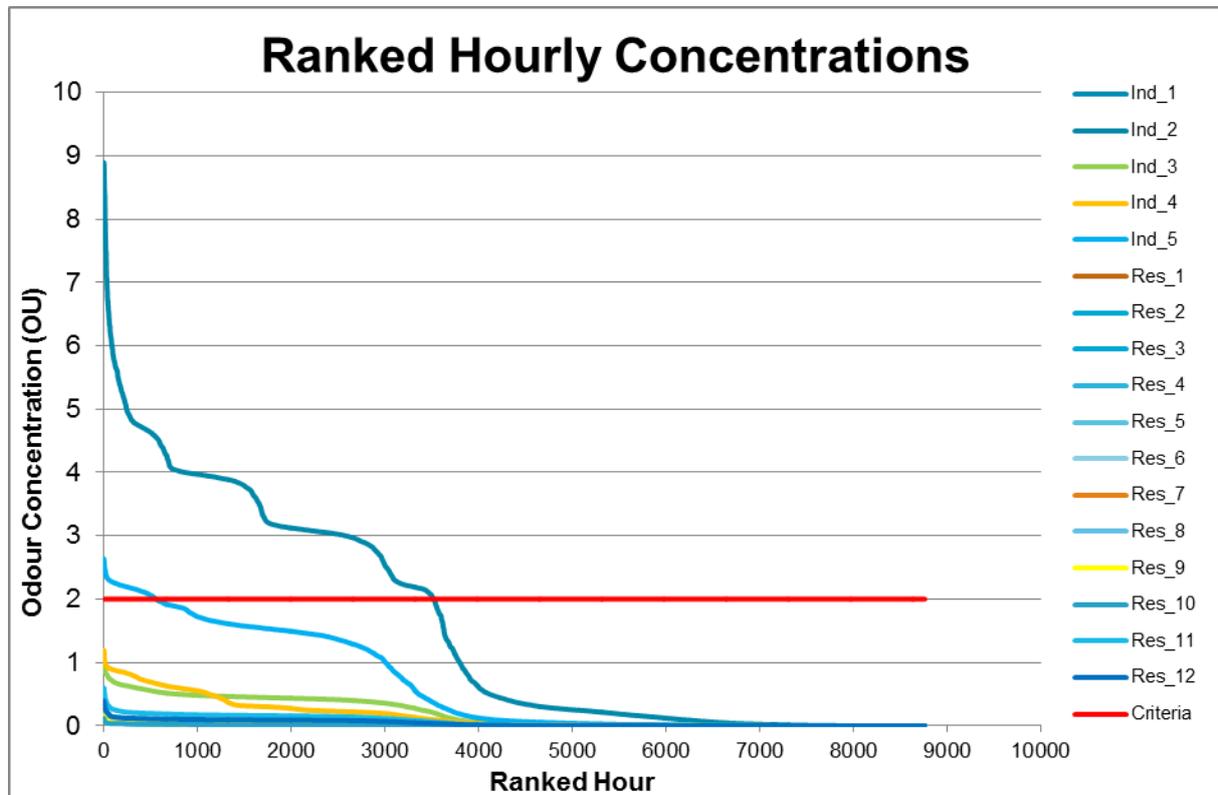
The report prepared by The Odour Unit to accompany the above results indicates that the biofilter odour is unlikely to cause an environmental nuisance based on its neutral to slightly unpleasant hedonic tones at weak and distinct perceived intensities. The Odour Unit data suggests that the biofilter odour would not illicit an adverse response from sensitive people until the concentration reached at least 4.6 OU, and more likely 9.6 OU, depending on the sensitivity of the receiving environment.

The dispersion modelling summarised above and in Appendix E shows that the existing industrial receptors (receptors designated Industrial 1-5) modelled for the assessment all had predicted concentrations lower than the 9.6 OU concentration (but higher than the 4.6 OU value below which no adverse response is expected). On the basis of these results, and the expected low level of sensitivity for the industrial receptors included in the modelling, it is considered that the operation of the Aqua Feed Mill will have a low likelihood of eliciting an adverse response at surrounding receptors.

It should be noted that the hedonic tone of the odour from the biofilter was considered to have a neutral to slightly unpleasant tone. This means that the odour was largely neither agreeable nor offensive to the odour panel. This type of odour is considered common from a biofilter of the type proposed for the Aqua Feed Mill and the odour can best be described as a mild bark or fresh wood mulch odour. There are a large number of these biofilter operating throughout Australia and their use can be considered as best practice for the treatment of large process air volumes, where other treatment methods become unviable due to treatment volumes.

**6.1.6 Duration of the odour**

The duration of the odour has been examined through the analysis of the time series data obtained by the dispersion model. The discrete receptor data for every hour of the year was extracted and ranked from highest to lowest. The results were plotted and the plot is shown in Figure 22.



**Figure 22 Ranked Odour Concentration Data for Sensitive and Industrial Receptors**

As can be shown in the data presented above, the likely duration of odours above the criteria is low. Residential receptors are not expected to experience any periods above the 2 OU concentration, whereas the industrial receptors modelled are expected to experience odours above the criteria for less than ~8% for all receptors with the exception of the closest industrial receptor that is has conc > 2 OU for ~43% of the year. Coupled with the low expected frequency of odour change, the neutral hedonic tone and intensity of the odour, the duration is considered to demonstrate that the odours generated will not elicit a negative reaction from the surrounding receptors.

**6.1.6.1 Location**

The location of an odour source is a critical factor when examining whether an odour is likely to elicit a negative response. If a source is situated in an area with a high density of residential receptors close to the source, then there is a higher risk that there may be a person who has high sensitivity to odour or who has a sensitivity to a particular odour type. Conversely, if the odour source is situated in a location with a large buffer distance between the source and any receivers, or if the source was situated in an environment where odours are expected and tolerated to a higher degree e.g. an industrial precinct, the likelihood of odour complaints is much lower.

In this particular situation with the Aqua Feed Mill, there are some factors that need to be considered from a location perspective:

- Sensitive receptors (residents) are situated at a significant distance from the Mill, with the closest receptor approximately 1km away. This buffer distance is much higher than what would be expected from any modern industrial facility and is expected to virtually eliminate the likelihood of odour complaints from surrounding residents
- There are existing Industrial receptors situated to the south of the proposed Aqua Feed Mill site. While it is acknowledged that there is the potential for the odour concentration to exceed the 2 OU criterion at the locations close to the Aqua Feed Mill site, the nature of the industrial facilities i.e. heavy industrial / commercial activities suggest that the low level odour that may occur on occasions will not cause an adverse reaction as the workers on these sites have a lower expectation of air quality at these precincts than what would be expected at a residential setting
- There is a low population density around the Aqua Feed Mill facility. This low population density (in terms of both residential and Industrial developments) suggests that there would be a correspondingly low risk of someone being sensitive to odour or sensitive to a particular type of odour. Given the nature of the area this risk is considered acceptable.

### 6.1.7 Alternative Source or Treatment Methodologies

Although the data above suggests that there will not be a problem with the proposed odour capture and treatment system, an investigation into alternative methodologies was undertaken to determine whether an alternative system could be used to either reduce the odour to a lower concentration or disperse the odours more effectively. The following discussion has been separated into two areas for analysis:

1. Alternative ventilation methodologies
2. Alternative treatment technologies

#### 6.1.7.1 Alternative Ventilation methodologies

One of the reasons for the high odour concentrations at the boundary is that the treated process air is emitted at ground level over a large area with no vertical momentum or thermal buoyancy to aid in the dispersion of the air. An alternative to this type of emission source (known as an area source) is to vent the air via an emission stack or point source. Two stack scenarios were examined with the point source investigated at the location of the existing biofilter with two different flow rates as outlined in Table 7.

**Table 7 Stack Source Characteristics**

Source Label	Easting (m)	Northing (m)	Stack Diameter (m)	Stack Gas Flow Rate (m <sup>3</sup> /s)	Stack Temp (K)	Stack Height (m)	Stack Velocity (m/s)	Emission Rate (OU/s)*
Scen. 1	485667	5404934	1.3	26.39	298.15	15	19.88	6598
Scen. 2	485667	5404934	1.3	19.44	298.15	15	14.62	4860

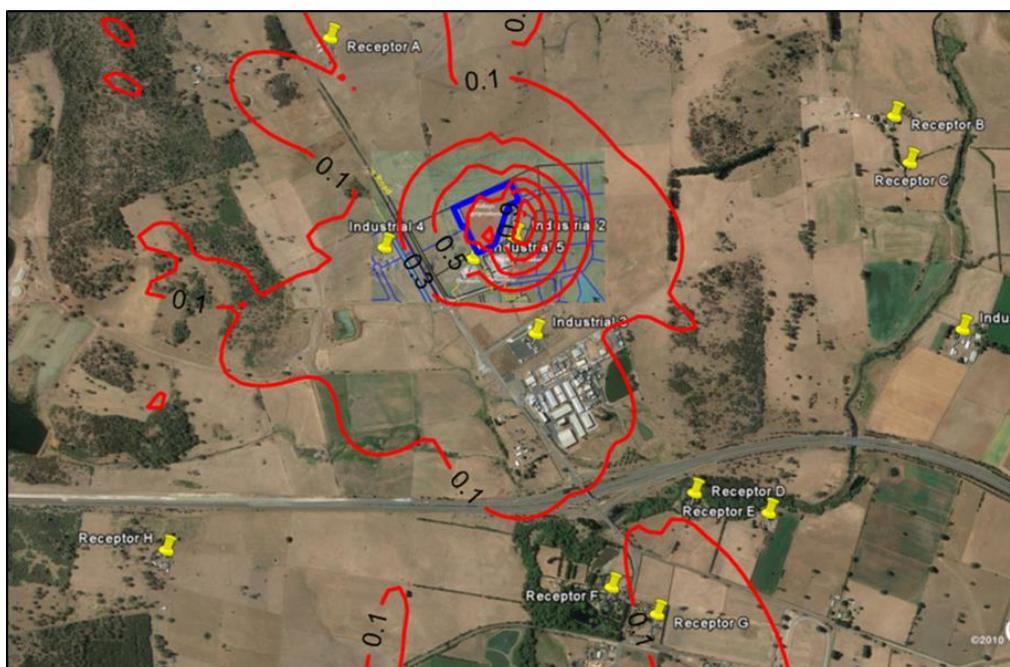
\* Based on 250 OU/m<sup>3</sup> as this is the projected operating level.

The above stack was modelled in the absence of building wakes as a screening run to establish whether this option was worth further investigation as a measure to reduce odour concentrations. In the event that more detailed modelling was to be undertaken for this technology, building wakes would be included. However, the wakes would be unlikely to make a significant difference to the results discussed below.

The results of the stack modelling have been presented in terms of the tabulated concentration at the boundary (refer Table 8) and using concentration contours for the worst case stack scenario (Scenario 1).

**Table 8 Peak odour concentration at the property boundary**

Scenario	Concentration Statistic	Odour Concentration (OU)	Tasmania EPA Odour Assess Criteria (OU)
Scenario 1	Maximum Concentration	1.268	2
	99.5 <sup>th</sup> Percentile Concentration	0.371	
Scenario 2	Maximum Concentration	0.9345	
	99.5 <sup>th</sup> Percentile Concentration	0.368	



**Figure 23 Odour concentration contours for 1 hour maximum odour concentration (Scenario 1)**

The results of the stack modelling suggest that the ground level concentrations would be lower than the results for the biofilter. The contours suggest that the stacks main benefit would be for the industrial estate where the concentration within the estate would be in the order of 1.8-2.0 OU in comparison to the biofilter concentration of ~32 OU at the boundary. It should be noted that this difference is most pronounced close to the biofilter location itself and by the time the plume has reached the boundary of the industrial estate, the concentration difference has decreased to approximately 0.7OU. On this basis, by the time the odour from the stack reached the industrial receptors, the difference between the odour performance of the biofilter and stack is expected to be negligible.

Given that the better performance of the stack over the biofilter is only experienced close to the site and that there is only marginal improvement beyond the boundary of the new industrial estate, the additional costs associated with the stack infrastructure are considered to be excessive relative to the odour improvement outcome. The additional costs would include installation of a cover for the biofilter, a large fan, an in-line scrubber and associated stack. This approach would also involve higher energy usage and costs over the life of the facility and additional maintenance costs. It is contended that this higher level of investment is not justifiable when compared with the proposed biofilter as studies conducted at a comparable Ridley plant suggest that the proposed biofilter solution will not create adverse impacts in the industrial estate.

Although in this instance the modelling suggests that the introduction of a stack should reduce the odour concentration at the boundary, Ridley has extensive experience in the operation and maintenance of biofilters at a number of facilities in other states of Australia, none of which are fitted

with a stack. The biofilter at the proposed Westbury facility is of similar design to Ridley's other biofilters and has been designed by The Odour Unit who have extensive experience with industries within Tasmania.

Ridley's plant in South East Queensland has been used as a baseline for the proposed Westbury facility and operates 24 hours per day 7 days per week complying with the relevant authorities. The hedonic tone and intensity testing performed by The Odour Unit at the Queensland site provides factual data regarding the odour emitted from the surface of the biofilter highlighting the biofilters effectiveness. As with Ridley's Queensland facility, an odour/biofilter management plan (found in Appendix E) that addresses the operation and maintenance activities required to monitor compliance will be implemented.

The biofilter as currently designed is a practical and fit for purpose piece of equipment that demonstrates in numerous applications the potential for odour to cause an environmental nuisance is unlikely.

### **6.1.8 Alternative treatment technologies**

Treatment of odour can be achieved through a wide range of methodologies and technologies. Typical odour treatment methods are:

- Adsorption of odours e.g. activated charcoal;
- Thermal treatment of odours e.g. thermal oxidiser or flare;
- Wet scrubbers; and
- Biological filters.

#### **Adsorption of odour**

Adsorption of odour as a treatment methodology relies on the passing of an odour laden air through a substrate (such as activated charcoal) which adsorbs different compounds onto the surface of the substrate, thereby removing the compounds and hence the odours. The removal efficiency of this method relies upon the ability of the substrate to adsorb odorous gases and the residence time of the gas within the substrate to allow the gas enough time to come into contact with the substrate surface and adsorb onto the substrate.



**Figure 24 Activated Charcoal System**

The design of odour control units for adsorption is scalable from very small canister arrangements to large shipping container size batches of substrate. The scalability of the adsorption method is a significant advantage for this method for odour treatment, but as the batch increases in size, the relative cost of the system increases and the cost to replace the substrate once saturated becomes significant and produces a waste that needs to be either treated to remove the pollutants or disposed of to landfill. There is also doubt about the suitability of the activated carbon to remove all the odorous species.

Given the large flow rate from the Ridley facility (70,000 – 95000 m<sup>3</sup>/hr), an activated charcoal system would need to be very large and would require an expensive monitoring system to ensure the filter breakthrough is managed. As such, it is not considered a viable option for the plant (Figure 24).

#### **Thermal Treatment of Odour**

Thermal treatment includes technologies such as thermal oxidiser and flares. The treatment mechanism uses a flame or heated catalyst to burn the organic or odorous compounds in the air stream, decreasing the odour concentration by releasing odour free products of combustion (CO<sub>2</sub> and water). This method works well for combustion of process streams with combustible organic compounds such as off-gases from petrochemical production or processing. An example of the Thermal Oxidiser is shown in Figure 25.

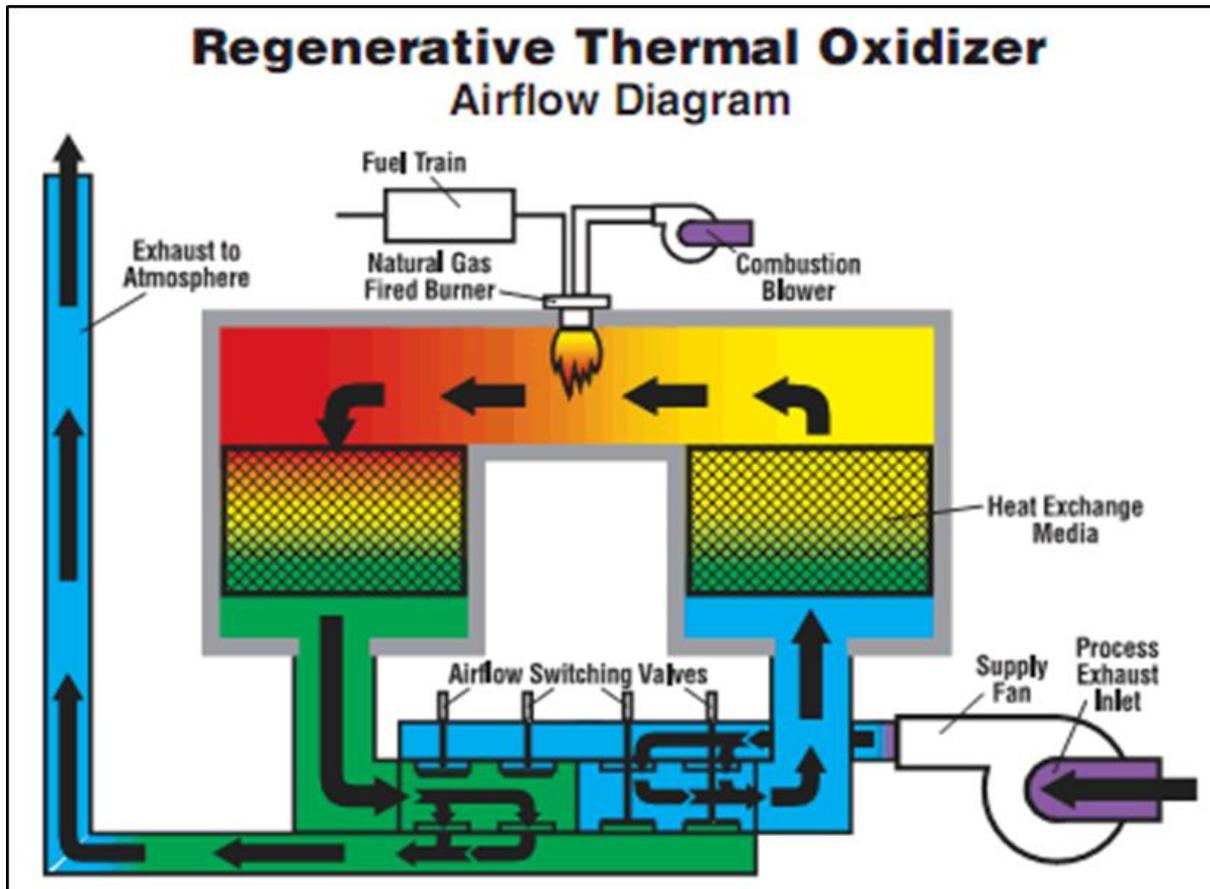


Figure 25 Thermal Oxidiser System

The odours from the Ridley Aqua Feed Mill are expected to be low concentration, large volume organic compounds and as such, would not be of sufficient concentrations to assist in the combustion process and make this type of odour treatment viable. With a lower combustible composition, there would need to be a larger quantity of fuel (natural gas) needed to ensure the treatment occurs to an acceptable level. These types of treatment technologies are also very capital intensive and require highly skilled operators to monitor their operation. The operating cost of the unit that needs to burn e.g. natural gas are very high and lead to significant greenhouse gas emissions. Given the nature of the air stream exiting the Ridley facility, there is no justification for the use of a thermal oxidiser.

**Wet Scrubbers**

Wet scrubbers utilise a counter-current airflow passing through a packed bed with a liquid scrubbing medium moving through the packed bed to remove odorous gases from the liquid stream. Wet scrubbing is an efficient means of removing odour from a process air stream as it can be designed to target specific compounds expected in the process air. The disadvantage of the wet scrubber is in its generation of waste and capital and operating costs. The scrubbing liquid needs to be either regenerated or disposed of once saturated leading to either additional regeneration or disposal fees. In addition, the capital and maintenance costs for a wet scrubber are higher than for an activated charcoal or biological filter system. An example of a wet scrubber is shown below in Figure 26.

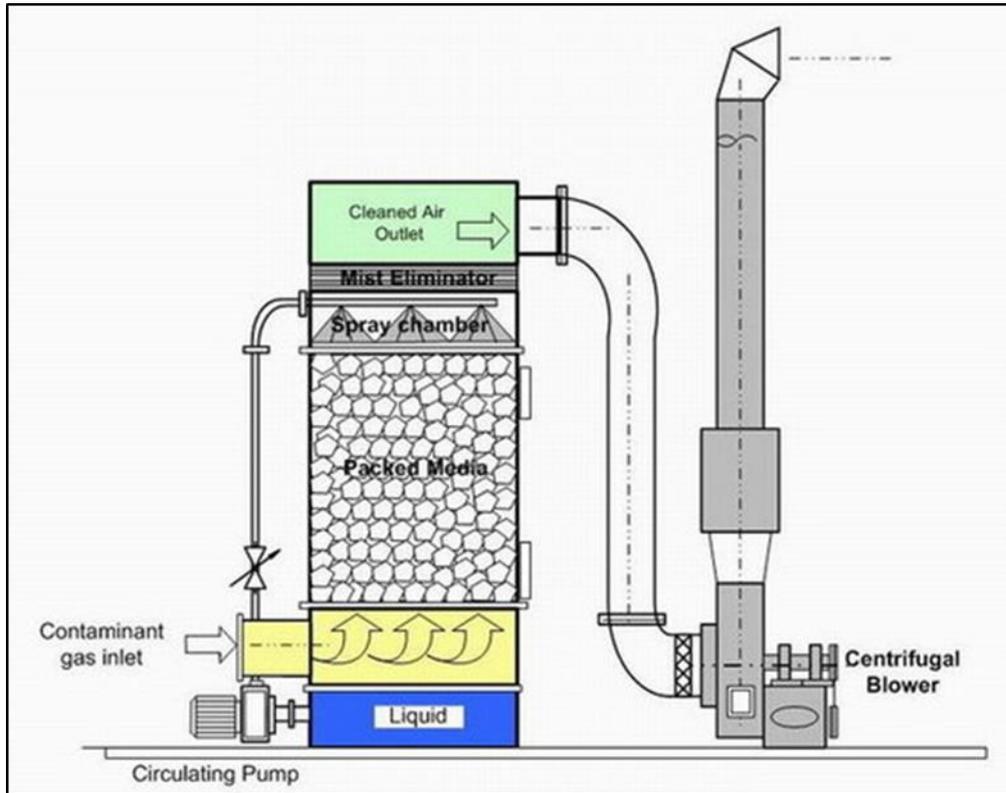


Figure 26 Wet scrubber system

While wet scrubbing would be a feasible technology for the Aqua Feed Mill, it is considered that the initial capital and ongoing maintenance and waste disposal costs cannot be justified given that the level of odour impact associated with the facility is predicted to be low with the proposed biofilter technology.

**Biological Filtration**

Biological scrubbers utilise biological activity within the system to consume organic compounds within the process air, effectively scrubbing the foul gases from the process air prior to the air being vented to the environment. Biological scrubbers have the advantage that they are very simple to operate (although care must be taken to ensure good biological growth conditions are present), easy to build and expand and can be replaced easily through the replacement of their biological media. They are a well understood technology and have been used throughout Australia for the treatment of foul air from waste facilities and a range of industries that produce organic compound laden off-gas.

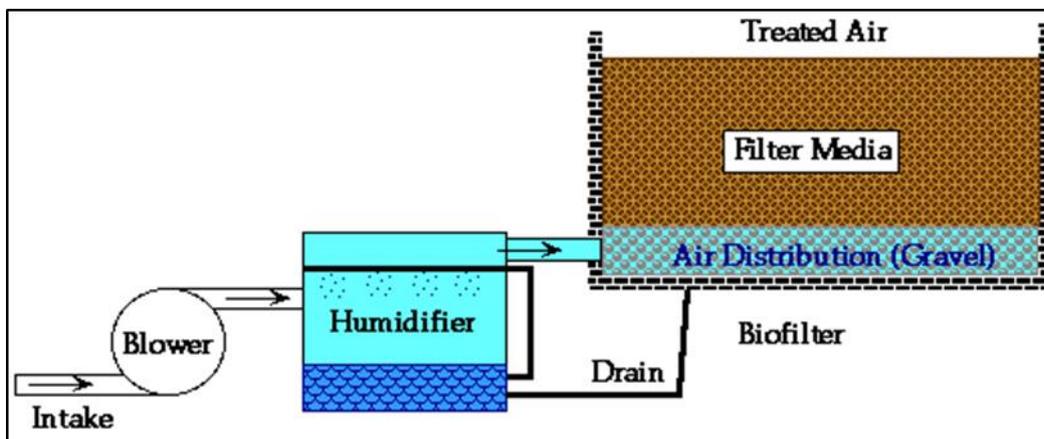


Figure 27 Biological Filter System

Biofilters are relatively low capital and maintenance cost scrubber and can produce reliable long term results from a continuous source. Given the low concentration, high process air flow conditions at the Aqua Feed Mill, a Biofilter system will perform reliably and produce a consistent odour emission.

### Summary

Of the odour scrubbing technologies available, the two technologies that could be reasonably used at the Ridley facility are the Wet Scrubber and the biofilter technologies. The selection of the biofilter technology has been based on the lower capital and maintenance costs of the biofilter, the known performance of a similar scrubber at a Ridley Facility in Queensland and the fact that the proposed facility is predicted to have minimal odour impact at receptors.

### 6.1.9 Selected Odour Control System - Biofilter Technology

As discussed in the preceding section, the Odour Control System (OCS) adopted for the Aqua Feed Mill is a biofilter similar to those used at other Ridley operations and designed by The Odour Unit who have considerable experience in these systems. The OCS is discussed below with more details found in a report by The Odour Unit in Appendix E.

The OCS at Westbury will consist of three key components namely:

- A collection duct system extracting process air from all significant aqua feed processing units;
- A packed-bed humidifier/scrubber vessel; and
- The Biofilter.

### Collection System Design Details

#### Design Airflows

In developing a design for the OCS, each process unit within the plant was allocated a maximum design airflow from that collection point, sufficient for capture of all odorous process emissions. Each of these individual process unit airflows has been combined into the Total Process Airflow for the plant. In practice actual airflows may differ slightly from the design flows once the collection system is flow and pressure-balanced during commissioning.

The design of the internal collection system has been carried out by Grintec, a leading engineering consultant in the aqua feed industry. The design of the external ductwork, humidifier and fan will be completed by The Odour Unit. The maximum Total Process Airflow is 102,500 m<sup>3</sup>/hr for the design however for modelling a realistic operating air flow of 95,000 m<sup>3</sup>/hr and 70,000 m<sup>3</sup>/hr (~10% below designed airflows) was used for the air modelling. The breakdown of the Process Airflow is shown below.

Process airflows to biofilter	
Process Item	Maximum Airflow (m <sup>3</sup> /hr)
Raw Materials Receival Area	25,000 (intermittent)
Hammer Mill	10,000
Flash Off	7,500
Dryer	30,000
Product Cooler	30,000
Design Maximum Airflow: 102,500 m <sup>3</sup> /hr	
Design Base Airflow: 77,500 m <sup>3</sup> /hr	
Expected Operating Airflow: 70,000 m <sup>3</sup> /hr / 95,000 m <sup>3</sup> /hr	

It should be noted that not all process airflows will operate continuously. For example, the Raw Materials Receival Pit area will contain raw materials for only one hour at a time, several times daily. Outside of these times the airflow to the biofilter can be reduced by 25,000 m<sup>3</sup>/hr.

### *Ducting*

Process airflows will be conveyed by 304 Stainless Steel ducting internal and external to the building, to the humidifier, fan and biofilter. The diameter of this duct will be 1500 mm. The fan will discharge into the biofilter distribution chamber.

### *Biofilter - Design Concept*

The OCS consists of a point-source capture system for the most odorous process units, with this process airstream treated in a new biofilter. It is The Odour Unit's experience that the capture and treatment of process air, in the manner proposed, will result in only 5-10% of the odour generated in the aqua feed plant being discharged into the aqua feed environment, and ultimately to the atmosphere (i.e. 90-95% odour destruction).

The collected airstream will be humidified before biofiltration. Humidification of the air to approximately 85% relative humidity (RH) is required to ensure sustainable, strong biofilter performance. Lower levels will invariably result in uneven and possibly dry patches in the biofilter medium, and incomplete odour removal. Inadequate humidification is the single largest reason for poor biofilter performance in Australia.

### *Biofilter Fan*

The OCS is powered by a centrifugal fan located adjacent to the biofilter. This fan will be sized to draw process air from all the point source airflows (102,500 m<sup>3</sup>/hr), however will be able to operate at the expected operating flow of 70,000 m<sup>3</sup>/hr. The individual airflows will be adjusted and balanced by dampers on each of the main branch ducts and most of the source ducts. The specifications for the fan are summarised below.

<b>Westbury Biofilter Fan Specifications</b>	
<b>Fan Type</b>	Centrifugal
<b>Materials</b>	All wetted parts in 304 Stainless Steel
<b>Capacity</b>	102,500 m <sup>3</sup> /hr
<b>Pressure Duty</b>	3.5 kPa
<b>Power Draw/Motor</b>	120 kW / 160 kW
<b>Speed Control</b>	Variable speed drive (VSD)

The actual airflow at commissioning should be set to the design flow at the initial low biofilter back-pressure by the use of the VSD. The VSD ensures that full design airflow can be achieved right up to the end of the life of the biofilter medium, when the biofilter back-pressure will have increased to 2.0-2.5 kPa.

### *Biofilter Details*

The biofilter will be designed for the maximum design airflow of 102,500 m<sup>3</sup>/hr, although will operate at a reduced flow of 70,000 m<sup>3</sup>/hr, except when the raw materials receival system is in operation (for approximately one hour, several times per day). Under these conditions, the biofilter will be under loaded for the majority of the time.

The design specifications for the biofilter are shown below. While the technical specifications for the biofilter are not expected to change, the layout and configuration of the biofilter will be subject to site availability and may vary from the 3-cell arrangement depicted in the photo.

Westbury Biofilter Operating Specifications	
Specification	Value
Area	540 m <sup>2</sup>
Configuration	Two or three cell, 'hopper-front', open bed (see example photo below)
Air distribution	Full plenum distribution chamber
Depth of medium	2.0 m
Temperature	45°C (max.)
Design Flow rate	102,500 m <sup>3</sup> /hr (max.), 77,500 m <sup>3</sup> /hr (base), 70,000 m <sup>3</sup> /hr (operating)
Specific loading rates (at max. flow)	190 m <sup>3</sup> /m <sup>2</sup> /hr 95 m <sup>3</sup> /m <sup>3</sup> /hr 38 seconds EBRT
Plenum floor	Proprietary TOU design, full cavity floor
Biofilter medium	TOU proprietary medium, based on oversized composted and bark material sourced locally
Pressure drop across medium	0.1 to 0.5 kPa (new medium) Up to 2.5 kPa (exhausted medium)
Air inlet	Horizontally, into end of distribution plenum chamber



Figure 28 Photo of biofilter of similar design to that proposed

*Biofilter Medium Details*

The medium for the biofilter will be a blend of materials sourced from locally available materials. This blend is a proprietary TOU formula and consists broadly of an oversized partially-composted fraction, mixed with bark nuggets and other organic materials. The life of the medium is expected to be 4-5 years, with a mid-life cycle 'refreshing' of the media expected after 24-30 months from the commissioning date. This involves loosening and turning the medium, and incorporating some new

medium if required. Replacement of the entire medium will require the old medium to be removed and new material installed in the same manner as the existing medium. When reloading the new medium an additional 30% to the calculated medium volume is needed, to allow for consolidation and compaction during placement. Some incorporation of the spent medium is recommended to serve as an inoculant to the new medium.

The medium will be loaded by means of a long reach excavator. This machine will load the medium from the open front of the cells, depositing it carefully across the cell. It is not desirable to bulk-load the cells by dropping the medium in the centre of the cell and allowing it to distribute to the walls, as this results in segregation of the medium and air distribution problems.

To minimise and manage odour during medium replacement period's medium can, if needed, be replaced one bay at a time, during processing periods. This will have no effect of the biofilter performance. The alternative is to replace all three beds on weekends or during shutdown periods when the plant is not running. Spent material will contain no contamination and can be disposed of to land.

#### *Inlet Biofilter Airstream Conditioning*

The need to condition the airstream prior to biofiltration consists of two key performance parameters including:

- Relative humidity level of the airstream; and
- Temperature.

A biofilter requires the biofilter medium in the beds to be adequately moistened in order to maintain sustainable performance. It is The Odour Unit's experience that inadequate bed moisture control is the single largest contributor to poor biofilter performance, and that the air to a biofilter should be as close to saturation as possible under all climatic conditions. In this case a two-stage approach to achieving this objective has been selected. Humidification of the inlet airstream to the biofilter will be the primary means of achieving bed moisture control, and involve the use of a dedicated humidifier/scrubber vessel.

This pre-conditioning of the airstream brings about adiabatic cooling of the airstream and an increase to relative humidity to near saturation levels. The humidifier system is described below.

#### *Humidifier Design*

Due to likelihood that the inlet air flows will at times be less than fully saturated, it is essential to humidify the air stream prior to biofiltration. For the biofilter inlet airstream, this will be achieved by a humidifier/scrubber installed on the suction side of the biofilter fan. The system will be designed in-house by The Odour Unit and manufactured specifically for this application.

The humidifier system will be designed for the expected operating airflow of 70,000 m<sup>3</sup>/hr and be capable of operating for short periods at the maximum airflow of 102,500 m<sup>3</sup>/hr. It will feature a humidifier vessel with the following specifications:

- Design: single-stage, counter-current, packed bed vessel
- Material: 304 stainless steel or GRP
- Colour: SS or green
- Diameter: 3.3m
- Height: 7.0 m
- Packing depth: 1.4m of random packing (Tellerettes)
- Ducting diameter: 1500 mm
- Motor: One 7.5 kW (approx.) liquor recirculation pump

The humidifier will utilise a counter-current air/water flow design, with a target performance of better than 90% relative humidity in the biofilter inlet airstream. A single recirculation pump at the base of each vessel will recirculate scrubbing water from the base of the vessel to the spray nozzle above the

packing layer. The scrubbing liquor will need to be systematically removed from the vessel and disposed of to trade waste. This can be via a continuous slow bleed from the vessel, or through the entire contents being dumped on a regular basis.

#### *Biofilter Bed Surface Drip Irrigation Systems*

A secondary biofilter humidification system has been designed, in the form of surface drip irrigation system on the biofilter beds. This system is timer-controlled from a localised control box mounted on the southern end of the biofilter. The drip irrigation system will be a commercial system used in the horticultural industry. As the secondary biofilter humidification system, this system should be operated only when additional moisture is needed in the biofilter bed. A typical operating regime would be 10-30 minutes of operation 3-6 times daily, depending on seasonal conditions.

The drip lines are positioned at 300 mm centres across the bed, and will have drip holes also at 300 mm centres. The drip irrigation system will be installed by a local contractor, as part of the TOU biofilter internals supply-and-install package.

#### *Drainage*

Leachate from each cell of the biofilter will drain across the plenum floor to a spoon drain which will be constructed at the end distant from the inlet. It is collected there and removed to one of the two common sumps by means of a 75 mm line with an 'S' bend type water seal to prevent loss of untreated air. These may be removed in the event of blockage and a hose inserted for clearing. The 'S' bend type water seal also needs to be visible for the operator to inspect the drainage from the biofilter plenum. This leachate is then pumped to Trade Waste, along with the humidifier 'blow-down' liquor.

#### *Biofilter Loading Rate*

The Odour Unit has found that the odour destruction performance of this type of biofilter is not dependent to any significant extent on inlet odour concentrations, in aqua feed processing plant applications. The proposed EBRT loading of 38 seconds has been proven to be conservative for this application, with loadings as low as 30 seconds still able to achieve satisfactory performance.

### **Biofilter Commissioning and Operation**

#### *Commissioning*

A well designed odour collection system will start up with more than adequate airflows at each of the process unit collection points, sufficient to capture all odorous emissions. In the first few days the system will be flow balanced to optimise capture efficiency in order to use the available airflows to best advantage, but in general terms the system works well from the first day of operation.

It is The Odour Unit's experience that a well-designed biofilter will work well from the time it is commissioned, removing the required level of odour from the inlet air stream. There are two reasons for this. Firstly, a biofilter has a large odour adsorption capacity, by virtue of the large and damp mass of biofilter medium and its very large surface area. Secondly, and most significantly, the biofilter medium, being based on a range of composted materials, is biologically active from day one. Over several weeks the biomass in and on the medium will continue to acclimatise to the specific odourant compounds present in the air stream, but will be sufficiently active at commissioning to remove enough odour so as not to cause off-site odour impacts. Indeed, aqua feed processing plant biofilters are amongst the easiest to commission by virtue of the readily biodegradable nature of the odourant compounds forming the odour (mostly aldehydes and ketones). There is therefore little need for microbiological examination of the biomass in the biofilter during the commissioning phase.

The key to maximising the action of both of the above effects is to ensure that the biofilter medium is close to its optimum moisture level before turning on the system. This must be part of the commissioning process.

The operation of the Ridley biofilter will be comparatively simple and normally changes will occur very gradually. TOU has found clearly that a most important factor leading to good biofilter operation is the appointment of one person to manage the biofilter's efficient operation. In this way one person will be responsible for the operation, maintenance and monitoring of the biofilter systems. Biofilters that are not regularly checked have a tendency to suffer problems, usually in the bed moisture control area.

### *Monitoring and Biofilter Maintenance*

A proposed monitoring and maintenance protocol is outlined below:

#### *Daily Biofilter Management Procedures*

- Inspect the biofilter system and check that the fan is running and the humidification system is operating.
- Check the drainage sumps, particularly the delivery from the drains. This should be a steady, fast drip or dribble. Too little suggests insufficient irrigation and too much suggests over-irrigation.
- Check the temperature of the foul air stream into the biofilters (post-fan).
- Check the under bed pressure in the inlet air distribution chambers.
- Check above each bed and downwind for any odours. Check the surface of the medium for dry patches and adjust watering regime if necessary. Particularly note any odours or dry areas around the walls. Log any adverse results. Identify any areas where odour and/or short-circuiting may be occurring and rectify as required.

#### *Weekly Biofilter Management Procedures*

- Check and record the back-pressure into the biofilter, as indicated by the fixed pressure gauges at the end of the inlet chambers. It is desirable that the back-pressures be graphed, as to demonstrate any sudden changes that may have occurred from the previous operating period. This gives assistance when the six monthly checks are carried out. A gradual falling in back pressure may indicate that the beds are drying out. A sudden increase indicates over-watering or accumulation of water in the plenum, while a gradual increase over a period of years indicates normal bed consolidation.
- Inspect the top surface of the biofilters. Remove any weeds. If the problem is persistent the use of a light surface spray of herbicide is acceptable (e.g. Roundup). Check for any dry spots. If these occur, water well with a hand hose or sprinkler and consolidate the area by tramping. These are most likely at the inlet chamber/medium interface. During filling these areas were filled a little higher and given extra tramping to consolidate. In the event that any problems develop it may be necessary to spread extra compost and compact well.
- Inspect the action of the irrigation drippers. Check that the surface of the beds is uniformly moist and that all drippers are free from blockages. Adjust irrigation timer if necessary.
- Check that negative pressures are being maintained within the foul air collection systems, by observing process air capture at the extremities of the system.

#### *Monthly Biofilter Management Procedures*

- Measure and record the foul airflow to the biofilters. Check against set-point airflow to determine whether the air capture system is operating effectively.
- Assess the air distribution between each of the biofilter cells, by observing the steamy outflow from the surface of the cells. This is best done in the early morning.
- Check and record the relative humidity and temperature in the foul airstream into the biofilter, using either a combined anemometer/RH meter or a wet/dry bulb thermometer system. Investigate reasons for lower than desirable RH if present. Check the operation of the spray humidification system.
- Check the moisture of the biofilter beds. This can best be done by digging to a depth of at least 300mm and observing the condition of the medium. If dry areas are evident the surface drip irrigation system should be adjusted to increase irrigation times.

#### *Half-yearly or Yearly Assessments*

- In the first year of operation six-monthly assessments of the OCS by an external consultant have been found to be highly beneficial. Subsequent assessments can extend to yearly visits if operation is satisfactory.

### *Complaints Management*

- An Environmental Complaints procedure will be developed for the OCS based on an existing Ridley protocol for its Queensland plant shown in Appendix E. This will include a complaint form/register, response protocols, and management responsibilities. Ridley records all such issues in a centralised database including tracking of actions.

#### **6.1.10 Odour Management Plan**

An Odour Management Plan (OMP) based on the detailed air quality and odour management studies conducted for the Aqua Feed Mill will be developed prior to operation.

Studies conducted to support this DPEMP indicate that the 2 OU limit policy requirement specified by the EPA will not be met at the site boundary. However, a further assessment conducted by The Odour Unit using empirical data from the Ridley Feed Mill at Narangba in Queensland which operates a biofilter similar to that proposed at Westbury concluded that the odour itself will be neutral and non-offensive. The study found that the odour generated by the facility is unlikely to result in a negative reaction from off-site receptors.

Notwithstanding this, the Aqua Feed Mill OMP will outline the protocols and procedures to be adopted for odour management, ongoing monitoring and implementation of mitigation measures in the event that these are required.

The OMP will include key elements including:

#### **Characterisation of the odorous emissions from the activity**

- This section of the OMP will outline details of the likely odour generated, factors mitigating the predicted odour concentration, frequency of the odour, odour intensity and hedonic tone and duration of odour.

#### **Description of infrastructure and equipment utilised for odour mitigation**

- This section of the OMP will provide details on the overall odour management and mitigation infrastructure and equipment used within the plant itself and technical details of the biofilter used to treat odour emissions. All odour sources from the production process will be identified and odour management equipment such as extraction fans, collection ducting system, humidifier / scrubber vessel will be described. Design information for the biofilter will be outlined covering aspects including design airflows, ducting, biofilter fan, biofilter medium details, inlet airstream conditioning, humidifier design, biofilter bed surface drip irrigation system, drainage system and commissioning procedures.

#### **Description of the monitoring and maintenance system**

- This section of the OMP will provide details on the monitoring and maintenance program to be implemented covering both equipment and the biofilter. The monitoring program will be based on the considerable experience of specialist advisors The Odour Unit who have implemented and monitored many biofilter systems in industrial settings. The monitoring and maintenance plan will include:
  - daily procedures (e.g. check of fans and humidification system, drainage sumps, temperature of foul air stream, under bed pressure, biofilter surface and manual odour detection assessment);
  - weekly procedures (e.g. biofilter back-pressure, biofilter surface inspection, weed removal, watering and composting as required, check irrigation drippers, check negative pressure within foul air collection systems);
  - Monthly procedures (e.g. measure and record foul air flow to biofilter, assess air distribution between biofilter cells, check and record foul airstream temperature and humidity, check spray humidification system, assess moisture of biofilter beds and adjust as required)
  - Half yearly or annual (e.g. external audit of odour management system to provide feedback on performance and continuous improvement).

### **Method of complaints handling and procedures for maintaining a complaints register**

- This section of the OMP will clearly document the procedure for recording, assessing, mitigating and closing out issues raised in complaints in the event that these eventuate. The complaints register and procedures will be based on existing, effective procedures adopted at other Ridley operations with biofilter odour management systems. The OMP will provide details on a central database which will be used to register and describe complaints, assign them to a responsible person, track progress on complaint investigation and resolution, record mitigation measures, demonstrate close-out of the complaint and identification of opportunities for continuous improvement.

### **Stakeholder engagement and consultation**

- This section of the OMP will provide details on the stakeholder engagement and consultation process that was implemented during the planning and approvals phase of the project and outline mechanisms which could be used to engage with stakeholders in the future if required. The section will include a register of stakeholder consultation to date, issues discussed and concerns raised (none at present). As the Aqua Feed Mill is in an industrial estate remote from sensitive uses such as residences, protocols for engaging with other potential industrial users establishing in the estate will be documented for implementation if required. The OMP will demonstrate the commitment by Ridley to maintaining open dialogue with regulatory authorities and neighbours.

### **Triggers and procedures for voluntary shutdown in the event of apparent environmental nuisance being created**

- This section of the OMP will outline the triggers and procedures that would necessitate Ridley giving consideration to a voluntary shutdown of the plant based on odour issues. The impact assessment studies indicate that odour from the plant and biofilter is likely to be neutral and non-offensive. As potential odour complaints will be recorded and mitigated through the complaints management process, procedures for a voluntary plant shutdown would be contemplated in only the most extreme circumstances where normal odour management protocols proved not to be effective. Potential triggers will be outlined in the OMP.

### **Detailed description of planned continual improvement in the environmental performance of the proposed activity**

- This section of the OMP will outline the continual improvement processes which will be adopted to maintain the performance of the proposed plant at a high level of environmental performance. The OMP will document the overall environmental commitment of Ridley to remaining informed on the latest technologies in its industry and implementing improvements consistent with capital expenditure programs. The OMP will outline a process where local learnings, improvements and innovations derived from ongoing monitoring of the Westbury odour management system will be adopted and potentially transferred to other Ridley operations.

The OMP for the proposed Aqua Feed Mill will be developed prior to operation of the plant. Relevant staff will be fully inducted and made familiar with the procedures related to operation, monitoring and maintenance of the odour management system and the complaints management protocols.

#### **6.1.11 Conclusion**

A detailed air quality study has been undertaken for the Ridley Aqua Feed Mill facility proposed for the industrial estate north of Westbury in north Central Tasmania. The AQIA undertaken shows that on the basis of concentration alone, there is an exceedance predicted of the Tasmania odour criteria at the property boundary and at close existing industrial receptors. Despite these concentration exceedances, additional assessment conducted by Ridley focusing on the characteristics of the odour suggest that the odour itself is a neutral, non-offensive odour and it is considered unlikely that odour from the facility will result in a negative reaction from off-site receptors. An Odour Management Plan will be developed and will include the following key elements:

- Characterisation of the odorous emissions from the activity
- Description of infrastructure and equipment utilised for odour mitigation
- Description of the monitoring and maintenance system

- Method of complaints handling and procedures for maintaining a complaints register
- Stakeholder engagement and consultation
- Triggers and procedures for voluntary shutdown in the event of apparent environmental nuisance being created
- Detailed description of planned continual improvement in the environmental performance of the proposed activity.

The use of other technologies would result in significant associated environmental impacts such as disposal of waste ( activated carbon or scrubber liquors) or consumption of fossil fuels and associated greenhouse gas emissions ( thermal incineration). The use of the “natural” biofilter system provides the best outcome on a holistic environmental basis.

## 6.2 Liquid Waste and Surface Water Quality

This section of the DPMP outlines the potential impacts and management of surface water quality in relation to the proposed Aqua Feed Mill.

### 6.2.1 Legislative and Policy Requirements

The key legislative and policy requirements relating to surface water quality, relevant to the proposed Aqua Feed Mill are:

- *Urban Drainage Act 2013;*
- *Building Act 2016;*
- *Building Regulations 2016;*
- *State Policy on Water Quality Management 1997 (Water Policy);*
- *State Stormwater Strategy 2010.*

### 6.2.2 Assessment of Effects

#### Stormwater

The overall intent of the stormwater management strategy for the proposed Aqua Feed Mill is to divert clean runoff into the natural drainage systems surrounding the site and segregate any water that becomes contaminated by a spill or similar through the use of bunds.

The proposed Aqua Feed Mill is located on relatively flat land (approximately 186m AHD). The topography gradually inclines from the centre of the property towards the north to 191m AHD. The site is surrounded by a number of water bodies (dams, drains and rivers), including Quamby Brook located approximately 1.4km to the south east of the site and the Meander River approximately 1.1km to the north.

Stormwater runoff from the site will be discharged into a stormwater swale drain that will run along the plant boundaries, diverting stormwater that enters the site around the operational area and conveying clean stormwater from non-processing site areas to a discharge point on the lower-lying southern boundary. The swales operate on gravity only and the stormwater runoff will pass through a sediment interceptor pit prior to discharge offsite. This will retain free hydrocarbons through its underflow overflow design as well as sediment. The unit will be cleaned out from time to time based on experience. An approved discharge point will be located south of the site and discharge into an existing drainage easement located along neighbouring Tasbuilt Homes eastern site boundary.

The quality of the stormwater runoff from the site is expected to be representative of clean rain-water and similar to that running off natural surface areas in the wider vicinity. The swales and sediment trap are intended to screen and remove gross pollutants including sediment and hydrocarbons (e.g. arising from vehicle oil drips, which may be digested and processed by soil micro-organisms in the earthen swales) as well as reducing and delaying stormwater runoff intensity.

Site surfaces surrounding the production area will include concrete, asphalt roadways, hardstand areas and concrete process areas, including bunds. The remaining vacant areas of the site will be

covered with grass and gravel. The following areas will be bunded to contain spills and prevent stormwater contamination, bunded Bulk liquid (canola and fish oils) storage located in tank farm and bunded liquid ingredients unloading area.

Any impacted water from these areas will be collected for off-site disposal (refer to Section 6.6 for more detail).

Small amounts of water which may collect in the bulk liquid storage bund may contain oily residues. These will be manually pumped into suitable containers for offsite disposal to an appropriate facility. In the event that a larger quantity of water requires disposal, an appropriate waste service provider will be utilised.

Management of stormwater quality impacts from erosion and sedimentation during the construction phase will be managed through a Construction Environmental Management Plan.

### **Sewerage**

Domestic wastewater will be produced in the administration building from toilet flushing, urinals, showers, hand basins and sinks. This wastewater will be discharged to the municipal sewerage system. During operation, there will typically be 10 employee's onsite plus visiting truck drivers. On this basis, domestic wastewater production is expected to be relatively small at approximately 2 kL/day (based on estimated 100 L/d per person typical use).

During the construction phase, portable sanitation facilities will be installed at the site. Domestic wastewater will be contained in these facilities and will be pumped out by a contractor for off-site disposal.

### **Trade Waste**

There is minimal wastewater generated by the Aqua Feed Mill process itself as feed wastes are collected in a wet slurry system, and along with dusts, are re-introduced into the production process at a controlled rate. However, operation of the overall facility will result in three wastewater streams that Ridley intends to dispose to sewer under a Trade Waste Agreement to be approved by TasWater.

The three wastewater streams are as follows:

- Boiler blowdown - Boiler blowdown volumes are typically minor compared to other process wastewater sources with the key water quality component requiring consideration being Total Dissolved Solids (TDS). The boiler blow-down volume and TDS concentration will be dependent on incoming water TDS, and operating envelope of the boiler.
- Biofilter excess water seepage - Biofilter excess water seepage arises from the need to maintain high relative humidity levels in the biofilter media to maximise odour control. Typically, water sprays are used and a constant trickle of leachate generated. This seepage water is likely to have relatively high concentrations of nutrients and dissolved organic (biodegradable) constituents.
- Wash bay area where grinder screens are cleaned - Wastewater generated from the wash bay area is likely to be the largest volume contributor to the total wastewater generated at the site and will include ingredient-based solids from the equipment. This will be an intermittent wastewater stream, with timing subject to programed cleaning and end of week cleaning activities.

Wastewater from the facility will be piped to a central location on site prior to discharge to sewer.

The estimated volume of wastewater generated from the three waste streams is likely to be in the order of 20 - 25 kL/day. This is based on operation of a similar plant owned by Ridley in Narangba, Queensland that generates approximately 8,500kL (35kL/day) of trade waste annually. The proposed Westbury facility has fewer sources of trade waste compared to the Narangba site with no cooling towers or cooling room condensate / coil washes required.

Ridley is currently in discussions with TasWater to obtain a Trade Waste Agreement. At present, the only data available to assist in consideration of a Trade Waste Agreement is a limited water quality sample from the Ridley Narangba facility which can only be considered indicative as the Narangba operation has additional production processes to that proposed at the Aqua Feed Mill.

A single grab sample result taken at the Narangba facility in 2015 indicated that the 5-day Biological Oxygen Demand (BOD<sub>5</sub>) and Total Kjeldahl Nitrogen (TKN) exceeded the standard TasWater acceptance limits listed in Schedule 3 of the *Water and Sewerage Industry (General) Regulations 2009*. As requested by TasWater, Ridley is conducting additional sampling at the Narangba facility to further characterise the relevant trade waste streams. Given the predicted small volume of wastewater, it is anticipated that the local sewer system has the required capacity and that a Trade Waste Agreement can be achieved.

As a contingency measure, Ridley will consider pre-treatment to meet sewer discharge requirements. Any such system will be enclosed to minimise fugitive odour emissions.

Discussions are ongoing with TasWater and a final agreement on the Trade Waste Agreement will be made after more detailed chemical analysis of the Narangba waste stream is undertaken and treatment options (if required) are agreed with TasWater.

In summary, the proposed Aqua Feed Mill is not expected to generate any unacceptable impacts on surface water on the basis that:

- Clean stormwater resulting from rainfall will be diverted into the natural drainage system on and around the site and pass through an interceptor and swale system for treatment
- Areas within the plant where there is the potential for a spill to contaminate stormwater will be fully bunded and any contaminated water disposed of offsite
- The three wastewater streams generated by the operation (boiler blow down, biofilter seepage and wash water) will all be contained and disposed of to the sewer under a Trade Waste Agreement and have no potential to enter the environment.

## 6.3 Groundwater

This section of the report identifies and quantifies groundwater system(s) beneath and adjacent to the proposed Aqua Feed Mill to enable consideration of potential impacts to groundwater as a resource.

### 6.3.1 Legislative and Policy Requirements

The legislative and policy requirements relating to groundwater, relevant to the proposed Aqua Feed Mill are:

- *ANZECC and Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ), Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Volume 1.*
- *ARMCANZ and ANZECC, National Water Quality Management Strategy, Guidelines for Groundwater Protection in Australia*
- *State Policy on Water Quality Management, 1997*
- *Water Management Act, 1999*

### 6.3.2 Geology

#### Regional

The geology beneath the site is based on the 1:25,000 series Digital Geology Digital Atlas of Tasmania (Westbury Sheet).

Regionally, the site lies close (<2.0 km) to a geological boundary comprising to the east Tertiary aged non-marine sequences (gravel, sand, silt, clay and regolith) and to the west predominantly igneous geology consisting of Jurassic aged dolerite and Tertiary aged basalt, all overlain by Quaternary aged sediments (sands, gravels and muds are mapped) adjacent to drainage lines.

Inspection of the geological map shows that the site is entirely underlain Basalt, with alluvium observed adjacent to the nearby Meander River and Quamby Brook. The geology of the site and surrounding area is shown in Appendix F.

## Local Site

The local site geology is based on geotechnical investigations conducted in 2016 (TASMAN Geotechnics). The scope included a number of boreholes to a maximum depth of 3.0 m below ground surface (bgs). The following observations were made:

- Surface conditions noted poor draining soils
- Up to 1 m of brown sandy/clayey topsoil was generally encountered
- Beneath the topsoil, high plasticity clay with sand to sandy clay, very stiff to hard was encountered
- Depth to competent bedrock was inferred to be greater than 3.0m; and
- Groundwater was not encountered during drilling activities.

### 6.3.3 Hydrogeology

#### Hydrostratigraphy

The regional hydrogeology is based on Municipal Planning Information Hydrogeological Map Series (MRT, 2006a and 2006b).

The hydro-stratigraphy in the region is summarised in Table 9.

**Table 9** Aquifers identified local to project area (after MRT)

Aquifer Type	Rock Groups	Location	Vulnerability to Pollution
Fractured Rock (FRA)	Tertiary Basalt Jurassic Dolerite	Directly beneath the site in the basalts and surrounding dolerite	Moderate - High Can be high if fracturing is present. Generally lower in vulnerability if impermeable layers overlie the aquifer.
Porous / Sedimentary	Quaternary alluvium Tertiary sediments	Adjacent to the Meander River to the north. Adjacent to and east of Quamby Brook.	Low to high Low where clay material overlies the aquifer Moderate where there is no clay or where aquifers outcrop at surface

### 6.3.4 Groundwater Yield and Quality

The 1:250,000 North East Tasmania Groundwater Map indicates a number of groundwater bores located to the south and east of the site which were most likely drilled to target the Tertiary aged non-marine sediment aquifer. Table 10 summarises the average bore yields and water quality of the regions aquifers.

**Table 10** Aquifer parameters (after MRT)

Aquifer Type	Average Bore Yields (L/s)	Salinity (as TDS mg/L)
Fractured Rock	3.5 (Tertiary Basalt) 1.0 (Jurassic Dolerite)	<500 – 3,000
Porous / Sedimentary	1.5 (Quaternary alluvium) 2.0 (Tertiary sediments)	<500 – 3,000

The published yield and salinity ranges indicate that groundwater would have some limited use. However, key is the likelihood that the long term yields from groundwater systems will be lower than reported, given the nature and extent of the lithology. This would limit future groundwater use to relative small scale extraction, such as stock and/or domestic.

### 6.3.5 Groundwater Flow

Regional flow in the upper most aquifer of the Tertiary aged sediments will follow the general direction of surface topography, which in the area is to the east and south east. Little information is provided for the adjacent fractured rock aquifer (FRA), however it is expected to be similar to the Tertiary aged sediments.

### 6.3.6 Registered Groundwater Bores

A search of the registered bores within a 3km radius of the site was conducted using the Tasmania Groundwater Information Access Portal (Developed by Tasmania Department of Primary Industries, Parks, Water and Environment). 11 bores were identified. Bore locations are provided in Table 11, yields and water quality reported for bores within 3km are summarised in Table 12.

Table 11 Registered bores within 3 km radius (after DPIPWE)

Bore ID	Easting	Northing	Drilled	Status	Aquifer
2384	486113	5403583	26/03/1981	abandoned	TERTIARY BASALT
2410	484213	5403183	25/09/1978	abandoned	JURASSIC DOLERITE
2424	488213	5405983	8/10/1982	operating	TERTIARY BASALT
2425	488013	5406083	7/10/1982	abandoned	TERTIARY SEDIMENTS
4714	484763	5405783	15/08/1984	abandoned	TERTIARY SEDIMENTS
4736	487313	5402883	1/10/1989	operating	TERTIARY BASALT
15118	486513	5403283	10/02/1995	operating	TERTIARY BASALT
17684	485113	5402183	18/04/1995	operating	TERTIARY BASALT
18200	486363	5402483	1/01/1995	Unknown	TERTIARY BASALT
30784	487558	5402933	16/12/2002	Unknown	TERTIARY SEDIMENTS
40933	483908	5402707	16/09/2008	capped	TERTIARY BASALT

Table 12 Reported bore yields and quality in registered bores within 3 km of site

Aquifer Type	Yields (L/s)	Salinity (as TDS mg/L)
Fractured Rock (FRA)	0 – 7.6	Largely unknown in identified bores. Bore 18200 is reported as 171 mg/L.
Porous / Sedimentary	0 – 1.89	No salinity data for identified bores in area.

As expected, the FRA reports a large range in yield, however, it is expected that long term sustainable yields would be towards the lower end, and likely limit future use to small scale local use.

### 6.3.7 Localised Groundwater Flow

Depth to water in registered bores near the site is reported from 2.4m below ground surface (bgs) (within Sediments) to 7.6m bgs (within FRA). Groundwater elevations were not reported for the registered bores. No further data or documentation was available to interpret groundwater flow at the site.

Surface drainage features are noted to the immediate north and south of the site (modified due to development) and are shown in Appendix F. Groundwater flow in the FRA beneath the site is

expected to move radially from the site, following the general direction of surface drainage north towards Meander River and south towards Quamby Brook.

### 6.3.8 Potential Impacts

The proposed Aqua Feed Mill is not anticipated to impact on groundwater quality or potential users of groundwater because:

- The facility is not generating any contaminated wastewater that will be discharged to the environment and which could potentially enter the aquifer (wastewater will be discharged to sewer via a Trade Waste Agreement)
- Uncontaminated stormwater will be discharged into the natural drainage system on and around the site and would not have a negative impact on groundwater quality if it reached the aquifer
- The risk to water quality impacts to the aquifer beneath the site is very low due to the reported presence of high plasticity, low permeability clay across the top 3 metres of the site.

## 6.4 Noise Emissions

### 6.4.1 Report Objective

The purpose of this section of the DPEMP is to assess the potential noise and vibration impacts associated with the construction and operation of the proposed Aqua Feed Mill and identify noise and vibration controls if required.

A glossary of acoustic terminology used in this report is included in Appendix G.

### 6.4.2 Relevant Guidelines

The legislative and policy requirements relating to noise and vibration emissions are:

- Environmental Management and Pollution Control Act 1994 (EMPC Act)
- Environment Protection Policy – Noise (Department of Environment, Parks, Heritage and the Arts, 2009)
- General Guidelines for the Preparation of a Development Proposal and Environmental Management Plan (DPEMP General Guidelines), EPA Tasmania, January 2014
- Noise Measurement Procedures Manual, Second Edition July 2008 Development Proposal and Environmental Management Plan (DPEMP) Project Specific Guidelines for Ridley Aqua feed Mill, Westbury, Tasmania, May 2017
- World Health Organisation (WHO), Guidelines for Community Noise, 1999.

### 6.4.3 Scope of Assessment

The scope of the noise and vibration impact assessment includes:

- Establishing construction and operational noise and vibration limits in accordance with the DPEMP guidelines
- Predicting construction and operational noise levels at the nearest sensitive receivers
- Provide recommendations on feasible and reasonable mitigation measures to control construction and operational noise and vibration levels.

Due to the large buffer distance to residential and non-residential receivers, vibration impacts associated with the operation of the plant are not expected to cause human discomfort, regenerated noise or structural damage to nearby receivers. No further assessment of operational vibration has been conducted in this report.

### 6.4.4 Site Description

#### Site Operation and Location

For the purposes of the noise and vibration assessment, the facility is assumed to comprise of:

- Mill Building

- Intake building and process tower
- Silos
- Liquid storage tanks and bunding
- Pipework, pumps and conveying equipment
- Raw material handling and processing systems
- Extrusion, drying and vacuum coating equipment
- Packaging equipment
- Weighbridge
- 3 MW Boiler – (14359 MJ/hour at full load, or approximately 325 kg/hour of natural gas)
- Biofilter
- Waste and storm water treatment
- Offices
- Roadways.

It is anticipated that the main Mill Building will have a footprint of approximately 4500 square metres; whilst the whole site including driveways, intake, raw material storage, boiler and liquid storage area is expected to be approximately 28,800 square metres subject to detailed design.

Deliveries of the raw ingredients will be via bulk tankers and trucks with smaller amounts being delivered in one ton bulk bags and palletised into 25 kilogram bags. Outgoing finished feed will be packaged in one ton bulk bags and loaded on trucks sized to suit the delivery. Truck movements over a year are predicted to be twenty per day.

The proposed hours of operation of the processing plant are 24 hours a day, five days a week increasing to seven days a week depending on market demand.

The proposed Ridley Aqua Feed Mill is located on a site in the General Industrial Zone adjacent to Birrale Road, approximately 500 metres north-west of Bass Highway, Westbury. The site is currently bounded by unoccupied land, however industrial zoned land is located to the south.

The proposed site and nearest noise sensitive receivers are presented in Figure 29 with noise sensitive receivers listed in Table 13.

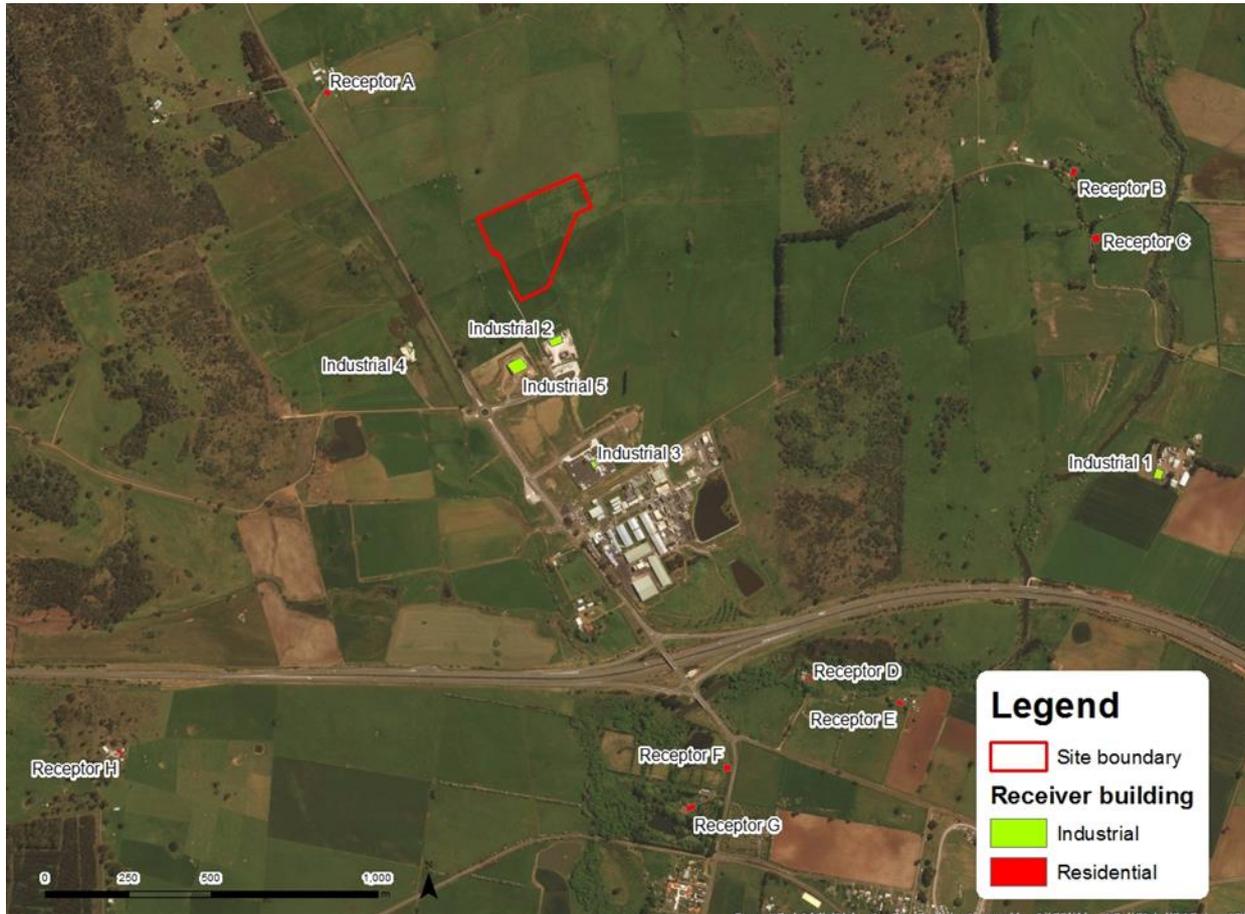


Figure 29 Site and receiver locations

Table 13 Noise sensitive receivers

Receiver No.	Approximate distance to site boundary, (metres)	Receiver No.	Approximate distance to site boundary, (metres)
Residential		Industrial	
Receptor A	650	Industrial 1	1910
Receptor B	1530	Industrial 2	150
Receptor C	1580	Industrial 3	540
Receptor D	1420	Industrial 4	360
Receptor E	1640	Industrial 5	170
Receptor F	1540		
Receptor G	1610		
Receptor H	1820		

(Note: these distances are to the Receptor boundary and not the residence).

### 6.4.5 Noise Criteria

#### Environment Protection Policy (Noise) 2009

The Environment Protection Policy – Noise (Department of Environment, Parks, Heritage and the Arts, 2009) presents acoustic environment indicator levels that are to be used to protect the environment from noise emissions that have the potential to impact the health and well-being of the community. This policy is made pursuant to the provisions of the Environmental Management and Pollution Control Act 1994 (EMPCA).

The policy identifies the requirement to assess, manage and regulate proposed commercial and industrial activities that are sources of noise.

The acoustic environment indicator levels specified in Table 14 are values presented in Table 13 of the World Health Organisation (WHO) publication Guidelines for Community Noise (Berglund B, Lindvall T and Schwela D H, 1999). They are indicative, not mandatory noise levels.

These recommended guideline noise values are based on research to minimise sleep disturbance at residential dwellings and also provide people with a reasonable level of amenity in outdoor living spaces.

**Table 14 WHO Guideline Noise Values (1999)**

Specific environment	Critical health effect(s)	L <sub>Aeq</sub> , dB(A)	Time base, hours	L <sub>Amaxfast</sub> dB(A)
Outdoor living area	Serious annoyance, daytime and evening	55	16 Day	-
	Moderate annoyance, daytime and evening	50	16 Day	-
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16 Day	-
Inside Bedrooms	Sleep disturbance, night time	30	8 Night	45
Outside bedrooms	Sleep disturbance window open	45	8 Night	60

### 6.4.6 Development Proposal and Environmental Management Plan General Guidelines

Pertinent to noise emissions, Section 6.4 of the DPEMP General Guidelines state:

#### Noise Emissions

Discuss impacts of the proposal on ambient (surrounding) noise levels (during both the construction and operational phases), including:

- *Identifying and describing all major sources of noise.*
- *A map of the location of all major sources of noise.*
- *Considering the potential for noise emissions (during both the construction and operational phases) to cause nuisance for nearby land users.*
- *The potential for noise emissions to affect terrestrial, marine and freshwater wildlife and livestock.*

#### Legislative and Policy Requirements

Consideration should be given to the requirements of the Tasmanian Environment Protection Policy (Air Quality) (see <http://epa.tas.gov.au/policy/air-quality-epp>)

**6.4.7 DPEMP Project Specific Guidelines**

The DPEMP Project Specific Guidelines for the Aqua Feed Mill (Tasmania EPA, May 2017), identifies the key issues that must be addressed in the DPEMP.

Pertinent to noise emissions, Section 6.4 of the DPEMP Project Specific Guidelines state:

**6.4.8 Noise Emission**

In addition to the matters stipulated in Section 6.4 of the DPEMP General Guidelines the DPEMP must contain the following:

- Description of all major noise sources (fixed and mobile) onsite, e.g. mills, pumps, loaders etc. Include details of make, model, power rating, throughput capacity, sound power level, planned hours of operation, associated noise attenuation and any noise mitigation measures (as relevant)<sup>1</sup>
- Identify all sensitive receptors within 1 kilometres of a major noise source
- Provide a contour map of noise levels resulting from noise emitted from the site. Demonstrate that noise levels will not exceed 45 dB(A) during the day (7am to 6pm), 40 dB(A) during the evening (6pm to 10pm), 35 dB(A) during the night (10pm to 7am)<sup>2</sup> at noise sensitive receptors, and 65 dB(A) at any industrial premises in other ownership
- Estimates of the number and type of vehicle movements during the day, evening and night.

**6.4.9 Summary of Project Noise Criteria**

The DPEMP prescribes the project criteria for noise emissions for the project presented in Table 15. The criteria adopted are more stringent than the recommended WHO Community Noise Guidelines, and therefore will ensure that the project minimises noise disturbance to the local community, protects outdoor amenity, and minimises the risk of sleep disturbance.

**Table 15 Prescribed Project Noise Criteria**

Item	Construction & operational noise limit, L <sub>Aeq,period</sub> dB(A)		
	Day (7am to 6pm)	Evening (6pm to 10pm)	Night (10pm to 7am)
Section 6.4 of the DPEMP Project Specific Guidelines – residential receivers	45	40	35
WHO Guideline Noise Values	sleep disturbance window open - external		60 L <sub>Amax</sub>
Section 6.4 of the DPEMP Project Specific Guidelines – industrial receivers	65		

**6.4.10 Traffic Noise Level Increase**

In the absence of specific Tasmanian criteria for assessing developments that increase traffic on adjoining roads, the most applicable criteria are described in the NSW EPA’s NSW Road Noise Policy (RNP) dated March 2011 and have been used for guidance in this DPEMP.

<sup>1</sup> The Environment Protection Policy (Noise) 2009 and the Noise Measurement Procedures Manual, 2008, are available on the EPA website at [http://epa.tas.gov.au/documents/epn\\_noise\\_2009.pdf](http://epa.tas.gov.au/documents/epn_noise_2009.pdf)

<sup>2</sup> Consideration should also be given to noise levels likely to be generated during the construction and start-up phases.

The RNP describes the acceptable limits for the increase of noise levels in respect to the resultant increase of traffic flows roads close to residential properties as follows:

*“In assessing feasible and reasonable mitigation measures, an increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person.”*

#### **6.4.11 Construction Vibration Criteria**

In the absence of specific Tasmanian criteria for assessing construction vibration impacts, vibration limits have been adopted from the NSW EPA's 'Assessing Vibration: a technical guideline' (AVATG) which has been designed to be used in evaluating and assessing the effects on amenity of vibration emissions from industry, transportation and machinery. The guideline is used in assessments of vibration impacts caused by the construction and operation of new developments.

Vibration criteria are set primarily according to whether the particular activities of interest are continuous in nature or intermittent, whether they occur during the daytime or night-time and the type of receiver to be assessed e.g. commercial or residential.

The effects of vibration in buildings can be divided into three main categories:

- Those in which the occupants or users of the building are inconvenienced or possibly disturbed, i.e. human disturbance or discomfort
- Those in which the integrity of the building or the structure itself may be prejudiced
- Those where the building contents may be affected.

Therefore, vibration levels at sensitive receiver locations must be controlled so as to prevent discomfort and in some cases, structural damage.

#### **6.4.12 Building Exposure to Vibration Structural damage**

Vibration generated by construction activities can travel through the ground and cause nearby building structures to vibrate. This may cause damage to the building structure ranging from minor hairline cracking to major structural cracking.

The following guideline has been considered as part of this assessment:

- DIN Standard 4150 - Part 3 - Structural Vibration in Buildings - Effects on Structures;

DIN 4150 provides recommended maximum levels of vibration that reduce the likelihood of building damage caused by vibration. It should also be noted that these levels are “safe limits”, up to which no damage due to vibration effects has been observed for the particular class of building. “Damage” is defined by DIN 4150 to include even minor non-structural effects such as superficial cracking in cement render, the enlargement of cracks already present, and the separation of partitions or intermediate walls from load bearing walls.

DIN 4150 states that buildings exposed to higher levels of vibration than recommended limits will not necessarily result in damage, the limits are generally recognised as being conservative.

#### **6.4.13 Human Exposure to Tactile Vibration**

Long term exposure to vibration in buildings may cause annoyance. The levels at which annoyance occurs are much lower than the structural damage criteria in buildings.

*British Standard 6472-1992 Evaluation of Human Exposure to Vibration in Buildings* (1 Hz to 80 Hz) and AVATG provide guidance on human response to vibration and are used to set guideline vibration levels for this project. BS 6472-1992 has recently been superseded by BS 6472-2008 however the EPA still requires vibration to be assessed in accordance with the 1992 version of the Standard at this point in time and accordingly the 1992 version is referred to in this document.

The EPA guideline is based on Vibration Dose Values (VDVs). VDVs can be directly related to vibration discomfort experienced by a person and can be used to assess intermittent vibration. The VDV is a cumulative measure and increases as the exposure duration increases.

#### 6.4.14 Construction and Operation Vibration Criteria Summary

The recommended criteria presented in DIN 4150 and BS 6472 have been summarised in Table 16. Measurement of vibration should be taken at the base of the building facing the source of the vibration in the vertical and two horizontal directions. For multi-storey structures where vibration amplification is likely measurements should also be made on the floor with the highest vibration level.

**Table 16 Construction vibration criteria summary for nearby residential receivers**

Category	Human Comfort, VDV ( $m/s^{1.75}$ )		Structural Damage (mm/s)
	Day	Night	
Residential structures	0.2	0.13	5 mm/s at 1-10 Hz increasing to 15 mm/s at 50 Hz increasing to 20 mm/s at 100 Hz and above
Non-sensitive structures of reinforced concrete or steel construction (e.g. factories and commercial premises)	0.8 (only applied if occupied)	0.8 (only applied if occupied)	20 mm/s at 1-10 Hz increasing to 40 mm/s at 50 Hz increasing to 50 mm/s at 100 Hz and above

#### 6.4.15 Construction Noise Assessment

##### Construction Stages and Scheduling

Construction works to take place as part of the construction of the Aqua Feed Mill are outlined in Table 17, where works have been grouped into seven distinct construction stages, six of which are expected to generate significant noise levels and have been modelled.

**Table 17 Construction stages and scheduling**

Construction stage	Activities	Approximate duration	Timing
Site establishment	Removal of vegetation, site excavation.	20 days	Standard construction hours
Pier boring	Boring of structural piers.	6 weeks	
In ground services	Conduit trenching, excavation, installation of in-ground services.	12 weeks	
Structural, roofing and wall sheeting	Construction and installation of structural elements, roof and wall partitions.	23 weeks	
Internal services & finishes	Installation of internal services and finishes – no significant noise source expected therefore this stage has not been modelled.	24 weeks	
Equipment delivery and installation	Delivery, lifting and installation of equipment.	25 weeks	
External works	Site restoration	4 weeks	

Notes:

1. Construction stages which are expected to generate significant noise at nearby receptors have been shaded in grey.

**6.4.16 Plant and Equipment Levels**

Table 18 presents the typical sound power levels of the construction equipment to be used. These sound power levels are typical values taken from data provided in Australian Standard AS2436-2010, "Guide to noise and vibration control on construction, demolition and maintenance sites" and the UK Department for Environment, Food and Rural Affairs (DEFRA) "Update of noise database for prediction of noise on construction and open sites" noise database and assume equipment is modern and in good working order.

The modelled scenarios include all equipment that has been conservatively assumed to be operating at the same time for an entire daytime period. Table 18 shows the construction equipment in this assumed worst case and associated sound power levels. Recommendations to control noise are provided in Section 6.4.24.

**Table 18 Typical sound power levels of construction plant**

Equipment	Sound power level, dB(A)	Construction stage				
		Site establishment	Pier boring	In-ground services	Structural, roofing and wall sheeting	Equipment delivery and installation
Small excavator	93	•	•	•		
Dump truck	98	•				
Light vehicle	90	•		•	•	•
Excavator with breaker	112	•				
Jackhammer	108	•				
Pile borer	103		•			
Delivery truck	98		•	•	•	•
Hand tools	94			•	•	•
Welding units	101			•		•
Concrete pump	106				•	
25t franna crane	93				•	•

**6.4.17 Modelling**

A noise model representing the proposed Aqua Feed Mill was created in SoundPLAN Version 7.3. The following noise prediction methodology implemented by SoundPLAN was used for the modelling:

- CONCAWE, used for the prediction of noise associated with construction noise. Neutral weather conditions were assumed.

A three dimensional representation of the environment was constructed within SoundPLAN. Modelling inputs included ground contours, representative construction activities, locations of sensitive receptors and other inputs that have an effect on the noise environment.

The potentially loudest construction activity is identified as site establishment works, due to the high noise levels generated by the excavator with breaker and jackhammers.

Noise levels due to the loudest construction activity are shown in Table 19 and have been predicted at nearby sensitive receivers using SoundPLAN. Barrier reflections and ground absorption coefficients 0.6 for soft ground has been included in the model. It can be expected that noise levels measured during construction may at times be lower than those predicted due to variations in instantaneous operating conditions, plant in operation during the measurement and also the location of the plant equipment and acoustic shielding.

**6.4.18 Predicted Construction Noise Levels**

Table 19 and Table 20 present the predicted construction noise levels at residential and non-residential receptors respectively. Construction activities are anticipated to occur during standard hours only. Appendix G presents L<sub>Aeq</sub> noise level contours maps for these activities.

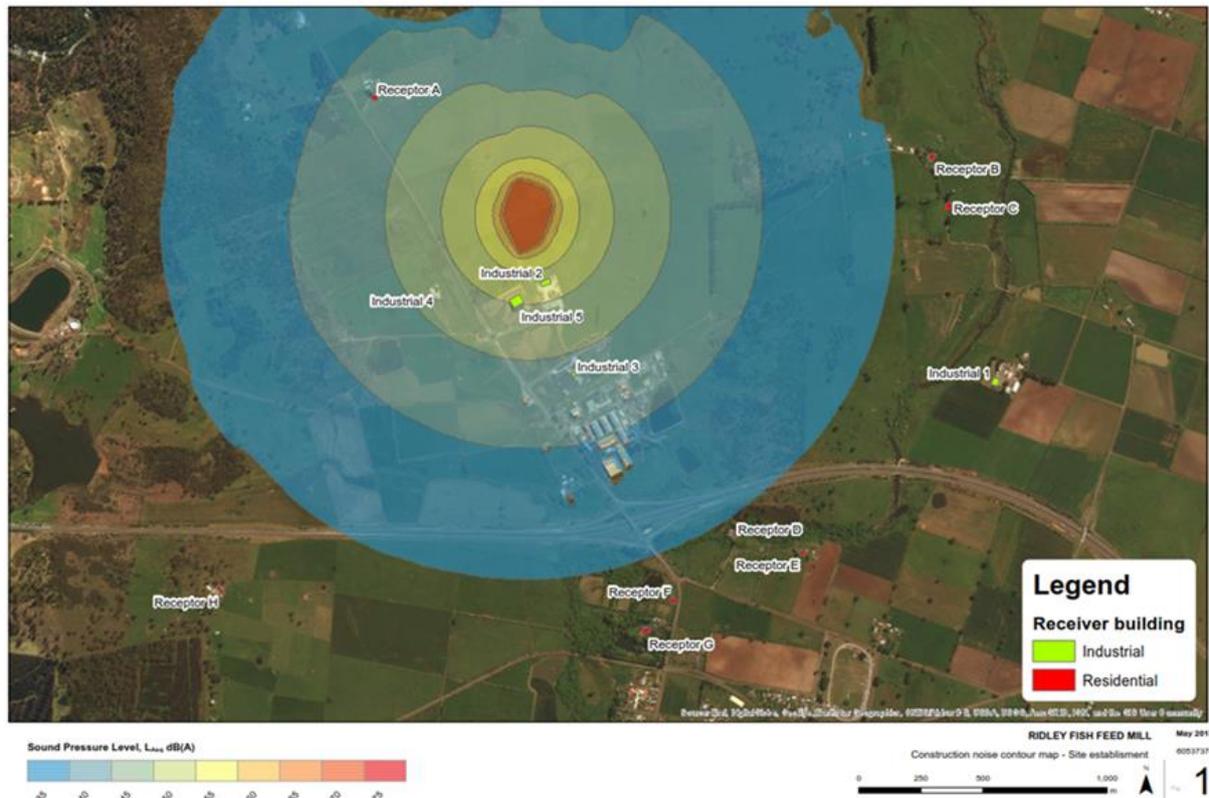
**Table 19 Predicted construction noise levels – Residential receivers**

Receptor no.	Approximate distance to Aqua Feed Mill (m)	Predicted noise levels during loudest stage of construction – site establishment, dB(A)	Standard construction hours (7am to 6pm)
			Criteria
			45
			Exceedance, dB
Receptor A	900	44	Complies-
Receptor B	1700	36	Complies
Receptor C	1700	33	Complies
Receptor D	1400	35	Complies
Receptor E	1700	35	Complies
Receptor F	1600	33	Complies
Receptor G	1600	35	Complies
Receptor H	1800	34	Complies

*(Note: these distances are to the Receptor (residence) not to the property boundary.*

**Table 20 Predicted construction noise levels – Non-residential receivers**

Receptor no.	Approximate distance to Aqua Feed Mill (m)	Predicted noise levels during loudest stage of construction – site establishment, dB(A)	Standard construction hours (7am to 6pm)
			Criteria
			65
			Exceedance, dB
Industrial 1	1910	31	Complies
Industrial 2	150	52	Complies
Industrial 3	540	43	Complies
Industrial 4	360	47	Complies
Industrial 5	170	53	Complies



**Figure 30 Construction noise worst case scenario**

During construction, the predicted noise levels during the loudest predicted stage of construction, the site establishment stage, are predicted to comply with project noise limits at all residential and non-residential receptors. Since construction noise levels during the loudest stage of construction, site establishment, are shown to comply, noise levels during all other construction stages are predicted to comply.

While the modelling indicates construction noise compliance at sensitive receptors, all construction activities associated with the proposed development should be subject to the standard noise and vibration mitigation measures described below.

The contractor will, where reasonable and feasible, apply industry standard noise mitigation measures including;

- Equipment with directional noise emissions should be orientated away from the nearest sensitive receivers that are located to the west of the site.
- Maintenance work on construction plants with the potential to generate noise impacts must be confined to standard daytime construction hours.
- Turn off plant that is not being used. Ensure plant is regularly maintained, and repair or replace equipment that becomes noisy.
- Arrange the work site to minimise the use of reverse warning alarms.

#### 6.4.19 Construction Traffic Assessment

The number of truck movements anticipated for construction deliveries has been estimated at twenty truck movements per day, to take place during the daytime hours only (7am until 6pm). Due to the small number of truck movements the increase in noise as a result of construction traffic would be negligible (less than 1 dB) on nearby roads. In accordance with the acceptable increase of noise levels in respect to the resultant increase of traffic flows roads close to residential properties as follows, “an increase of up to 2 dB represents a minor impact that is considered barely perceptible to the average person.”

**6.4.20 Construction Vibration Assessment**

Vibration intensive work is proposed to occur as part of the proposed construction works. The works may include the use of rock breakers during the site establishment stage.

Typical safe working distances for rock breakers are provided below in Table 21. These safe working distances are developed to meet the recommended levels of vibration levels of British Standard 6472-1992 and DIN 4150 and are based upon the safe working distances presented in the CNS library of vibration data.

Since the nearest off-site receptors are greater than 100 metres from the proposed site, no significant risk of adverse vibration impacts are likely to surrounding receptors.

**Table 21 Recommended safe working distances for vibration intensive plant**

Plant	Rating/description	Safe working distance (m)	
		Cosmetic damage	Human response
		Industrial	
Small hydraulic hammer	(300 kg – 5-12t excavator)	<1	7
Medium hydraulic hammer	(900 kg – 12-18t excavator)	2	23

**6.4.21 Operational Noise Assessment**

**Operational Noise Sources**

A list of proposed operational noise sources are presented in Table 22. Proposed locations of listed units are shown in Figure 31.

Typical activities on the site will include;

- the delivery and storage of raw materials
- grinding feed in a multi-mill
- mixing feed
- drying into pelleted feed
- packaging activities
- dispatch of finished products to customers.

**Table 22 Operational noise sources**

Noise source	Details	Operating time	Operating sound power level per unit, dB(A)	Octave, Hz								
				63	125	250	500	1000	2000	4000	8000	
				Octave band sound power level, dB								
<b>Within site building</b>												
Multi-mill	-	24 hours	104 <sup>1</sup>	93	95	102	102	100	96	90	81	
Vacuum Coater	-		Insignificant <sup>2</sup>									
Extruder	-		100 <sup>3</sup>	80	88	84	88	86	82	78	73	
Dryer	-		100 <sup>4</sup>	89	91	98	98	96	92	86	77	
Horizontal mixer type	-		70 <sup>5</sup>	60	68	64	68	66	62	58	53	
Refrigeration units (600W Unit)	-		85 <sup>6</sup>	60	60	63	69	74	74	69	60	
Forklift – 3 tonne	-		93	106	102	88	87	87	87	82	75	
<b>External units</b>												
Air conditioning units	Split system units for admin office	24 hours	65	67	67	66	66	58	51	47	47	
Silo elevators	Unknown		Insignificant <sup>2</sup>									
Liquid storage pumps	Unknown		Insignificant <sup>2</sup>									
Biofilter fans	Fan – 70,000 m3/h flow rate		100 <sup>6</sup>	89	91	98	98	96	92	86	77	
Delivery truck arrivals & departures	20 movements between 7am and 6pm, 10 minutes each	Day	100	108	99	94	93	96	93	87	80	
Cars arriving & departing from car park	20 cars arriving and 20 cars departing during each day and night period to represent day and night shift, 5 minutes each	24 hours	93	80	85	85	92	87	85	81	74	
Cars accelerating in car park			93	68	71	75	83	91	84	82	75	
Car door closing - L <sub>Amax</sub>			109	96	101	101	108	103	101	97	97	

Notes:

- Multi mill unit to be enclosed within mill building, a 20 dB reduction in sound power due to the enclosure has been modelled
- Noise emissions from unit described as insignificant by operator or manufacturer, are not considered to contribute to overall site noise emissions
- No noise data available for extruder, except that noise levels are > 80 dB(A). Sound power level has been conservatively assumed to be 100 dB(A), with spectrum taken from similar capacity unit
- Sound power level of dryer stated as 90-100 dB(A), spectrum taken from similar capacity unit
- Spectrum taken from similar capacity unit
- Sound power level and spectrum taken from similar capacity unit.

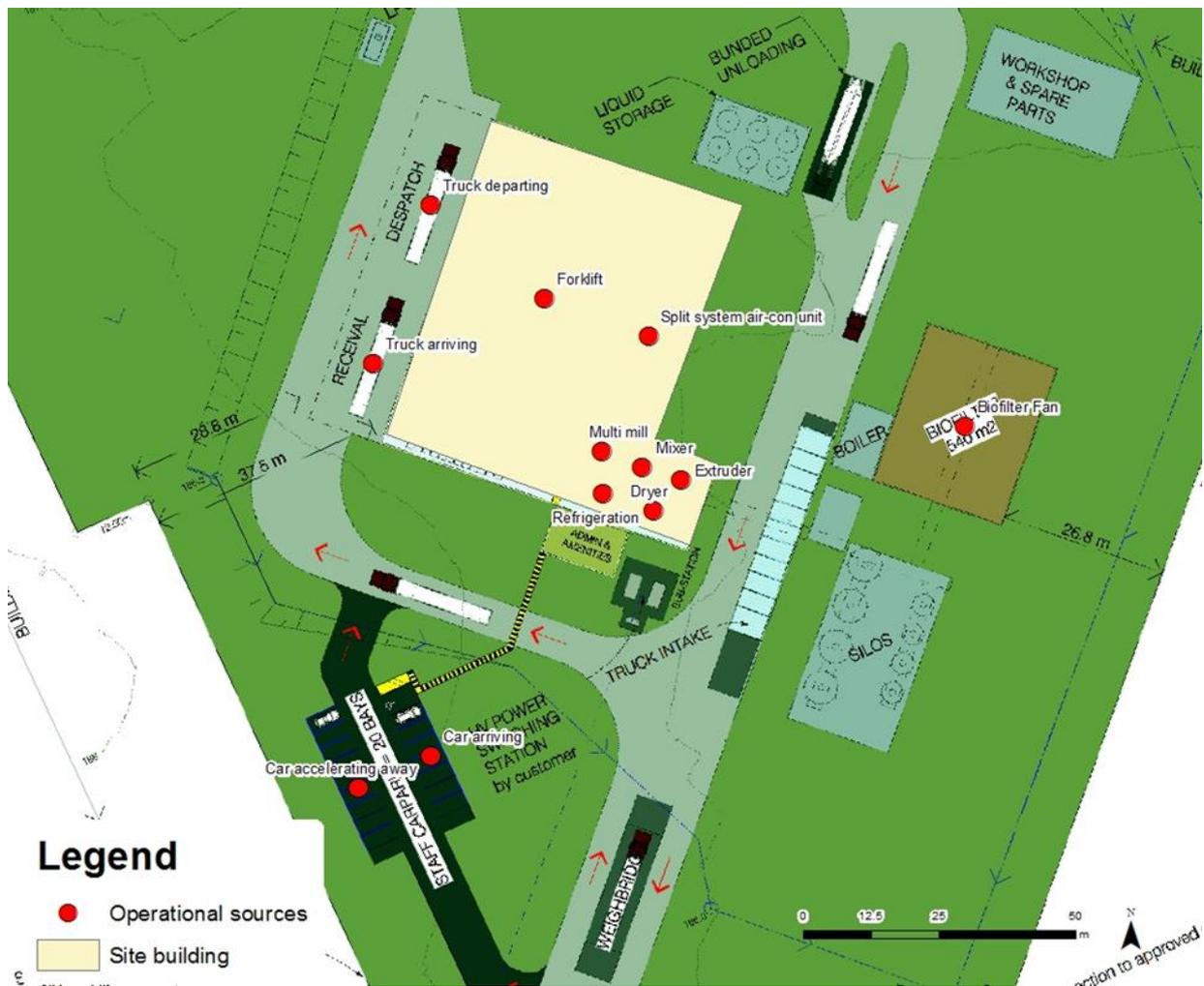


Figure 31 Operational Noise Source Locations

6.4.22 Building Envelope

Based on the current level of building design the following conservative assumptions have been made:

- Four open roller doors 3 m x 5 m in size are located on the north-western façade of the storage areas
- No operable windows are located on the building façade
- The building roof is metal deck

- The multi-mill, vacuum coater, extruder, dryer and horizontal mixer are located within the 6 level process building, which contains no large openings in its façade or roof.

#### 6.4.23 Modelling

A noise model representing the proposed Aqua Feed Mill was created in SoundPLAN Version 7.3. The following noise prediction methodology implemented by SoundPLAN was used for the modelling:

- CONCAWE, used for the prediction of noise associated with operational industrial noise sources.
- Pasquill Stability Class D and 3 metres per second adverse winds (blowing from source to receptor) and also neutral weather conditions were modelled.

A three dimensional representation of the environment was constructed within SoundPLAN. Modelling inputs included ground contours, operational noise sources, locations of sensitive receptors and other inputs that have an effect on the noise environment.

Barrier reflections and ground absorption coefficients 0.6 for soft ground has been included in the model. The predicted noise levels are conservative, and operational noise levels measured during operation may at times be lower than those predicted due to variations in instantaneous operating conditions, plant in operation during the measurement and also the location of the plant equipment and acoustic shielding.

#### 6.4.24 Predicted Operational Noise Levels

Table 23, Table 24 and Table 25 present the predicted operational noise levels at residential and non-residential receptors respectively. Noise contour maps are presented in Appendix G.

**Table 23 Predicted day and evening operational noise levels – Residential receivers**

Receiver no.	Approximate distance to site boundary, m	Predicted day and evening operational noise levels, dB(A)	Day (7am to 6pm)	Evening (6pm to 10pm)
			Criteria	
			45	40
			Exceedance, dB	
<b>Neutral weather conditions – no wind</b>				
Receptor A	650	36	Complies	Complies
Receptor B	1530	<30	Complies	Complies
Receptor C	1580	<30	Complies	Complies
Receptor D	1420	<30	Complies	Complies
Receptor E	1640	<30	Complies	Complies
Receptor F	1540	<30	Complies	Complies
Receptor G	1610	<30	Complies	Complies
Receptor H	1820	<30	Complies	Complies
<b>Worst case weather conditions – 3 m/s source to receiver winds</b>				
Receptor A	650	41	Complies	+1
Receptor B	1530	32	Complies	Complies
Receptor C	1580	<30	Complies	Complies
Receptor D	1420	32	Complies	Complies

Receiver no.	Approximate distance to site boundary, m	Predicted day and evening operational noise levels, dB(A)	Day (7am to 6pm)	Evening (6pm to 10pm)
			Criteria	
			45	40
			Exceedance, dB	
<b>Neutral weather conditions – no wind</b>				
Receptor E	1640	31	Complies	Complies
Receptor F	1540	<30	Complies	Complies
Receptor G	1610	31	Complies	Complies
Receptor H	1820	31	Complies	Complies

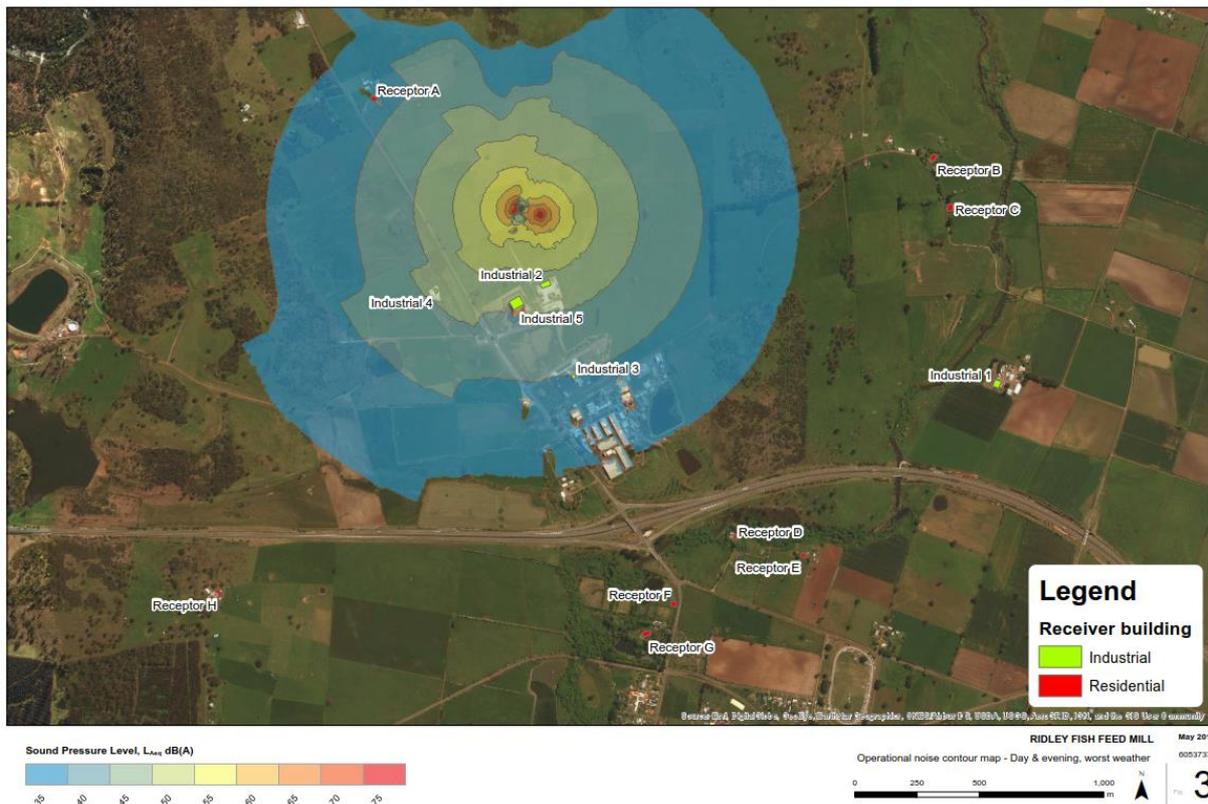


Figure 32 Operational noise worst case scenario day and evening

**Table 24 Predicted night operational noise levels – Residential receptors**

Receiver no.	Approximate distance to site boundary, m	Predicted day and evening operational noise levels, dB(A)	Night (10pm to 7am)
			Criteria
			35
			Exceedance, dB
<b>Neutral weather conditions – no wind</b>			
Receptor A	650	35	Complies
Receptor B	1530	<30	Complies
Receptor C	1580	<30	Complies
Receptor D	1420	<30	Complies
Receptor E	1640	<30	Complies
Receptor F	1540	<30	Complies
Receptor G	1610	<30	Complies
Receptor H	1820	<30	Complies
<b>Worst case weather conditions – 3 m/s source to receiver winds</b>			
Receptor A	650	40	+5
Receptor B	1530	32	Complies
Receptor C	1580	<30	Complies
Receptor D	1420	32	Complies
Receptor E	1640	31	Complies
Receptor F	1540	<30	Complies
Receptor G	1610	31	Complies
Receptor H	1820	31	Complies

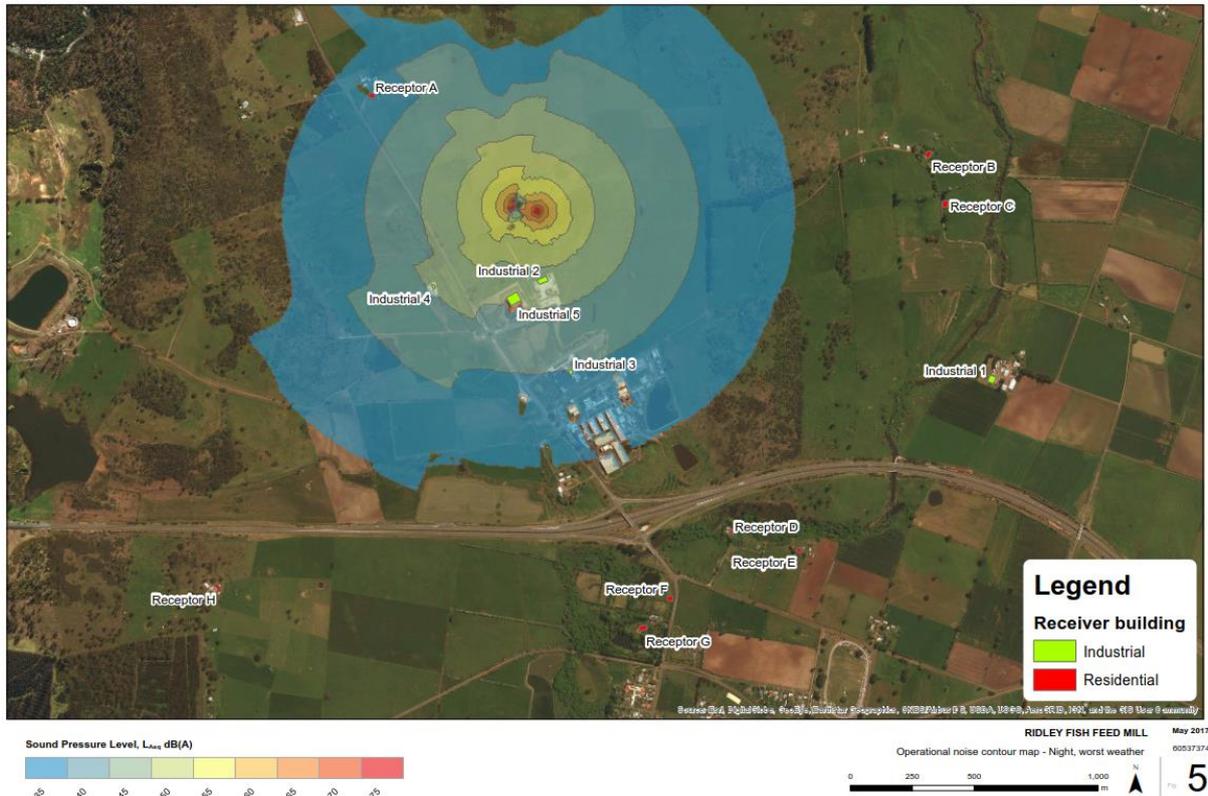


Figure 33 Operational noise worst case scenario night

Table 25 Predicted operational noise levels – Non-residential receivers

Receiver no.	Approximate distance to site, m	Operational noise level, dB(A)	24 hours
			Criteria
			65
			Exceedance, dB
<b>Neutral weather conditions – no wind</b>			
Industrial 1	1910	<30	Complies
Industrial 2	150	44	Complies
Industrial 3	540	34	Complies
Industrial 4	360	41	Complies
Industrial 5	170	45	Complies
<b>Worst case weather conditions – 3 m/s source to receiver winds</b>			
Industrial 1	1910	<30	Complies
Industrial 2	150	48	Complies
Industrial 3	540	39	Complies
Industrial 4	360	45	Complies
Industrial 5	170	49	Complies

The results of the noise modelling of the operational noise impacts indicate that under worst case weather conditions operational noise is predicted to comply at all receptors except Receptor A. Noise emissions at Receptor A are predicted to exceed the evening and night criteria by 1 and 5 dB (A) respectively under worst case weather conditions but only if roller doors on the north-western side of the facility are open.

The site boundary of Receptor A is located 650 metres to the north-west of the site, in line with the open roller doors and facing the area where truck arrivals and deliveries take place. The largest contributors to noise levels at Receptor A are noise sources located within the 6 level process building, namely the multi-mill, extruder and dryer. The evening and night exceedances experienced at Receptor A are a result of plant noise escaping the building through the north-western roller doors.

As there will be no deliveries to the Aqua Feed Mill during the evening or night, the roller doors on the north-western side of the building will be closed as a matter of course at the end of the day as they will not be required for deliveries for security reasons and to minimise the potential for vermin and birds to enter the facility. Closing roller doors along the north-western side of the building is expected to reduce noise emissions from internal building noise sources by approximately 10 dB(A) at Receptor A meaning the plant operations will readily achieve compliance with the day, evening and night noise limits at Receptor A under all weather conditions.

Overall night-time noise levels when roller doors are closed, including both indoor and external noise sources, are presented in Table 26. Operational noise with roller door closed is modelled in Appendix G.

**Table 26 Predicted night-time operational noise levels with roller doors closed – Residential receivers**

Receiver no.	Approximate distance to site boundary, m	Predicted night operational noise levels, dB(A)	Night (10pm to 7am)
			Criteria
			35
			Exceedance, dB
<b>Neutral weather conditions – no wind</b>			
Receptor A	650	30	Complies
Receptor B	1530	<30	Complies
Receptor C	1580	<30	Complies
Receptor D	1420	<30	Complies
Receptor E	1640	<30	Complies
Receptor F	1540	<30	Complies
Receptor G	1610	<30	Complies
Receptor H	1820	<30	Complies
<b>Worst case weather conditions – 3 m/s source to receiver winds</b>			
Receptor A	650	34	Complies
Receptor B	1530	32	Complies
Receptor C	1580	<30	Complies
Receptor D	1420	32	Complies
Receptor E	1640	31	Complies

Receiver no.	Approximate distance to site boundary, m	Predicted night operational noise levels, dB(A)	Night (10pm to 7am)
			Criteria
			35
			Exceedance, dB
Receptor F	1540	<30	Complies
Receptor G	1610	31	Complies
Receptor H	1820	30	Complies

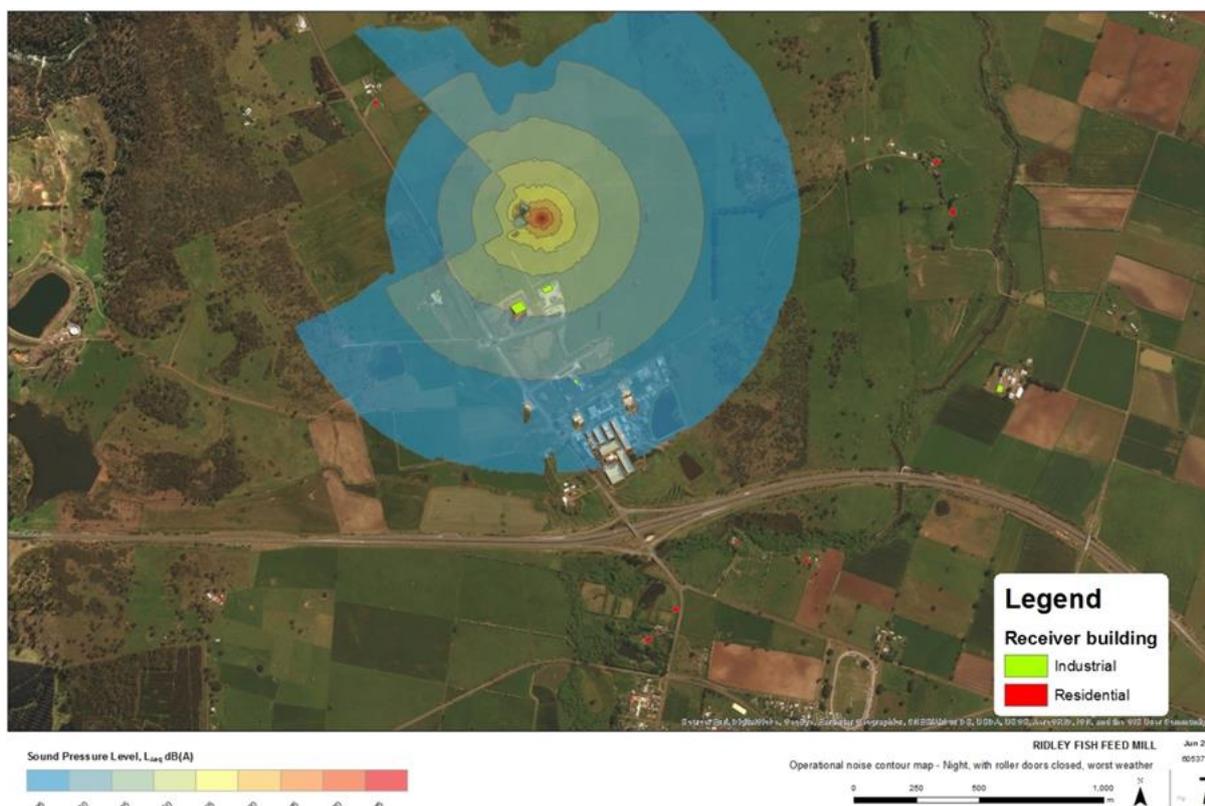


Figure 34 Operational noise with roller doors closed worst case scenario night

Results show compliance with the day, evening and night noise limits is achieved at all receptors under all weather conditions.

Additionally, the roller doors are only required to be open during daytime hours for intermittent deliveries and dispatch of product.

The predicted noise levels at the non-residential receivers are not predicted to exceed of the noise criteria during any period.

It should also be noted that the noise modelling is based on conservative assumptions (refer Section 6.4.23) and noise levels at receptors are likely to be lower than predicted.

### 6.4.25 Sleep Disturbance

The main sources of noise associated with the Project that have the potential to disturb sleep at the adjacent residences are car doors closing within the carpark upon staff arrival to site during night shift.

The predicted night-time  $L_{Amax}$  noise level at the nearest residential receptor due to car doors closing is presented in Table 27.

**Table 27 Predicted night  $L_{Amax}$  noise levels – Residential receivers**

Receiver no.	Approximate distance to site boundary, m	Predicted night operational noise levels, dB(A)	Night (10pm to 7am)
			Criteria
			60
			Exceedance, dB
<b>Neutral weather conditions – no wind</b>			
Receptor A	650	38	Complies
<b>Worst case weather conditions – 3 m/s source to receiver winds</b>			
Receptor A	650	43	Complies

The results of the noise modelling of the  $L_{Amax}$  noise level for sleep disturbance present that under worst case weather conditions operational noise are predicted to comply at the nearest residential receiver. The noise level at all receivers located at distances greater than Receptor A will be lower than predicted at Receptor A and will also comply with the sleep disturbance criteria.

No mitigation measures are considered necessary for sleep disturbance, however, signage reminding staff to keep noise down in the car park may prevent future issues.

In summary, the proposed Aqua Feed Mill will not have unacceptable noise and vibration impacts because:

- Noise levels from all construction phase activities are within the required regulatory limits at all receptors
- Additional noise associated with construction traffic will be negligible
- The distance between the proposed plant and receptors means there will no adverse effects associated with construction vibration
- Noise levels associated with operation of the Aqua Feed Mill are within the required regulatory noise limits at all receptors except Receptor A. Exceedances at Receptor A would only occur in the evening and night if delivery roller doors on the north-western side of the building were left open. As there are no deliveries to the plant in the evening or night, roller doors will be closed for security reasons and compliance at Receptor A is readily achieved
- Night time  $L_{Amax}$  noise levels are within the required regulatory limits for sleep disturbance.

## 6.5 Waste Management

This section of the DPMP outlines the potential effects and management of solid and controlled waste associated with the proposed Aqua Feed Mill.

### 6.5.1 Legislative and Policy Requirements

The legislative and policy requirements relating to solid and controlled waste management, relevant to the proposed Aqua Feed Mill are:

- *Environmental Management and Pollution Control Act 1994; and*

- *Environmental Management and Pollution Control (Waste Management) Regulations 2010.*

### 6.5.2 Assessment of Effects

Solid wastes generated directly from the process of feed production are minimal. The majority of waste from processing will be captured by a wet slurry system. The wet slurry system is designed to capture and manage the feed waste (wet and/or dry, mash and/or formed pellets) from pre-conditioning and the extruder, then reintroduce it into the process at the pre-conditioner in an accurately controlled manner.

The fines feed waste (including dusts) from sieves, cyclones and dryer will be collected, weighed, recorded and conveyed automatically to designated macro batching bins for weighing and inclusion into diets.

The solid waste streams that will be generated by the proposed Aqua Feed Mill and be managed in accordance with the *Environmental Management and Pollution Control (Waste Management) Regulations 2010* are:

- Used Intermediate Bulk Container (IBC)/totes or bag-in boxes from oils/liquids delivered to the site;
- Bulk feed bags (6 kg to 1000 kg capacity)
- Waste from dust collection and biofilter (media change-out)
- Normal office and staff wastes.

The overarching principle of the Ridley approach to solid waste management is to reuse and recycle wherever possible and this will be the objective for the proposed Aqua Feed Mill.

The bag-in-boxes and bulk feed bags are the main waste streams that will need to be managed at the site. It is estimated that up to 2,000 feed bags of different sizes will be generated at the site per week. Ridley will continue to explore options for recycling of these bags as a means of diverting the waste stream from landfill. Waste streams from the dust collection systems that are not suitable to be reintroduced into the production process and biofilter media change-out are expected to be either relatively small or infrequent and non-hazardous. Biofilter media change-out is expected to be required every 3 years or as specified in the biofilter maintenance schedule. A complete replacement would generate a maximum of 1,000 m<sup>3</sup> of solid waste. These wastes will be disposed of to landfill.

Wastes will be stored in covered areas within the process building to avoid contamination of stormwater runoff.

A summary of anticipated waste volumes is provided in Table 28.

**Table 28 Anticipated waste streams**

Waste Stream	Volume of Waste – Daily Rate	Volume of Waste – Annual Total	Proposed Destination
Biofilter media	N/A	1,000 m3 every 3 years	Landfill or composting
1000 kg bulk feed bags (dry ingredient)	35 bags	9,000 bags	Local bag recycler
25 kg bags (dry ingredient)	255 bags	65,000 bags	Paper recycling or landfill
20 kg bag-in-box (liquid ingredient)	50 bags	12,500 bags	Local bag recycler
6 kg bags (dry ingredient)	85 bags	20,000 bags	Paper recycling or landfill

Waste Stream	Volume of Waste – Daily Rate	Volume of Waste – Annual Total	Proposed Destination
Used IBCs	3	780	Return to supplier or third party re-conditioner
Waste from dust collection	0	0	0

Note: waste from dust collection is recycled back into the process.

Office and staff kitchen wastes will be collected separately for recycling or landfill disposal, as appropriate.

In summary, solid waste generated by the proposed Aqua Feed Mill is not considered to create any unacceptable environmental impact because:

- Any solid or semi-solid wastes generated by the aqua feed production process are recycled back into the process with no disposal required
- Bag-in-boxes and bulk feed bags which are the main waste stream and IBC will either be fully recycled or returned to the supplier or to a third party reconditioner
- Small amounts of waste from dust collection and general office and staff wastes will be disposed of to landfill via traditional municipal or industrial waste collections.

## 6.6 Dangerous Goods and Environmentally Hazardous Materials

This section of the DPEMP outlines the potential effects and management of the transport, storage and usage of dangerous goods and hazardous substances associated with the Ridley Aqua Feed Mill.

### Legislative and Policy Requirements

The legislative and policy requirements relating to dangerous goods and hazardous substances for the Ridley Aqua Feed Mill include the following:

- *Australian code for the Transport of Dangerous goods by Road and rail*
- *Dangerous Goods (Road and Rail Transport) Act 2010*
- *Dangerous Goods (Road and Rail Transport) Regulations 2010*
- *Work Health and Safety Act 2012*
- *Work Health and Safety Regulations 2012*
- *National Code of Practice for the Labelling of Workplace Substances [NOHSC: 2012 (1994)].*

### Potential Effects

The chemicals, dangerous goods and hazardous substances to be used and stored at the Aqua Feed Mill site are presented in Table 29 together with the quantities and Dangerous Goods Categories.

Ridley has advised that none of the materials being used for the production of aqua feed are classified as Dangerous Goods. The location of the storages for all materials is shown in Figure 3. The only Dangerous Good used and stored on the site is LPG used as fuel for the fork lifts.

The potential risks associated with LPG storage and storage and use of raw materials are:

- Handling and storage of bulk and packaged liquids, primarily the potential for spills and leaks
- Handling and storage of LPG, primarily the potential for ignition and fires.

## Management and Mitigating Measures

The controls proposed for storage of materials are presented in Table 29. These comprise bunding systems with sufficient capacity to contain the contents of a failed tank. Bunds will be designed in accordance with AS1940 so as to provide 120% of the largest tank volume plus incident rainfall. Overfilling of the tank is another risk and tanks will include level indication and alarms (high and High High) to alert the operator during filling or transfers.

The tanker load in area will be designed with containment such that loss of the largest tanker compartment will be contained. Stormwater in the area will be directed to stormwater drains. The hoses will have Camlock fitting (or similar) to prevent spills when disconnecting hoses. Drip trays may be used where drips are possible.

The bulk liquid storage tanks will not be roofed and therefore stormwater sumps will be incorporated into the bund for collection of rainwater. The sumps will be valved and normally closed.

The site will have a number of spill kits located in areas with higher potential for spills and leaks e.g. adjacent to the tanker load-in, bunded areas and pump stations.

The whole site stormwater system will have an isolation valve that can be closed, if a major spill occurs, so as to contain the spill on site.

The LPG storage will be designed in accordance with the AS/NZS 1596 and AS 4332, including appropriate signage, vehicle impact protection, and firefighting equipment.

## Contingency Plans

Ridley will develop contingency plans to address potential incidents such as a major liquid (e.g. fish oil) spill, bulk liquid storage tank failure or over filling or a fire.

The plans will define roles and responsibilities, actions to control the discharge or fire, clean up procedures and a lessons learnt process, equipment requirements and associated training and drills.

For example, in the case of a spill during unloading, the process would involve

- The operator ceasing the unloading
- Isolating the source
- Isolation of the stormwater system
- Notifying the supervisor and cleaning up the spill( e.g. using the spill kit or calling in a Vacuum truck)
- Incident investigation and close out.

## Safety in Design and Risk Assessment

As part of the design process, a safety in design assessment and risk assessment will be conducted.

Potential plant failures leading to environmental impacts (e.g. leaks and spills, fire) will be assessed and the Safety Hierarchy used to address the hazards:

- Elimination of the hazard (changing the design)
- Substitution (e.g. using a different substance or piece of equipment that is less hazardous)
- Engineering controls (e.g. bunding, level alarms, etc.)
- Separation of operators from the hazard (e.g. guarding, covers)
- Personal Protective equipment (e.g. gloves, safety glasses, protective clothing, etc.)

In summary, the potential for Dangerous Goods and Environmentally Hazardous Materials to create unacceptable risks or impacts is low because;

- LPG is the only classified Dangerous Good to be stored on site – the storage facility will be designed in accordance with relevant Australian Standards and emergency protocols defined

- Liquid storage and handling areas will be designed with bunds to Australian Standards and able to accommodate 120% capacity of the largest tank volume plus incident rainfall
- Tanks will be fitted with level alerts
- Internal stormwater system will be able to be fully isolated in the event of a spill.

**Table 29 Proposed controls for storage**

Category	Tonnes	Volume (kL)	Dangerous goods Classification	Control Measures
Dry Bulk	200		Non Dangerous Good	Dry storage, non-hazardous stored in silos
Bulk Meals	400		Non Dangerous Good	Dry storage, non-hazardous stored in silos
Macros		300	Non Dangerous Good	Dry storage, non –hazardous stored in silos
Bulk Liquids	240	4 no 65	Non Dangerous Good	The tanks are bunded in accordance with AS1940 with impervious floor and wall, a rainwater collection sump, the bund volume is 120% of the largest tank volume. Separation distances between the tank and bund wall are as per AS1940
Fish Oil	120	2 no. 65	Non Dangerous Good	The tanks are bunded in accordance with AS1940 with impervious floor and wall, a rainwater collection sump, the bund volume is 120% of the largest tank volume. Separation distances between the tank and bund wall are as per AS1940
Packages Liquids			Non Dangerous Good	Packaged liquids will be stored in a covered and bunded area as per AS 1940.
Micros		40	Non Dangerous Good	Dry storage, non-hazardous stored in silos
Fuel	1.4	2.75	Flammable Gas Category 1 Petroleum Gases, Liquefied. Transport Hazard Code 2.1	LPG cylinders shall be stored in accordance with the requirements of AS/NZS 1596 and AS 4332

## 6.7 Biodiversity and Natural Values

This section of the DPEMP outlines the potential effects and management of potential effects of the proposed Aqua Feed Mill on biodiversity and nature conservation values.

### 6.7.1 Legislative and Policy Requirements

The key legislative and policy requirements relating to biodiversity and nature conservation values, relevant to the proposed Aqua Feed Mill Facility are:

- *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- *Threatened Species Protection Act 1995*
- *Nature Conservation Act 2002*
- *Weed Management Act 1999*
- *Threatened Species Strategy for Tasmania*
- *National Strategy for the Conservation of Australia's Biological Diversity*
- *Tasmania's Nature Conservation Strategy*
- *Japan-Australia Migratory Bird Agreement*
- *China-Australia Migratory Bird Agreement*
- *A Directory of Important Wetlands in Australia (2nd edition)*
- *Tasmanian Regional Forest Agreement*
- *Tasmanian Forest Practices Code 1995*

### 6.7.2 Existing Conditions

The site of the proposed Aqua Feed Mill is predominantly flat and is crossed by a shallow drainage line running from south-east to north-west. The site has previously been used for agricultural and has generally been degraded by exotic pasture species. The biodiversity and nature conservation values of the broader industrial precinct subdivision were assessed as a part of the approvals process for the rezoning and subdivision of the site. The assessments, including the EPBC referral prepared by the Meander Valley Council, report on NRM values, and Green and Gold Frog Habitat assessment are referenced in this section.

#### Matters of National Environmental Significance

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* provides protection to Matters of National Environmental Significance (MNES) by requiring an action that is likely to have a significant on a MNES to be approved by the Commonwealth Minister for the Environment. The MNES are world heritage properties, national heritage places, Ramsar wetlands of international significance, listed threatened species or communities, migratory species protected under international agreements, nuclear actions, and the Commonwealth marine environment.

A search of the MNES database was conducted to determine what values are potentially present at the subject site. It is important to note that species are listed through the database search as potentially present at various locations based on the wider habitat values of an area but may not be present at a specific site as the habitat values are not present for a variety of reasons including vegetation clearance, existing land uses and the like. The MNES that are relevant to biodiversity and nature conservation (threatened and migratory species) which may be present at the subject site are listed in Table 30. Section 6.7.3 provides a summary of the site condition and actual habitat value present at the site to assess the likelihood of EPBC listed species being present at the site.

Table 30 EPBC Listed Threatened and Migratory Species

Common Name	Scientific Name	Status	Presence	Likelihood
<b>Threatened Bird Species</b>				
Tasmanian Wedge-tailed Eagle	<i>Aquila audax fleayi</i>	Endangered	Breeding likely to occur within area	No known nest in area
Australasian Bittern	<i>Botaurus poiciloptilus</i>	Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Curlew Sandpiper	<i>Calidris ferruginea</i>	Critically Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Tasmanian Azure Kingfisher	<i>Ceyx azureus diemenensis</i>	Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Swift Parrot	<i>Lathamus discolor</i>	Critically Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Eastern Curlew	<i>Numenius madagascariensis</i>	Critically Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Gould's Petrel	<i>Pterodroma leucoptera leucoptera</i>	Endangered	Species or species habitat may occur within area	No suitable habitat onsite
Masked Owl	<i>Tyto novaehollandiae castanops</i>	Vulnerable	Species or species habitat may occur within area	No suitable habitat onsite
<b>Threatened Ecological Communities</b>				
Lowland Native Grassland of Tasmania		Critically Endangered	Community likely to occur within area	Not identified at this location
<b>Threatened Fish Species</b>				
Australian Grayling	<i>Prototroctes maraena</i>	Vulnerable	Species or species habitat may occur within area	No suitable habitat onsite
<b>Threatened Frog Species</b>				
Green and Gold Frog	<i>Litoria raniformis</i>	Vulnerable	Species or species habitat may occur within area	Resident in the area
<b>Threatened Mammal Species</b>				
Spotted-tail Quoll	<i>Dasyurus maculatus maculatus</i>	Vulnerable	Species or species habitat likely to occur within area	No suitable habitat on site

Common Name	Scientific Name	Status	Presence	Likelihood
Eastern Quoll	<i>Dasyurus viverrinus</i>	Endangered	Species or species habitat may occur within area	No suitable habitat on site
Eastern Barred Bandicoot (Tasmania)	<i>Perameles gunnii gunnii</i>	Vulnerable	Species or species habitat likely to occur within area	No suitable habitat on site
Tasmanian Devil	<i>Sarcophilus harrisii</i>	Endangered	Species or species habitat likely to occur within area	No suitable habitat on site
Threatened Plant Species				
Midlands Mimosa	<i>Acacia axillaris</i>	Vulnerable	Species or species habitat may occur within area	Not identified at site survey/ no suitable habitat on site.
Native Wintercress	<i>Barbarea australis</i>	Endangered	Species or species habitat likely to occur within area	Not identified at site survey/ no suitable habitat on site.
Curtis Colobanth	<i>Colobanthus curtisiae</i>	Vulnerable	Species or species habitat may occur within area	Not identified at site survey/ no suitable habitat on site.
Matted Flax-Lily	<i>Dianella amoena</i>	Endangered	Species or species habitat may occur within area	Not identified at site survey/ no suitable habitat on site.
South Esk Heath	<i>Epacris exserta</i>	Endangered	Species or species habitat known to occur within area	Not identified at site survey/ no suitable habitat on site.
Purple Clover	<i>Glycine latrobeana</i>	Vulnerable	Species or species habitat likely to occur within area	Not identified at site survey/ no suitable habitat on site.
Basalt Pepper-cress	<i>Lepidium hyssopifolium</i>	Endangered	Species or species habitat likely to occur within area	Not identified at site survey/ no suitable habitat on site.
Hoary Sunray	<i>Leucochrysum albicans</i> var. <i>tricolor</i>	Endangered	Species or species habitat may occur within area	Not identified at site survey/ no suitable habitat on site.
Midland Greenhood	<i>Pterostylis commutata</i>	Critically Endangered	Species or species habitat may occur within area	Not identified at site survey/ no suitable habitat on site.

Common Name	Scientific Name	Status	Presence	Likelihood
<b>Migratory Terrestrial Species</b>				
White-throated Needletail	<i>Hirundapus caudacutus</i>		Species or species habitat likely to occur within area	Not known in area/ lack of suitable habitat
Satin Flycatcher	<i>Myiagra cyanoleuca</i>		Species or species habitat known to occur within area	Not known in area/ lack of suitable habitat
<b>Migratory Wetland Species</b>				
Common Sandpiper	<i>Actitis hypoleucos</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Curlew Sandpiper	<i>Calidris ferruginea</i>	Critically Endangered	Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Pectoral Sandpiper	<i>Calidris melanotos</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Latham's Snipe	<i>Gallinago hardwickii</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Eastern Curlew	<i>Numenius madagascariensis</i>	Critically Endangered	Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Common Greenshank	<i>Tringa nebularia</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
<b>Migratory Marine Bird Species</b>				
Common Sandpiper	<i>Actitis hypoleucos</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Fork-tailed Swift	<i>Apus pacificus</i>		Species or species habitat likely to occur within area	Not known in area/ lack of suitable habitat
Great Egret	<i>Ardea alba</i>		Species or species habitat likely to occur within area	Not known in area/ lack of suitable habitat
Cattle Egret	<i>Ardea ibis</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat

Common Name	Scientific Name	Status	Presence	Likelihood
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Curlew Sandpiper	<i>Calidris ferruginea</i>	Critically Endangered	Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Pectoral Sandpiper	<i>Calidris melanotos</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Latham's Snipe	<i>Gallinago hardwickii</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>		Species or species habitat likely to occur within area	Not known in area/ lack of suitable habitat
White-throated Needletail	<i>Hirundapus caudacutus</i>		Species or species habitat likely to occur within area	Not known in area/ lack of suitable habitat
Swift Parrot	<i>Lathamus discolor</i>	Critically Endangered	Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Satin Flycatcher	<i>Myiagra cyanoleuca</i>		Species or species habitat known to occur within area	Not known in area/ lack of suitable habitat
Eastern Curlew	<i>Numenius madagascariensis</i>	Critically Endangered	Species or species habitat may occur within area	Not known in area/ lack of suitable habitat
Common Greenshank	<i>Tringa nebularia</i>		Species or species habitat may occur within area	Not known in area/ lack of suitable habitat

The NMES search outlined in Table 30 indicates that for all but the Green and Gold Frog (discussed in more detail below), the NMES species may occur in the area, however unlikely to occur on the site, due to the highly modified environment and therefore absence of suitable habitat to support these species. As a result, and based on the fact that habitat for the Green and Gold Frog has been assessed as not present on the site, it is not intended to make a referral to the Commonwealth under the EPBC Act.

### Report of Natural Resource Management Values

A Natural Resource Management (NRM) report was conducted on behalf of Meander Valley Council as part of the rezoning and subdivision application for the Valley Central Industrial Precinct, which included the site proposed for the Aqua Feed Mill. The report included a review of Commonwealth and Tasmanian Government databases relating to biodiversity. The review found that apart from the EPBC listed Green and Gold Frog, no NRM values are known to occur within the proposed Industrial precinct. The database review was followed by a site inspection (Welling 2008b) which confirmed that no values relating to threatened species or vegetation communities, with the exception of the Green and Gold Frog, were present.

### Green and Gold Frog Habitat Assessment

A Green and Gold Frog Habitat Assessment (was conducted as part of the rezoning process for the Industrial Precinct development. The assessment focussed on determining the suitability of the various drainage lines within the development area as habitat (both residence and movement) for the Green and Gold Frog. The suitability of an area was “determined by the vegetation present, the presence/absence of water and the nature of any waterbody (i.e. permanent, seasonal, and sporadic).” (Welling 2008b, p1). The assessment focussed on the one major drainage line, and three minor drainage lines within the development area and the waterbodies adjacent to, but outside of the development area that are linked to the drainage lines.

Figure 35 shows the Green and Gold Frog Habitat Assessment area with the drainage lines and waterbodies. It should be noted that Drainage Line C crosses the subject site. However, the assessment found that the upper section of Drainage Line C to the east of Birralee Road (including the proposed Aqua Feed Mill site ) is a predominantly man-made, shallow drainage line containing isolated native rush and sedge species that provides no habitat for the Green and Gold Frog.

The lower section of Drainage Line C to the west of Birralee Road is deeper and well formed (due the run-off from Birralee Road) and provides a broader sedgy area with weed species such as thistles and docks. This wetter area to the west of Birralee Road may provide some habitat for frogs in transit (refer Figure 35).

On the basis that the section of Drainage Line C that crosses the proposed site was assessed as providing no habitat for the Green and Gold Frog, it is considered that the proposed Aqua Feed Mill will have no adverse impact on the movement or residence of this frog species.

### Flora Values Report

A flora values assessment conducted in November 2008 for the nearby BOC gas facility (Welling, 2008a, p3). found that the locality ‘*is dominated by exotic grasses such as ryegrass, bent grass and barley grass, and a range of exotic herbs including Plantago sp, Anagallis arvensis, Leontodon taraxacoides and Erodium sp.*’ .

Under the TASVEG vegetation classification system, the subject site contains ‘Agricultural Land’ vegetation community, which is described as being improved pastures and croplands containing exotic grasses and herbs, with native herbs and grasses occurring in some situations. ‘Agricultural Land’ has no formal conservation significance under the *Threatened Species Protection Act 1995*.

Two environmental weed species, declared under the *Weed Management Act 1999*, were identified at the site.

As the Ridley site is located within close proximity of the BOC site and shares the same drainage line, and based on a visual inspection, it can be concluded that the Ridley site is characterised by the same exotic grasses and weed species.

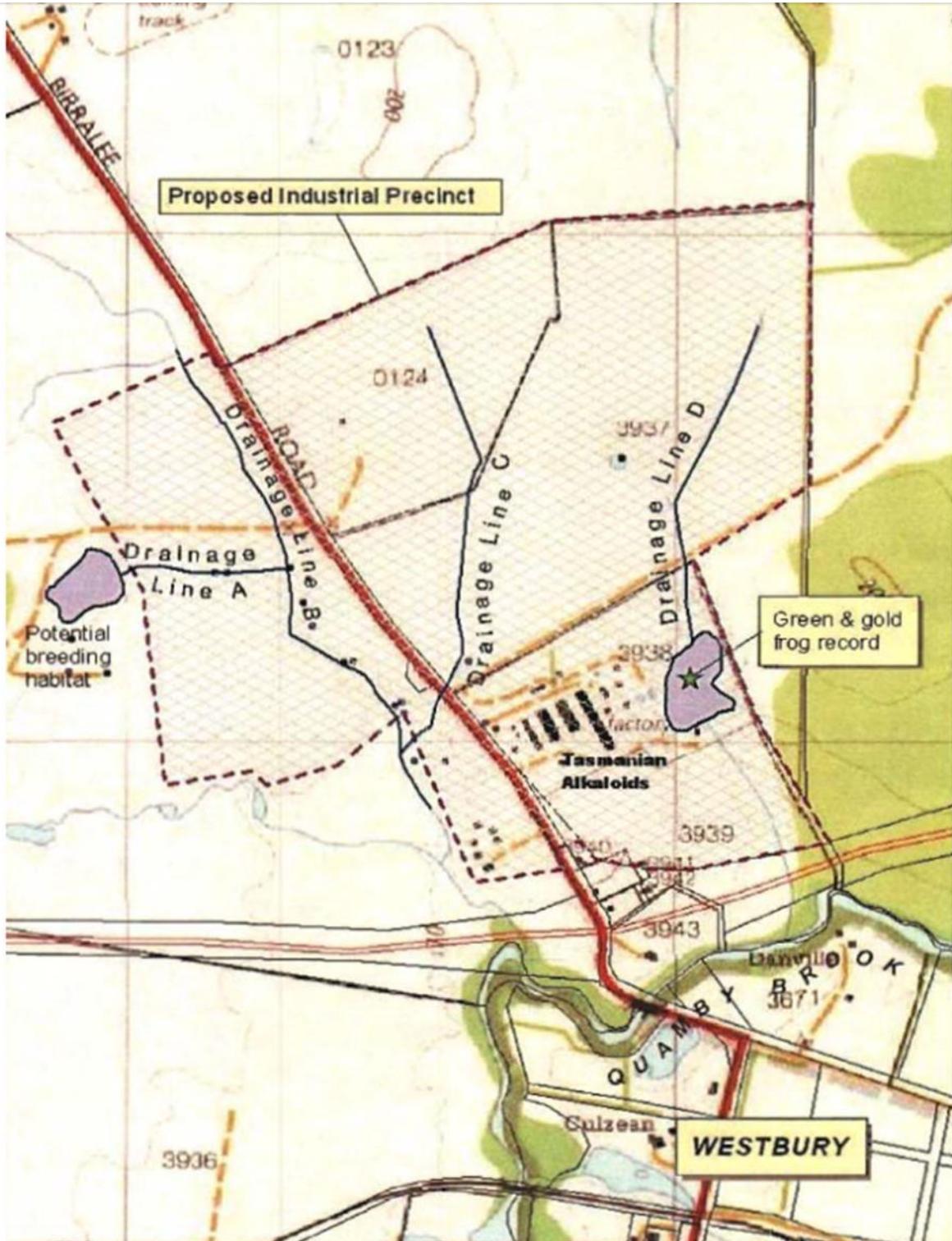


Figure 35 Green and Gold Frog habitat assessment area

### 6.7.3 Potential Effects

The natural flora and fauna values of the proposed Aqua Feed Mill site have been degraded by previous agricultural land uses with the site now characterised by exotic pasture species and weeds. Commonwealth and Tasmanian government ecological databases were searched to determine the likely presence of listed species at the site, and only the Commonwealth listed Green and Gold Frog has been identified as potentially occurring within the locality.

A Green and Gold frog habitat assessment was conducted for the Industrial Precinct in May 2008 that found that the drainage line that crosses the site of the proposed Aqua Feed Mill contains no habitat for the species. Given that no habitat for the Green and Gold Frog Species has been identified on the site, it can be concluded that the potential impact on the Green and Gold frog is likely to be negligible due to the unlikely presence of the species at the site.

### 6.7.4 Avoidance and Mitigation Measures

Opportunities to incorporate native vegetation into any landscaping on site will be investigated.

#### Pest Management Strategy

Once the facility is constructed, Ridley will implement vermin control procedures similar to those in place at their facility at Naganbra in Queensland. Preventative measures will be implemented to prevent the attraction of pest species. A qualified/certified external service provider will be engaged to manage pest control. Precautionary measures that Ridley will implement will include:

- Site roller doors and personnel access doors are to remain closed at times when loading, access or constant operations are not occurring
- Regular site audits are conducted
- Daily shift cleaning & housekeeping regimes
- Food sources are not permitted in the Mill or operational areas
- Lidded waste containers and daily waste removal from site
- Regular mowing of grass and trimming along the edges of concrete areas
- Regular weed management practices will be employed around the vegetated areas of the site.
- Maintain clear space around plant and machinery, doorways, drains are clean and general harbourage areas are inspected regularly
- Any raw material spills around site or inside buildings are to be cleaned up immediately
- Nesting sites or evidence of nesting of birds shall be eliminated & shall be removed in a timely fashion to prevent egg laying
- Termite inspection as required.

#### Monthly Review

Following the receipt of the monthly service report of the facility, the Pest Control Officer, Production Manager and Inventory Controller Officer will review report findings. A review meeting will be held to discuss pest infestations and proposed/required changes to the service program.

#### Amphibian Chytrid Fungus Management Measures

The risk of infection of the Amphibian Chytrid Fungus to the Green and Gold Frog *L. raniformis* will be managed by:

- Ensuring that all machinery and equipment used during construction of the proposed Ridley Aqua Feed Mill will be managed to control the spread of the Amphibian Chytrid Fungus, by adhering to the *Tasmanian Wash-down Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment, Edition 1*.

These Guidelines include instructions on:

- When to wash down

- Equipment for wash down and wash down procedures
- Specifically, the following instructions should be adhered to:
  - All equipment, vehicles and footwear should be dry and clean before entering the site to prevent spread of the Fungus via contaminated soils
  - The disposal of water and damp or muddy soils at the proposed development site should be minimised or undertaken as far away as possible from waterways, ponds and/or wetlands

In summary, the proposed Aqua Feed Mill should have no adverse impacts on biodiversity and natural values because:

- The site is highly degraded by past agricultural use and is characterised by exotic pasture species and weeds
- With the exception of the Green and Gold Frog, none of the MNES species listed under the EPBC Act are known to occupy the site and there is an absence of suitable habitat for these species
- The Green and Gold Frog is known to exist in the wider area but is not present on the Aqua Feed Mill site as the only potential habitat (Drainage Line C) has been assessed as not suitable as habitat
- Ridley intends to adopt pest and Amphibian Chytrid Fungus management and control measures at the facility.

## 6.8 Marine and Coastal

The proposed Ridley Aqua Feed Mill is located approximately 50 kilometres south of the nearest coastal area. The subject site is located within the Meander catchment, a sub-catchment of the Tamar, which joins the South Esk River at Hadspen (south-east of Launceston). The South Esk and North Esk join at Launceston to form the River Tamar which flows into the Bass Strait at West Head. The likelihood of the proposed Ridley Aqua Feed Mill impacting on marine and coastal areas is considered to be negligible.

## 6.9 Greenhouse Gases and Ozone Depleting Substances

This section of the DPEMP outlines the direct and indirect impacts of the proposed Aqua Feed Mill on greenhouse gas and ozone depleting substances production.

### 6.9.1 Legislative and Policy Requirements

The key legislative and policy requirements relating to greenhouse gas and ozone depleting substances, relevant to the proposed Aqua Feed Mill are:

- *Climate Change State Action Act 2008*
- *Climate Smart Tasmania: A 2020 Climate Change Strategy*
- *National Greenhouse and Energy Reporting Act 2007.*
- *National Greenhouse and Energy Reporting Regulations 2008.*
- *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*

### 6.9.2 Estimate of Greenhouse Gas Emissions

Greenhouse gas emissions from the proposed Aqua Feed Mill were estimated using the methodology described in the *National Greenhouse and Energy Reporting Regulations 2008*. This method employed the concept of emission scopes relating to:

- Scope 1 – direct greenhouse gas emissions that occur from sources owned or controlled by the company
- Scope 2 – indirect greenhouse gas emissions from the generation of purchased electricity consumed by the company.

### 6.9.3 Scope 1 Greenhouse Gas Emissions

Scope 1 emissions will occur from combustion of natural gas, predominantly for the boiler, and vehicles owned and controlled by the organisation. The estimated Scope 1 annual emission is 2,646 t CO<sub>2</sub>-e per year.

### 6.9.4 Scope 2 Greenhouse Gas Emissions

Scope 2 emissions are based on electricity to power motors in the process and other support functions. The estimated Scope 2 annual emission is 1,942 t CO<sub>2</sub>-e per year.

The total estimated annual greenhouse gas emission is 4,588 t CO<sub>2</sub>-e per year. Refer to Appendix H for a breakdown of the estimations and calculation used. Natural gas use makes up the majority of the emissions. Total estimated emissions are well below NGERs reporting thresholds.

### 6.9.5 Ozone Depleting Substances

Based on national regulations pertaining to the *Australian Government's Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (effective 1 July 2005), no ozone depleting substances are proposed to be used at the Aqua Feed Mill facility.

A refrigeration unit will be employed for generation of chilled air for process cooling. The unit will comprise two chillers, each with a 20 kg charge of refrigerant gas (R407C). This is well below the size requiring reporting under NGERs.

The Greenhouse Gas and Ozone Depleting Substances impact of the proposed Aqua Feed Mill is considered to be acceptable because:

- The total estimated greenhouse gas emissions associated with the facility are well below NGERs reporting thresholds.
- The potential generation of ozone depleting substances associated with the facility are well below NGERs reporting thresholds.

## 6.10 Heritage

This section of the DPEMP outlines the potential effects and management of potential effects of the proposed Aqua Feed Mill on Aboriginal and non-Aboriginal cultural heritage sites and areas.

### 6.10.1 Legislative and Policy Requirements

The legislative and policy requirements relating to heritage, relevant to the proposed Aqua Feed Mill are:

- *Aboriginal Relics Act 1975*
- *Environment Protection and Biodiversity Conservation Act 1999*
- *Historic Cultural Heritage Act 1995*

The performance requirements are to avoid impacting on items and places protected by the Historic Cultural Heritage Act 1995 and Aboriginal Relics Act 1975.

### 6.10.2 Existing Conditions

#### Aboriginal Heritage

During the assessment and approvals process for establishment of the Valley Central Industrial Precinct in which the Ridley site is located, it was concluded by Council that an Aboriginal archaeological heritage study was not considered necessary:

*'the long term and high degree of disturbance to the subject area due to historical land uses and the lack of anecdotal evidence regarding the potential for aboriginal relic occurrence, a detailed archaeological study was not considered necessary'* (Meander Valley Council, 2008).

Council made this determination based on previous studies for the Tasmanian Gas Pipeline, which indicated no likely occurrence of Aboriginal heritage in the vicinity of the site.

## Historic Heritage

A desktop review of the Tasmanian Heritage Register concluded that there are no historic heritage places present at the subject site.

### 6.10.3 Potential Effects

#### Aboriginal Heritage

The locality of the subject site has a long history of significant disturbance due to ongoing agricultural activities prior to subdivision. Considering the site history, it is considered unlikely that the proposed Ridley Aqua Feed Mill would have impact on Aboriginal heritage.

#### Non-Aboriginal Heritage

The proposed Ridley Aqua Feed Mill is highly unlikely to impact on any area, place or site of non-Aboriginal cultural heritage listed within the reviewed databases. No listed sites have been identified within the Aqua Feed Mill site.

### 6.10.4 Avoidance and Mitigation Measures

In the unlikely event of the discovery of Aboriginal artefacts during earthworks associated with the proposed Ridley Aqua Feed Mill, the provisions of the Aboriginal Relics Act 1975 would be followed.

### 6.10.5 Assessment of Effects

In summary, the proposed Aqua Feed Mill should have no adverse impacts on Heritage values because:

- Studies have concluded that there are no Aboriginal or non – Aboriginal heritage values present on the site
- In the event that Aboriginal artefacts are found during construction activities, Ridley is committed to following legislative requirements to assess and protect these relics as appropriate.

## 6.11 Land Use and Development

The proposed Ridley Aqua Feed Mill is to be developed within the Valley Central Industrial Precinct in Westbury.

The Precinct, which was specifically created to attract and accommodate industrial uses, provides:

- Access into the precinct designed specifically for truck movements
- Good access onto the Bass Highway for freight movements
- Service connections
- Substantial setbacks from surrounding sensitive land uses
- Limited flora and fauna values
- Suitable geology and topography to support construction of industrial facilities.

The location of the Industrial Precinct was specifically planned to minimise the potential impacts on surrounding land uses. The proposed Aqua Feed Mill is unlikely to impact negatively on neighbouring Industrial and commercial land uses. The proposed site is located within the industrial precinct, utilising access roads approved by Council for truck movements and is in keeping with the current industrial character of the area.

As shown in Figure 5, the closest residential property to the proposed Aqua Feed Mill site is located approximately 900 metres to the north- west. This property (Receptor A) has views to the south-east onto the Industrial Precinct. The next closest residents are over 1.4km from the proposed site to the south.

The studies conducted as part of this DPEMP such as noise and air quality show that the Aqua Feed Mill can readily comply with regulatory requirements at the nearest sensitive receptors (residences)

based on the type of operation, mitigation measures adopted and the buffer zones incorporated into the industrial precinct subdivision.

## 6.12 Visual Impacts

This section of the DPEMP outlines the existing visual setting within which the proposed Ridley Aqua Feed Mill would be located and assesses the capacity of the landscape to absorb any visual changes.

### 6.12.1 Existing Visual Setting

The existing visual setting of the Valley Central Industrial Precinct is characterised by a combination of rural vistas with structures associated with industrial development visible in the Industrial Precinct and the adjacent Tasmanian Alkaloids plant.

Eight potential residential receptors (residences and offices) have been identified within a 2km radius of the proposed site, labelled A to H (Figure 5). Two of these eight receptors (A and H in Figure 5) will have a view of the proposed Aqua Feed Mill.

Receptor A is located approximately 900m from the proposed site to the north-east.

Figure 36 shows the view from Receptor A looking south towards the proposed Aqua Feed Mill site. Tasbuilt homes, the BOC emissions stack and the Tasmania Alkaloids facility can be seen in the existing view from Receptor A.



**Figure 36 View from Receptor A looking South towards the industrial precinct.**

Receptor B and C are located over 1.7km from the site to the east and cannot view the site from their location due to the topography, vegetation and distance.

As shown in Figure 5, Receptor D is located approximately 1.4km to the south of the proposed Aqua Feed Mill and is positioned north towards the Tasmania Alkaloids Plant. The proposed Aqua Feed Mill will not be visible from Receptor D due to screening by the Tasmania Alkaloids plant as shown in Figure 37.



**Figure 37 View from Receptor D, north onto the industrial precinct.**

Receptors E, F and G are located more than 1.6km from the proposed site, and due to distance and topography, will not be able to view the site from their position.

Receptor H is located to the south- west of the proposed Aqua Feed Mill and currently has more distant views into the industrial precinct (shown in Figure 38 with a red triangle). This receptor is located on a rise in the landscape and is approximately 40m higher than the site of the proposed Aqua Feed Mill.



**Figure 38 Receptor H location**

As Receptor H currently overlooks the industrial precinct from some distance, the proposed Aqua Feed Mill should not have any significant additional impact on the views currently experienced from this location.

**6.12.2 Potential Effects**

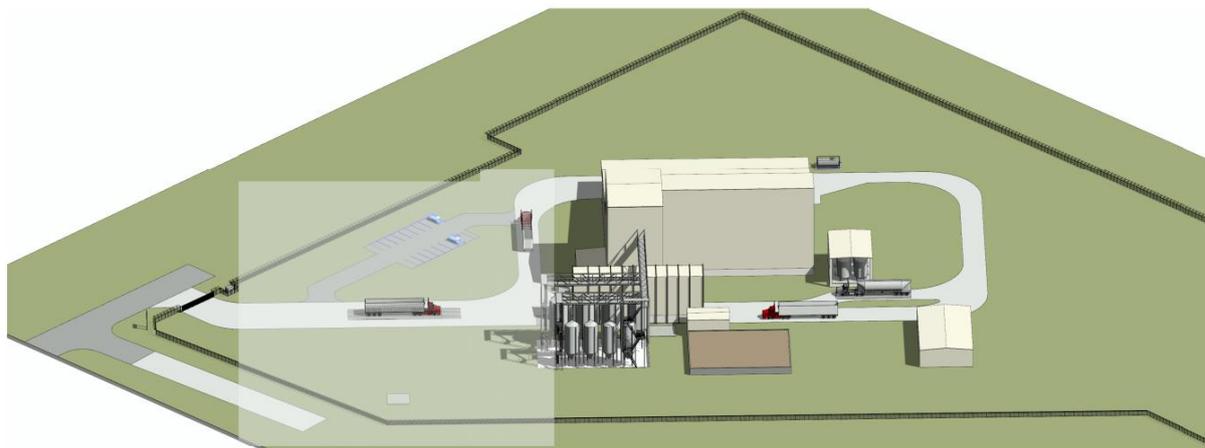
To assist in the assessment of visual impacts, 3D models of the proposed facility are provided in Figure 39 to Figure 42. Larger copies are included in Appendix I.

These models suggest that the proposed Ridley Aqua Feed Mill is in keeping with the general industrial character and visual bulk of the Industrial precinct. The facility will be visible by two receptors from the north of the site and on higher topography to the east. However, the two receptors in a position to view the facility currently experience an industrial landscape view of the precinct and the Ridley facility will be consistent with the existing view.

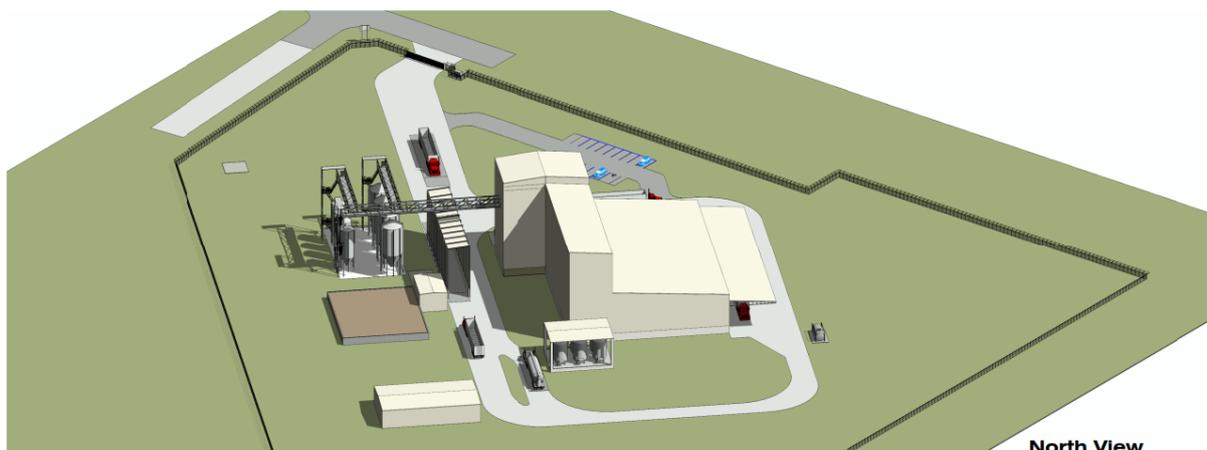
It should also be noted that the approved development plan for the industrial precinct contains provisions for vegetation screening along Birralelee Road and escarpment areas on the boundaries of the precinct which will assist in future screening the subdivision from Birralelee Road when planted.

The proposed Ridley Aqua Feed Mill is visible from two primary public viewing areas, Birralelee Road; and Bass Highway, although the undulating topography provides some screening, particularly where the Bass Highway is in a road cutting.

The Meander Valley Planning Scheme provides for a landscape zone along Birralelee Road and on the western escarpments of the industrial precinct. These landscape zones will provide screening from vantage points to the entire industrial precinct, including the site of the proposed Ridley Aqua Feed Mill.



**Figure 39 3D model showing a East view of the Aqua Feed Mill**



**Figure 40 3D model showing a North view of the Aqua Feed Mill**

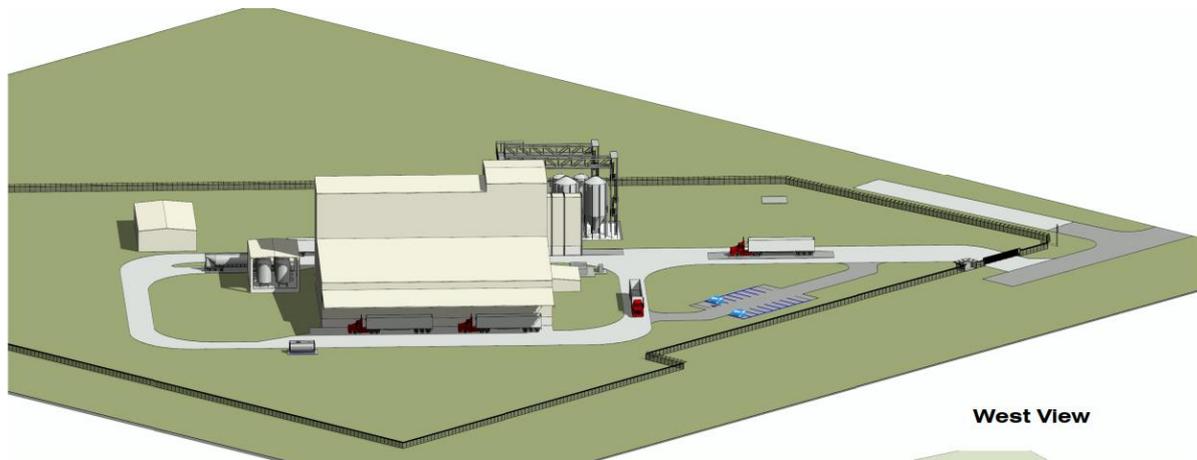


Figure 41 3D model showing a West view of the Aqua Feed Mill

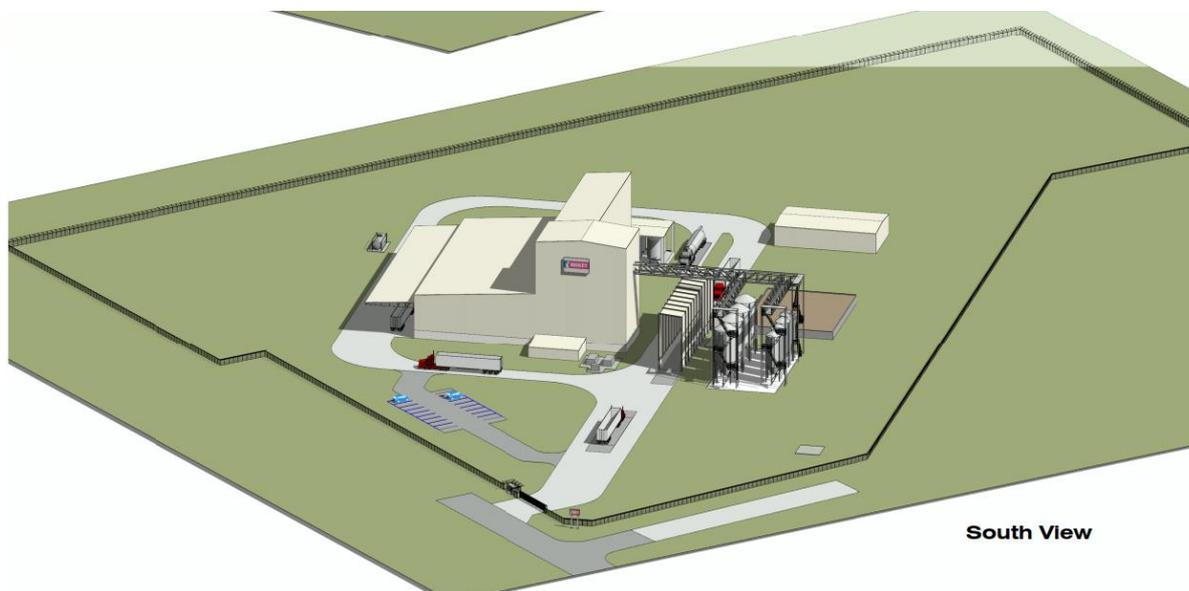


Figure 42 3D model showing a South view of the Aqua Feed Mill

### 6.12.3 Avoidance and Mitigation Measures

Ridley has adopted colours and materials for the facility selected to minimise visual presence in the landscape. The exterior of the Mill structure will be a pale eucalyptus Colourbond as shown in Appendix B and has been selected to ensure that the structure blends into the surrounds as much as possible.

Due to existing measures for screening provided for the entire industrial precinct and the relatively low bulk of the proposed Ridley Aqua Feed Mill, no further avoidance or mitigation are proposed.

In summary, the proposed Aqua Feed Mill should not have any material adverse impacts on visual amenity in the area because:

- It is located in a planned industrial precinct and is in keeping with the general scale and type of development already existing in the estate
- The overall dimensions of the structures proposed are consistent with current industrial setting
- The proposed exterior colour of the facility has been selected to minimise contrast with landscape elements

- Only two of eight receptors in the wider vicinity have views of the proposed Aqua Feed Mill and these residences already experience views of the industrial estate and will not see a material change in their current outlook.

### 6.13 Socio-Economic Issues

This section of the DPEMP contains information on the socio-economic effects of the proposed Ridley Aqua Feed Mill during the construction, operation and decommissioning phases. Due to the modest scale of the proposed Aqua Feed Mill when considered in the context of the Regional and State economies, the DPEMP Guidelines do not require a quantified economic evaluation of the project. However, the following general observations are made.

#### Impact on Labour Markets

During the construction phase of the proposed Ridley Aqua Feed Mill, it is anticipated that the regional labour market would be utilised (i.e. local and Launceston) which will directly provide jobs and spending on accommodation, meals and services.

During the operational phase of the proposed Ridley Aqua Feed Mill, there would be a modest positive impact on the local labour market, with full time employment positions being created in addition to further employment opportunities for contractors. It is anticipated that up to twenty employees could be engaged at the site when fully operational.

#### Impact on Industries

The project is expected to have a positive impact on the Tasmanian transport industry, particularly the transporting of raw and finished product goods, and provision of product to the local and international aqua culture.

#### Community Infrastructure

There is no community infrastructure, such as recreational, cultural, health or sporting facilities located near the subject site. Accordingly, any impact of the proposed Ridley Aqua Feed Mill on community infrastructure would be negligible.

#### Demographic Effects

The proposed Ridley Aqua Feed Mill is unlikely to have a significant impact on the demography of the community. During the construction phase, it is anticipated that employment not sourced locally would be sourced from Launceston, and during the operation phase, twenty full-time positions would be created, with many functions being sourced by contractors on an as-needed basis.

#### Land Values

The proposed Ridley Aqua Feed Mill is unlikely to have a significant impact on land values or demand for land and housing. It is anticipated that the existing local workforce, supplemented by the regional (Launceston) workforce during the construction phase of the project, would provide the labour required for the construction and operation of the project.

In summary, the proposed Aqua Feed Mill will have a positive socio-economic benefit to Westbury and the wider region because:

- It will create both construction and permanent jobs during the operational life of the facility
- It will provide economic benefits to the transport sector with trucks being utilised to bring raw materials to the facility and transport finished products to customers
- Ridley's local customer base will benefit from reduced supply chain costs when compared with the current import of aqua feed from plants elsewhere in Australia.

### 6.14 Health and Safety Issues

This section of the DPEMP outlines the potential effects and management of health and safety issues associated with the proposed Ridley Aqua Feed Mill relating to employees, site visitors and members of the public.

### 6.14.1 Legislative and Policy Requirements

The legislative and policy requirements relating to health and safety, relevant to the proposed Ridley Aqua Feed Mill are:

- *Public Health Act 1997*
- *Workplace Health and Safety Act 2012*
- *Workplace Health and Safety Regulations 2012*

#### Performance Requirements

Ridley recognises that its health and safety performance requirements are to comply with the Workplace Health and Safety Act 2012 (the H&S Act) and the Workplace Health and Safety Regulations 2012 (the H&S Regulations). A key component of the regulations is adherence to industry codes of practice. For example, the *Code of Practice for Working at Heights in Commercial Construction (2000)* will be relevant to construction of the Facility.

In addition to complying with the legislative requirements, Ridley must meet its own stringent corporate health and safety requirements. Safety is a core value of Ridley and is crucial to the way the company does business. Ridley's safety focus begins at Board and Executive Management level. Safety performance is rigorously monitored and reported to management and the Ridley Board. Ridley's key focus is to continually embed safety programs across the business and to driving behavioural change.

Consistent with normal Ridley practice, a comprehensive Health and Safety plan is in the process of being developed to address Health and Safety during the construction and operational phases of the proposed facility.

#### Potential Issues

Potential health and safety issues for the construction of the Aqua Feed Mill include:

- Facility construction issues associated with potential hazards including working at heights, excavations and activities associated with mobile plant and lifting equipment
- Process and operational safety issues associated with operational and maintenance activities around industrial plant with potential hazards; and
- Site security and control issues associated with unauthorised access to the site and managing the access of visitors and/or contractors.

The health and safety procedures of the draft Site Safety, Health and Environment Plan (hereafter the 'draft SHE Plan'), provides an example of the measures that will be put in place to manage Health and Safety. The draft SHE Plan will apply to all work on the site controlled by Ridley and will outline how health and safety issues are expected be managed. The draft SHE Plan will be finalised and implemented prior to commissioning of the facility.

#### Construction Phase Safety

Construction of the Aqua Feed Mill plant will be undertaken by a competent contractor who will be responsible for development and implementation of the construction health, safety and environment plan. Ridley will review all health, safety and environment plans to ensure compliance with Tasmanian workplace safety legislative requirements and Ridley's own expectations.

#### Security

During operation of the plant, Ridley will implement security arrangements that are best practice. The facility will be secured by fencing and gates.

During operation of the facility, a site identification card process will be established. The process will allow designated individuals on to the site who have been through the induction process.

All contractor personnel will comply with site security procedures and will not allow non-authorised personnel to enter the site.

### Operational Safety Issues

During operation, employee and contractor safety will be managed by requiring all site staff to:

- Undergo a site Induction
- Wear personal protective equipment
- Hold a valid permit to work
- Complete a job hazard analysis for specific tasks; and
- Manage potential safety risks during tasks.

The SHE Plan, also provides for management of potential risks to site staff and contractors from site traffic (a speed limit will apply).

Good housekeeping will be practised so that slip and trip hazards are, where possible, eliminated or managed to minimise the safety risk to employees and contractors.

All staff including contractors will be trained and competent to undertake the tasks required. Weekly short “tool box talks” by contractors, to all staff, will be encouraged and supported. These talks will reinforce good SHE practices, remind employees and contractors of SHE rules, and allow for review lessons from incidents and near misses. Accident/Incident reporting and investigation will occur as required. A system for reporting details of all incidents (lost time, medical treatment and first aid) will be developed.

The SHE Plan also covers first aid hazardous substances smoking, alcohol, drugs and weapons. In the case of an emergency, emergency response procedures (site evacuation etc.) will be defined by the Ridley Site Representative.

Facility visitors will be inducted to the site on arrival. Visitors will be accompanied at all times by Ridley staff if they are not inducted, to ensure they adhere to the health and safety requirements of the Facility.

In summary, safety, health and environmental issues will be managed to a high standard and comply with all regulatory requirements because:

- Ridley has a strong commitment to SHE across all of its operations and a strong SHE track record
- A detailed SHE plan (currently in preparation) will be adopted for operation of the Aqua Feed Mill covering employees, contractors and visitors
- Key elements of a strong SHE plan and culture such as training and inductions, permit to work, tool box talks, clearly defined responsibilities, job hazard assessments, incident reporting, emergency procedures and the like will be implemented
- A reputable contractor will be engaged for construction of the facility and will be responsible for implementation of a detailed Construction HSE Plan compliant with regulations and Ridley expectations
- Site security protocols will be adopted to ensure a safe and secure working environment.

### 6.15 Hazard Analysis and Risk Assessment

The proposed facility is not considered high risk. There is only one Dangerous Good being stored and used on site which is LPG for forklift refuelling. None of the raw materials used or stored in the production process are classified as Dangerous Goods.

In order to assess the potential risks and develop mitigation measures, a preliminary risk register has been prepared for the various stages of the project: construction, operations, maintenance and demolition. These are summarised in Table 31 together with approaches, mitigation measures and residual risk to address each of the hazards.

A preliminary risk assessment was conducted to assess whether the proposed mitigating measures were considered to be satisfactory in minimising the risk, taking into account the degree of project

development. The project will undergo further development and detailed design. Various management plans will be prepared as listed in Table 31.

As part of this process, as outlined above, further assessment of risk will be conducted and the risk register updated and further detail added.

The residual risk ranking is noted in Table 31. The highest risk was due to a gas explosion because of the potential major impact on staff.

As noted these risks should be re-evaluated after the design has been complete and the management plans prepared.

The management of hazards and risk will involve the development of a number of plans e.g. Construction Occupational Health and Safety (OHS) Plan, Construction Environmental Management Plan (EMP) and the like.

The approach to developing the OHS and EMP plans will involve a detailed identification of risks, and development of mitigating measures using the control hierarchy (eliminate, modify, controls, procedures). The Safety in Design reviews and HAZOPs will contribute to the development of these plans.

All design will be in accordance with the relevant Australian standards. It is anticipated that the mitigated risks would be ranked as low, however, this will be confirmed when each of the plans is developed. Where risks are not low, additional mitigating measures will be developed to achieve acceptable levels of risk.

There will be an employee induction program and training on the various relevant procedures for the construction phase and for the operations phase. Safe Work Method Statements will be developed for all activities; these include a risk assessment of the activities to be conducted. Daily tool box meetings will be held at the commencement of each work day during construction.

In summary, hazards and risks will be effectively managed because:

- Ridley has a strong commitment to hazard and risk management across all of its operations and a strong track record in managing these aspects of their business portfolio
- The preliminary Risk register provided in this DPEMP will be further refined during the detailed design phase of the project and include Safety in Design reviews and HAZOP's
- The Risk Register will be used to inform a variety of Plans for use during construction and operation including a CEMP, OHS Plan and the like
- Where risks and hazards are above a low risk ranking, additional measures will be identified and implemented to achieve an acceptable risk level
- LPG is the only classified Dangerous Good to be stored on site – the storage facility will be designed in accordance with relevant Australian Standards and emergency protocols defined.

**Table 31 Preliminary Risk Register**

Operational Phase	Hazard	Approach	Potential Mitigating measures	L	C	Risk
Construction	Accident leading to injury	Construction OHS Plan	Safety in design review. Implementation of the safety hierarchy (elimination, modification, procedures PPE), Risk assessments. Procedures (Safe Work Method Statement), Inductions, training, PPE, daily tool box talks	D	2	LOW

Operational Phase	Hazard	Approach	Potential Mitigating measures	L	C	Risk
	Structure failure	Safety in design review.	Risk assessments, Inductions, training, procedures (Safe Work Method Statements), daily tool box talks,	E	3	MOD
	Gas Works Explosion	Construction OHS Plan, Safety in design review. Compliance with Australian standards	Risk assessments, Inductions, training, Procedures (Safe Work Method Statements), daily tool box talks, Emergency Response plan	E	4	HIGH
	Road accident on site	Construction OHS Plan, Traffic management Plan	Risk assessments, Inductions, training, Procedures (Safe Work Method statements), daily tool box talks	E	2	LOW
	Environmental discharges-general	Construction EMP	Implementation of the impact minimisation hierarchy (elimination, modification, treatment disposal), Risk assessments, Inductions, training, Procedures (Safe Work Method Statements), daily tool box talks	D	2	LOW
	Dust impacts	Construction EMP	Water trucks for roads, wetting down work areas	D	1	LOW
	Impacted stormwater	Construction EMP	Sediment curtains, sedimentation basins, reuse on site for dust suppression, training	D	1	LOW
	Spills and leaks	Construction EMP	Bunding of storages, spill kits, training of staff			
	Noise	Construction EMP	Risk assessments, equipment noise assessments, Inductions, training, environmental procedures, daily tool box talks	D	1	LOW
Operation and Maintenance	Accident or Injury	Operations OHS Plan	HAZOP assessments, Implementation of the safety hierarchy (elimination, modification, procedures, PPE), Risk assessments, Procedures (Safe Work Method Statements ), Inductions, training, PPE, daily tool box talks	D	2	LOW

Operational Phase	Hazard	Approach	Potential Mitigating measures	L	C	Risk
	Gas explosion	Operations OHS Plan Design in accordance with Australian standards, Authority inspection and certification	HAZOP assessments, Implementation of the safety hierarchy (elimination, modification, procedures PPE), Risk assessments, procedures (Safe Work Method Statements), Inductions, training, PPE, daily tool box talks. Emergency Response plan	E	4	HIGH
	On site Road accident	Traffic management Plan	Risk assessments, Procedures (Safe Work Method Statements ), Inductions, training, PPE, daily tool box talks	E	1	LOW
	Fire	Emergency Response Plan	Design to include appropriate fire response equipment (hydrants, hoses, fire extinguishers etc.), emergency response procedures, training, PPE, emergency response training exercises, coordination with local firefighting authority	E	3	MOD
	Environmental Emissions-general	Operations EMP	Implementation of the impact minimisation hierarchy (elimination, modification, treatment, disposal), Risk assessments, Inductions, training, environmental procedures, daily tool box talks	D	1	LOW
	Dust emissions	Operations EMP	System designed with sealed roads, sealing of dust emission sources, bag houses where required	E	2	LOW
	Noise emissions	Operations EMP	Major noise sources inside buildings, screening of noise sources, design for 85dBA at 1m.	E	1	LOW
	Odour emissions	Operations EMP	All major odours sources are collected and treated in a biofilter, monitoring of the bio-filters, boundary odour surveys. Containing potential odour sources.	D	2	LOW
	Surface water impacts	Operations EMP	Spill contingency/response plan and procedures, isolation valve on stormwater system. Spill kits, staff training	D	2	LOW
	Spill and leaks	Operations EMP	Bunding of storages, spill kits, training of staff	D	2	LOW
Demolition	As per construction					

## Risk Assessment Matrices

### Likelihood Weighting

- A – Almost Certain (The event is expected to occur in most circumstances, one per month)
- B – Likely (The event will probably occur in most circumstances, once per three months)
- C – Moderate (The event should occur at some time, once per year)
- D – Unlikely (The event could occur at some time, once per 5 years)
- E – Rare (The event may only occur in exceptional circumstances, once in 20 years)

Numbers (1 to 5) are allocated to descriptive scales describing the magnitude of potential consequences, should the event occur

### Consequence Weighting

Scale	Effects
1 INSIGNIFICANT	<b>Low Impact</b> No observable effect to humans, plants or animals. No requirement to inform authorities. No visible discharges. No offsite impact
2 MINOR	<b>Minor Impact</b> Minor effects on humans, plants and animals. Required to inform authorities. Medical treatment injury. Minor damage. Visible discharge observed. No off site impact
3 MODERATE	<b>Moderate Impact</b> Moderate effects on humans, plants and animals. Physical impacts on the public. Lost time injury. Required to report to authorities. Offsite impact
4 MAJOR	<b>Major Release/incident</b> Major effects on plants and animals. Major injury, equipment damage, short term shut down. Long term impacts offsite Personal and business prosecution possible.
5 CRITICAL	<b>Extreme Event/Incident</b> Permanent effects on the environment on and off site. Fatality. Potential loss of licence to operate. Major equipment damage and facility shut down, prosecution of company and directors possible.

## 6.16 Fire Risk

This section of the DPEMP provides a fire risk review based on information available at the planning stage of the proposal. This section outlines the general requirements and principles to be adopted by Ridley but finalisation of approaches, procedures and protocols will take place during the detailed design phase of the project.

### 6.16.1 Fire within the Site

The proposed Aqua Feed Mill will be provided with fire safety systems as required to satisfy the performance requirements of the *National Construction Code – Building Code of Australia (BCA)*. Principally this will be achieved by using the deemed-to-satisfy provisions, but performance solutions are available. In this way the Fire Safety Act and Building Act requirements will be addressed.

The design intent is to satisfy the fire safety requirements of the code, without the need for onsite fire water storage (i.e. water mains supply would satisfy Australian design standard requirements). Similarly, the intent is to ensure the internal building design results in a main building (production facility, raw and finished goods store) that is not classified as a “large isolated building” requiring sprinklers.

The site incorporates a road around the main building; this facilitates fire brigade access and firefighting from external locations around the main building. Given the access road has been designed for articulated vehicles; it is expected to satisfy the requirements of *Draft Interim Planning Directive No 1, Bushfire Prone Areas Code*.

Fire hydrants will be provided for most of the buildings and will facilitate both internal and external firefighting activities. The multi-storey main process building is expected to require internal fire hydrants. The provision of fire hydrants on site will generally satisfy the requirements of the *Draft Interim Planning Directive No 1, Bushfire Prone Areas Code*.

#### **6.16.2 Fire Escaping From the Site**

The design and construction will be focused on non-combustible durable construction methods typical of industrial process buildings. This will act as mitigation to fire escaping from the buildings. The road around the main building is another risk control that mitigates fire spread due to any fires that escape the building. Internal firefighting systems will include fire hose reels and fire extinguishers.

The risk of fire spread from the building is further mitigated by the presence of the fire hydrant system. It is expected that the fire hydrant main will ring the main facility but branches will be used to protect other buildings such as the Workshops and Spare parts building.

Site vegetation management and maintenance will play a critical role in providing risk controls at the boundary of the site and in close proximity to the buildings. The final landscaping will dictate necessary provision to achieve this, but the expected approach is one of appropriate seasonal grass and weed control.

Other control measures aimed at managing the fire risk include:

- Waste management
- Designation of appropriate locations for smoking in areas with minimal vegetation or high frequency maintenance of vegetation
- Implementation of permit systems for activities such as “hot works” inclusive of controls and notifications associated with those permits
- No controlled burning for landscape management on site.

#### **6.16.3 Bushfire Impacts**

The proposed arrangement of buildings on the site places some building in the Bushfire Attack Level 12.5 zone or BAL Low. No buildings are placed in the BAL 19 zone (i.e. within 10 m from the boundary), which is based on an assumption of no management of the adjacent property. On this basis, the proposed siting is within the two lowest bushfire hazard zones.

The site management and vegetation controls will minimise exposure to external bushfire attack. While the principle means of achieving this is vegetation management and maintenance, there are other aspects in the facility that will help mitigate exposure including:

- the presence of the wide vehicle road around the main process plant; and
- The presence of fire hydrants for firefighting activity or fire appliance.

#### **6.16.4 Fire Response Plan**

The objectives of the site fire response plan which will be developed during detailed design phase of the project are to provide:

- Human safety in the event of a building fire or bushfire
- Facilitation of Tasmanian Fire Service operations

- Minimising damage due fire spread to an adjacent property
- Appropriate monitoring and management of communications for:
  - Notifying emergency services of an event on site
  - Receiving emergency warnings and bushfire updates from the surrounding area
- Access in and out of the site
- Providing site occupants with local area bushfire safety information.

#### 6.16.5 Management Principles

The main principles underpinning the fire response plan are:

- **Prepare**, risk mitigation measures implemented as part of facility management and operation
- **Act**, implement risk mitigations aimed at prevention, develop evacuation plans, and processes to support Tasmanian Fire Service operations
- **Survive**, evacuation of the building or site in a timely and safe manner (refer to the local Community Bushfire Protection Plan).

#### 6.16.6 Building Fires

Implementation of an emergency evacuation plan for building fire safety is required to address Work Health and Safety Act. This standard will provide a base emergency organisation and framework across the site.

As part of a building evacuation this will include identification of emergency assembly area(s) away from the buildings.

#### 6.16.7 Bushfires

The emergency organisation developed to satisfy the building fire safety (AS 3745) will be extended in portfolio to also put in place management procedures for Bushfire response. This will include ensuring relevant site operational procedures (e.g. landscaping maintenance and external works permits), taking into consideration the Community Bushfire Protection Plans (where available).

In summary, Fire Risk will be managed to a high standard and in compliance with all regulatory requirements because:

- The Aqua Feed mill will be fitted with fire safety systems required to satisfy the performance requirements of the National Construction Code – Building Code of Australia (BCA)
- The final design will ensure compliance with requirements of *Draft Interim Planning Directive No 1, Bushfire Prone Areas Code*
- Fire hydrants will be incorporated into the final design in accordance with regulatory requirements
- Site vegetation maintenance and general housekeeping to reduce fire risk will be adopted
- Location of buildings means the facility is in the low bushfire risk category
- A detailed Fire Response plan will be developed during the detailed design phase of the project.

### 6.17 Infrastructure and off-site Ancillary Facilities

The section of the DPEMP examines potential impacts of the proposed Aqua Feed Mill on off-site and infrastructure facilities such as the surrounding local road network, water supply, wastewater treatment, and electricity supply.

#### 6.17.1 Road and Traffic Impacts

Meander Valley Council has advised Ridley that the subdivision layout and vehicle access provisions within the precinct and onto the Bass Highway have been designed assuming maximum occupancy of industrial uses within the precinct. As such, traffic volumes and impacts of traffic generated due to the

use and development of the industrial precinct has already been considered and managed through the subdivision design and approval process.

A traffic assessment was undertaken by *Terry Eaton* in March 2008 to assess traffic impacts as a result of the industrial precinct development. The assessment concluded that there would be satisfactory site access to the industrial precinct for trucks and the design of the precinct would not result in significant traffic issues on Birralee Road.

### Road Network

The subject site is located near the interchange of Birralee Road (State Route B72) and Bass Highway (National Highway 1). Birralee Road provides access to Westbury Township to the south and the Lower Tamar valley to the north. Bass Highway is the primary arterial road in Tasmania providing access to Devonport and Burnie to the west and Launceston in the east and beyond to Hobart in the south.

Birralee Road is a two-lane single carriageway road adjacent to the subject site, which includes a roundabout and a central turning lane for northbound traffic as shown in Figure 43. Approximately 600 metres south of the industrial subdivision, there is a full grade separated interchange with Bass Highway, where Birralee Road passes over the highway and has priority over the give-way controlled ramps. Bass Highway is dual carriageway with two lanes in each direction, separated by a wide median.



Figure 43 Birralee Road

The speed limit on Birralee Road ranges from 60 km/h south of the Tasmanian Alkaloids site, to 80 km/h adjacent to the subject site to 100 km/h to the north of the roundabout.

The speed limit on Bass Highway is 110 km/h.

The Ridley Aqua Feed Mill site has direct access onto an internal subdivision road, which intersects with Birralee Road.

### Other Services

The Aqua Feed mill will not have adverse impacts on other services such as power, water and gas. Ridley is currently working with the relevant authorities to ensure that all required connections can be facilitated.

In summary, the proposed Aqua Feed Mill will have no adverse impacts on the road network or other ancillary services because:

- The Bass highway and Birralee Road as the two main access roads have more than sufficient capacity to accommodate the relatively small number of trucks and cars associated with the Aqua Feed Mill
- Traffic studies have confirmed that the traffic associated with rezoning and growth of the industrial precinct will be within the capacity of existing roads and that truck access and egress to the precinct can be accommodated

- Services are available to current and future users of the industrial precinct and Ridley has engaged with relevant providers to ensure that Aqua Feed Mill utility connections and requirements can be met.

## 6.18 Environmental Management Systems

Ridley recognises protection of the environment as a key business objective and currently operates a companywide Environmental Management System

Safety and environmental objectives rank equally with business objectives within the company. It is management's responsibility at every successive level to carry out this policy and to be visibly committed to achieving high levels of performance in this area.

With respect to the proposed Aqua Feed Mill, Ridley will:

- Identify environmental hazards arising from its operations and assess and manage associated risks
- Work towards continuous improvement in environmental performance and require contractors to demonstrate the same level of commitment
- Develop and maintain environmental emergency contingency plans
- Comply as a minimum with the Tasmanian Government's legislation and codes of practice; and
- Make available appropriate resources to fully implement the policy.

The construction and operation of the proposed Aqua Feed Mill will be conducted within the Ridley Environmental Management System, site specific elements of which will be developed during the detailed design phase of the project.

With respect to continuous improvement in environmental performance, Ridley has implemented a continuous improvement strategy across the business that fosters sustainable positive change, improved plant efficiency and a culture of excellence. Continuous Improvement is an iterative process that identifies opportunities to increase efficiencies in all areas of the business including environmental performance.

The Ridley Aqua Feed Mill has been designed to accommodate the latest and most efficient equipment available that will provide Ridley with an opportunity to operate as environmentally responsible as possible from the first day of operation. Ridley's sustaining capital expenditure program in conjunction with continuous improvement initiatives identifies opportunities for investment as alternative technologies become available to ensure that Ridley not only complies but strives to exceed current policies and guidelines.

## 6.19 Cumulative and Interactive Impacts

Currently the Valley Central Industrial Precinct has four industrial businesses that are operating in the precinct and two approved developments. The proposed Ridley Aqua Feed Mill is one of three proposed industrial applications in the precinct.

The Valley Central Industrial Precinct has been designed and constructed to provide land and services for industrial occupation. Access roads have been designed to allow for freight movements, water supply, sewer line and stormwater connection has also been provided. Given that the precinct has been established for industrial use, it can be said that there is a level of expectation in the community that the precinct will be fully occupied in the future.

The industrial precinct is a significant distance from sensitive receptors as outlined elsewhere in this DPEMP and there should be considerable ability to ensure that cumulative impacts can be maintained at acceptable levels in the future based on these substantial separation distances.

The proposed Ridley Aqua Feed Mill will contribute to the following impacts if approved and constructed:

- Additional truck movements in and out of the industrial precinct
- An additional industrial facility presence on the landscape
- Another user of services and infrastructure within the precinct
- Contribution to cumulative air emissions originating from the industrial precinct
- Contribution to wastewater disposal from the industrial precinct and
- Additional employees travelling into the site, utilising Westbury township services.

The above listed cumulative impacts are to be expected for a new green field's industrial precinct in a rural locality. These impacts were anticipated at the time of subdivision design and assessment.

It is noted that as Ridley is one of the early industries seeking to establish in the industrial precinct, it can only be responsible for, and assess, its own impacts at this point in time.

This DPEMP has demonstrated that all environmental impacts from the proposed development can be managed and mitigated to meet legislative requirements and should not contribute significantly to cumulative impacts.

## 6.20 Traffic Impacts

### 6.20.1 Previous Traffic Assessments

As part of the Valley Central Industrial Precinct subdivision permit, a Traffic Impact Assessment (TIA) was prepared during the amendment process to establish the *Birralee Road Industrial Precinct Specific Area Plan (SAP)*. It is considered that this TIA adequately demonstrates that the proposed subdivision and broader SAP is acceptable from a traffic safety perspective. Further information can be found in the Traffic Assessment undertaken by Terry Eaton in March 2008.

### 6.20.2 Site Access

Meander Valley Council has provided comment in the DPEMP Project Specific Guidelines that *'access to the site is via a local road, which has been designed and constructed to accommodate the predicted traffic type and movements'*. As discussed in Section 6.17 the subdivision design and vehicle access within the precinct and onto the Bass Highway has been designed assuming maximum occupancy of industrial uses within the precinct. Therefore traffic volumes and impacts of traffic generated due to the industrial precinct use have already been considered and assessed as acceptable through the subdivision design and approval process.

### 6.20.3 Predicted Traffic Volumes

During operation of the Aqua Feed Mill, annual truck movements are predicted to be twenty per day.

Freight will consist of bulk tankers and trucks travelling to and from the site via the Bass Highway to and from either Burnie or Devonport

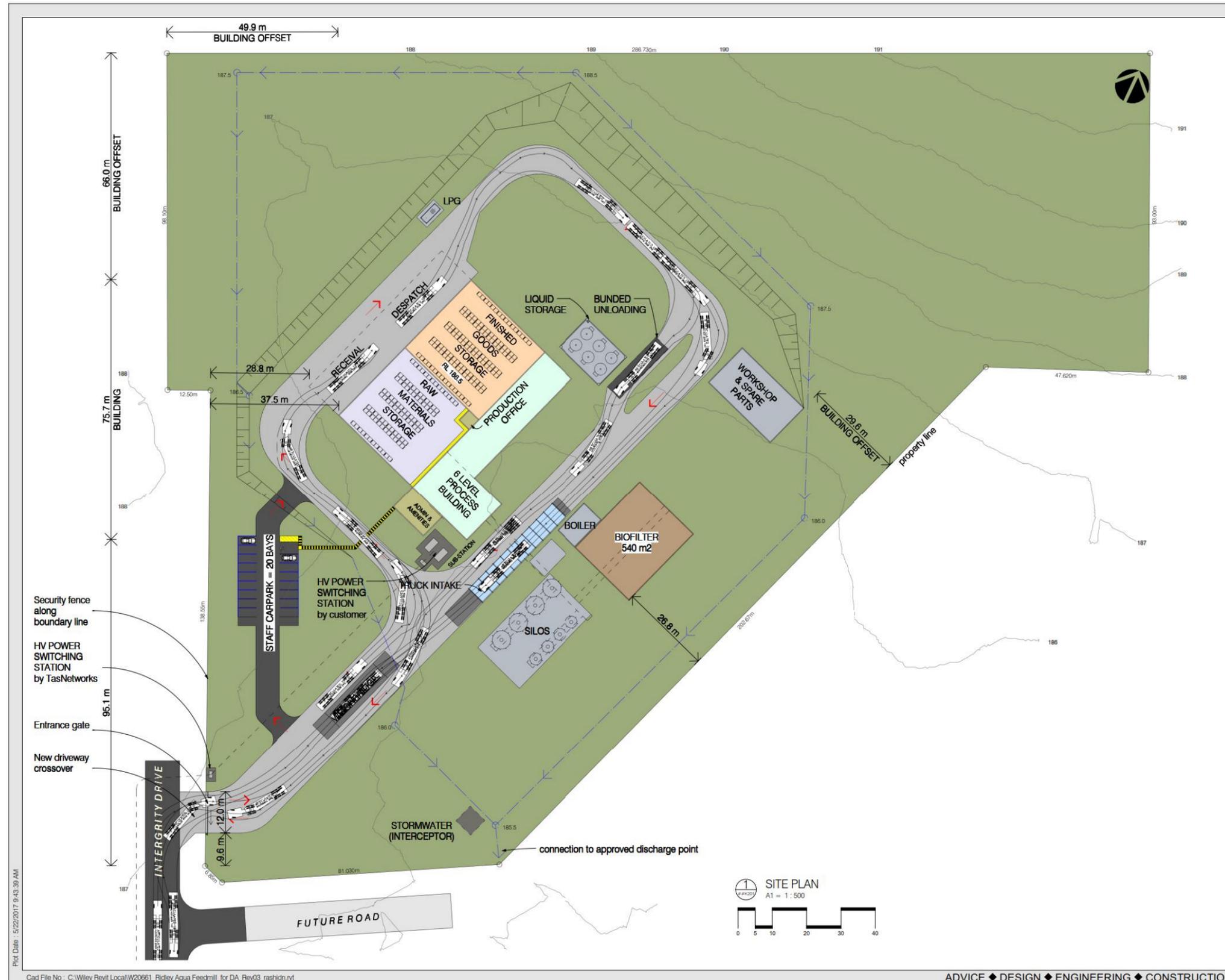
Vehicle movements generated by the proposed Aqua Feed Mill have been predicted to use Birralee Road between the subdivision access road and the Bass Highway interchange. It is anticipated that no vehicle movements would occur on Birralee Road north of the subdivision or south of the Bass Highway interchange.

### 6.20.4 Traffic Flow within the Site

Figure 44 provides an overview of the vehicle access and movements around the Ridley site. On entering the site, trucks travel in a clockwise direction round the main building to offload raw material and despatch finished product. The internal roadway has been designed to allow for access by bulk tankers.

In summary, the proposed Aqua Feed Mill will have minimal traffic impacts because:

- The Bass Highway and Birralelee Road as the two main access roads have more than sufficient capacity to accommodate the relatively small number of trucks and cars associated with the Aqua Feed Mill
- The industrial precinct subdivision was designed to accommodate traffic on the assumption that the precinct was fully developed
- The facility will generate twenty movements each day which is insignificant in the context of the wider road network
- The plant has been designed to facilitate safe and easy truck access and egress with a continuous clockwise movement of vehicles through the site.



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Date	Issue	Amendment	Init
17/05/17	4	FUTURE WORKS REMOVED	NRF
15/05/17	3	POSITION ON SITE REVISED	NRF
09/05/17	2	GENERAL REVISION	NRF
08/05/17	1	ISSUE FOR DPEMP SUBMISSION	NRF



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**PROPOSED FEEDMILL  
LOT 17, INTEGRITY DRIVE  
WESTBURY, TASMANIA**

Drawing Title  
**SITE PLAN - TRUCK  
MANEUVERING**

Scale A1 = 1:500 (A3 = 1:1000) 0 5 10  
Drawn **NRF** Date **15/05/2017**

Project No.  
**W20661** Bidg No.  
**00**

Drawing No. **00A002** Issue **4**

**PRELIMINARY**

Figure 44 Onsite vehicle movement

## 7.0 Monitoring and Review

This section of the DPEMP provides an overview of the monitoring, maintenance and reporting arrangements for the proposed facility.

### 7.1.1 Monitoring and Maintenance Program

#### Initial Monitoring

On start-up and operation of the facility, Ridley proposes to conduct some confirmatory monitoring of noise and air emissions. The purpose of this monitoring will be to confirm the conclusions of the noise and air impact assessment modelling and predictions.

#### Ongoing Monitoring

Ridley is committed to undertaking the following monitoring and maintenance of the facility as outlined in Table 32:

**Table 32 Ridley Monitoring and Maintenance program**

Monitoring and Maintenance Program	Frequency	Reporting Arrangements
Air Quality / Biofilter Maintenance	Daily Weekly Monthly Half-yearly/yearly	As per the Odour Management Plan
Pest and Vermin Control	Monthly	Pest Control Officer, Production Manager and Inventory Controller Officer will review report findings.
Waste Water	Every 3 months	As per the Waste Water Management Plan to be developed in consultation with TasWater
Waste	Annually	As required or identified during monthly HSEQ monthly workplace inspections (Refer to attachment for example of inspection checklist)

## 8.0 Decommissioning and Rehabilitation

The proposed Aqua Feed Mill is proposed to have a life of at least 20 years. At this stage, no formal timing or process for the decommissioning of the facility has been established. The Aqua Feed Mill will remain in operation for as long as needed to support the industry and as a contributing asset to Ridley. Operation beyond 20 years will be possible due to maintenance of assets, technology updates and other measures as required to support long term operations. Once the timing of decommissioning has been established, a rehabilitation management plan would be developed.

Ridley does not foresee any circumstance that would result in the proposed Aqua Feed Mill being closed and decommissioned within its working life. The facility has been purposely located at Westbury in response to market demand and proximity to customers and the company anticipates a strong and sustainable business.

However, in the event that the plant was closed at some future date, Ridley would decommission the facility in a responsible manner and in accordance with regulatory requirements. This would include relocation of plant, equipment and unused raw materials to other facilities or sale on the open market. It is likely that the overall warehouse structure would be suited to a wide variety of other industrial uses once clear of plant and equipment.

Ridley has a track record of acting with integrity during these activities and complying with local authorities and other community stakeholders at all times.

## 9.0 Commitments

Table 33 summarises the project commitments made throughout this DPEMP. There are a number of other commitments made throughout this document which relate to the design standards of the facility which have not been included in this table. This table includes construction and operations commitments only.

**Table 33 Project Commitments**

Commitment Reference Number	Commitment	Timing	Responsibility	Section of DPEMP Detailed
1	Odour generated from the process units listed in the process flow chart in the AQ document will be collected and blown through an biofilter to reduce the nature and concentration of the emitted odour.	During Operations	Ridley	6.1
2	The biofilter will be maintained to a standard as per the Odour Management Plan.	During Operations	Ridley	6.1
3	Preparation of a Construction Environmental Management Plan which will provide for management of stormwater quality impacts from erosion and sedimentation and dust management.	Prior to construction	Ridley	6.2
4	Finalise a Trade Waste Agreement (TWA) with TasWater.	Prior to operation	Ridley	6.2
5	The liquid ingredients unloading area will be bunded to contain spills and prevent stormwater contamination.	During Operations	Ridley/ Operations Manager	6.2.2 and 2.1.6
6	Where possible, equipment with directional noise emissions will be orientated away from the nearest sensitive receivers that are located to the west of the site.	Detailed design	Ridley	6.4
7	Plant equipment work will be regularly maintained in line with fit for purpose site operations.	During Operations	Ridley/ Operations Manager	6.4
8	Maintenance work on construction plants with the potential to generate noise impacts will be confined to standard daytime construction hours.	During Operations	Ridley/ Operations Manager	6.4

Commitment Reference Number	Commitment	Timing	Responsibility	Section of DPEMP Detailed
9	Reuse of Intermediate Bulk Containers and recycling of other raw material bags	During Operation	Ridley	6.5
10	To reduce noise emissions and for security purposes, the roller doors located on the north-western façade will be closed during the evening and night-time periods.	During Operations	Ridley/ Operations Manager	6.5
11	Contingency plans will be developed to address potential incidents such as a major liquid (e.g. fish oil) spill, bulk liquid storage tank failure or over filling, and a fire.	Prior to commissioning	Ridley	6.6
12	The site will have a number of spill kits located in areas with higher potential for spills and leaks as per site based risk assessments.	Prior to commissioning	Ridley	6.6
13	The site stormwater system will have an isolation valve that can be closed, if a major spill occurs, so as to contain the spill on site.	During Operations	Ridley/ Operations Manager	6.6
14	Stormwater from the wider property will be diverted into the natural drainage system surrounding the property via swales and an interceptor pit as per site design.	During Operation	Ridley	6.6
15	Vermin control and weed management procedures will be implemented that will include preventative measures in line with Ridley policies, procedures and relevant certifications.	During Operation	Ridley/ Operations Manager	6.7
16	In the unlikely event of the discovery of Aboriginal artefacts during earthworks associated with the proposed Ridley Aqua Feed Mill, the provisions of the Aboriginal Relics Act 1975 would be followed.	During Construction	Construction Manager/ Ridley	6.10

Commitment Reference Number	Commitment	Timing	Responsibility	Section of DPEMP Detailed
17	A Health and Safety plan will be developed to address Health and Safety during the construction and operational phases of the facility.	Prior to construction	Ridley	6.14
18	Environmental hazards arising from operation will be identified, assessed and associated risks managed.	Construction / During Operations	Ridley/ Operations Manager	6.18
19	Continuous improvement in environmental performance with contractors required to demonstrate the same level of commitment.	Construction / During Operations	Ridley/ Operations Manager	6.18
20	Emergency contingency plans will be developed and maintained.	Construction / During Operations	Ridley/ Operations Manager	6.18
21	Compliance with Tasmanian Government's legislation and codes of practice as a minimum.	Construction / During Operations	Ridley/ Operations Manager	6.18
22	Appropriate resources made available to fully implement the policy.	Construction / During Operations	Ridley/ Operations Manager	6.18
23	An Odour Management Plan be developed and implemented	Construction / Prior to Operations	Ridley/ Operations Manager	7.1
24	Monitoring of air quality to confirm the conclusions of the air quality impact assessment.	During Operation	Ridley	7.1
25	Monitoring of noise emissions will be conducted to confirm the conclusions of the Noise assessment.	During Operation	Ridley	7.4
26	A complaint register will be maintained onsite.	Construction / Operation	Construction Manager / Ridley	7.4
27	Ridley would decommission the facility in a responsible manner and in accordance with regulatory requirements. This would include relocation of plant, equipment and unused raw materials to other facilities or sale on the open market.	Decommissioning	Ridley/ Operations Manager	8.0

## 10.0 Conclusion

This Development Proposal and Environmental Management Plan (DPEMP) have been prepared to assess the potential environmental impacts associated with the proposed development by Ridley AgriProducts (Ridley) of an Aqua Feed Mill at the Valley Central Industrial Precinct in Westbury, Tasmania.

Ridley intends to locate its aqua feed production process closer to the main source of demand for aqua feed products, this being the Tasmanian aquaculture industry. The development will be of benefit to both the local and regional economy with the creation of construction and operational employment.

The proposed Aqua Feed Mill will be capable of producing up to 50,000 tons per year of finished aqua feed. Deliveries of raw ingredients will be via bulk tankers and trucks with smaller quantities being delivered in one ton bulk bags and palletised into 25kg bags. Outgoing finished feed will be packaged in one ton bulk bags and distributed to customers on trucks.

The site of the proposed Aqua Feed Mill is zoned General Industry under the Meander Valley Planning Scheme 2013 and is surrounded by several existing industrial uses. The site also benefits from the existing infrastructure of the industrial precinct such as roads and access to services specifically designed for industrial uses.

The closest residence is located approximately 900 metres to the north-east of the site with the next closest residences being approximately 1.4 kilometres distant.

In accordance with Guidelines issued by the Board of the Environment Protection Authority (EPA), a thorough assessment of potential environmental impacts associated with the proposed Aqua Feed Mill has been conducted, the findings of which are presented in this DPEMP. In particular, the one Key Issue identified by the Board of the EPA for primary focus, namely potential air quality impacts, has been addressed in detail.

As the proposed Aqua Feed Mill is to be located in an Industrial Precinct specifically established and zoned for industry with significant buffer distances from sensitive land uses, the assessment of potential impacts has demonstrated that it is highly unlikely that there will be any unacceptable adverse impacts from the proposal.

The assessments outlined in this DPEMP, in particular those assessing potential odour and noise impacts, demonstrate that potential impacts are all well within specified regulatory limits at the nearest sensitive receptors (residences) as a result of buffer distances and the design and mitigating measures proposed for the facility.

The only exceedance of regulatory limits arising out of the DPEMP assessments is a value higher than the specified 2 OU (odour units) predicted at the boundary of the Aqua Feed Mill site in the Industrial Precinct. Odour units predicted at the nearest residences readily comply with the regulatory limits.

It should be noted that the odour in question emanates from a proposed biofilter which will organically treat odour from the plant and will present as a mild bark or fresh wood mulch odour rather than a strong industrial odour. It is contended that exceedance of the 2 OU limit at the site boundary is not unacceptable as the only areas predicted to have values higher than 2 OU are within the Industrial Precinct where some levels of odour would be expected, or on adjacent agricultural land with no residences. It is considered unlikely that odour from the facility will result in a negative reaction from any off-site receptors.

This DPEMP has demonstrated that the proposed Ridley Aqua Feed Mill is appropriately located in the Valley Central Industrial Precinct at Westbury in a General Industry zone developed to attract such industries. The proposal complies with all regulatory requirements with respect to potential impacts at sensitive receptors (residences) and will bring economic benefits to the local and regional economies.

## 11.0 References

- Berglund, B., Lindvall, T. and Schwela, D.H. (1999) World Health Organisation Guidelines for Community Noise. WHO, Geneva.
- DPIPWE Website – Department of Primary Industries, Parks Water and Environment - Groundwater Information Access Portal (<http://wrt.tas.gov.au/groundwater-info/> ) accessed 12-05-2017
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- The Environment Protection Policy (Noise) 2009 and the Noise Measurement Procedures Manual, 2008, are available on the EPA website at [http://epa.tas.gov.au/documents/epp\\_noise\\_2009.pdf](http://epa.tas.gov.au/documents/epp_noise_2009.pdf) accessed 12-05-2017
- Welling. A, 2008a, Flora Values Report, [available at] [http://epa.tas.gov.au/documents/boc\\_ltd\\_lng\\_plant\\_westbury\\_dpemp\\_appendix\\_e\\_flora\\_values\\_report.pdf](http://epa.tas.gov.au/documents/boc_ltd_lng_plant_westbury_dpemp_appendix_e_flora_values_report.pdf) accessed 15-05-2017
- Welling. A, 2008b, Green and Gold Frog Habitat Assessment, Birralea Road Westbury,

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# Appendix A

## DPEMP Specific Guidelines

Development Proposal and  
Environmental Management Plan  
Project Specific Guidelines

*for*

**Ridley AgriProducts Pty Ltd**

**Aquaculture Feed Mill  
(Produce Processing Works)**

Lot 1 Integrity Drive, Westbury, Tasmania

**Board of the Environment  
Protection Authority  
May 2017**



## ***General***

This document identifies the key issues that must be addressed in the Development Proposal and Environmental Management Plan (DPEMP) for Ridley AgriProducts Pty Ltd's proposed Aquaculture Feed Mill, Valley Central Industrial Precinct, Westbury.

This document should be read in conjunction with the *General Guidelines for the preparation of a Development Proposal and Environmental Management Plan* (<http://epa.tas.gov.au/regulation/guidance-documents>), which provides general information on preparing a DPEMP.

While the DPEMP should evaluate all potential effects of the proposal, the DPEMP should be principally focused on the key issues identified below. The level of detail provided on other issues should be appropriate to the level of significance of that issue for the proposal.

This document identifies the minimum in relation to technical studies and planning required as part of the DPEMP in relation to the key issues.

This document should not be interpreted as excluding from consideration other matters deemed to be significant; matters that emerge as significant from environmental or technical studies; or public comments received during the course of the preparation of the DPEMP.

This document has been prepared on the basis of a Notice of Intent. Further guidance may be issued at a later date.

## ***Key Issue***

The key issue that has been identified for consideration in relation to the proposal, and which should be the principal focus of the DPEMP, is as follows:

<b>Key issue</b>	
1	Potential impacts of air emissions on sensitive receptors.

## Major Requirements

The following technical studies and plans will be required as part of the DPEMP in relation to the key issue. The relevant section of the DPEMP General Guidelines is also identified.

Key Issues	Major requirements for DPEMP	Relevant section of DPEMP General Guidelines
1	Atmospheric dispersion studies <ul style="list-style-type: none"> <li>• Identification of all sensitive receivers within 1 kilometre of the major sources of air emissions.</li> <li>• Atmospheric dispersion modelling and assessment of the impact of air emissions against the Environment Protection Policy (Air Quality) 2004 (Air EPP).</li> </ul>	6.1 (Further guidance is provided in section 6.1 of this document).

## Detailed Requirements for the DPEMP

The following DPEMP requirements are in addition to the requirements of the DPEMP General Guidelines. These additional requirements are grouped under the relevant section number corresponding to the DPEMP General Guidelines.

### 2.1 Proposal Description - General

In addition to the matters stipulated in Section 2.1 of the DPEMP General Guidelines the DPEMP must:

- Provide a description of the manufacturing process, from the handling and storage of ingredients through to the production, packaging and storage of the formulated feed. The description must include details on the design, function and operation of the equipment in each stage of the process including relevant operating parameters e.g. operating periods, volumes, temperatures, pressures etc. The description should be supported by flow diagram(s).
- Provide details of the quantities and types of raw materials used and the management of raw materials receipt, storage and use. Also describe the storage and treatment of manufacturing by-product (substandard ingredients and unsalable product) prior to disposal. Provide details of any alternative means of disposing unsalable product.
- Provide details of water and energy usage and other inputs into the process, such as steam.
- Itemise all waste streams and expected quantities (volumes) of waste (liquid, solid and gaseous) that will be generated, (as a daily rate and annual total).
- State the operating hours for the activity.
- Indicate of the times of year that peak production will occur.
- Outline key management measures for decommissioning the activity and its facilities, in case of an unforeseen requirement to shut down the business.

### 2.5 Site Plan

In addition to the matters stipulated in Section 2.5 of the DPEMP General Guidelines the DPEMP must contain the following:

- A site plan showing all infrastructure on the Land associated with the proposal, not limited to storage tanks/silos, the mill, wastewater management infrastructure, biofilter, leachate tank, and the operation area.
- An area map delineating the boundary of the Land, the proximity of waterways (including drainage lines) and sensitive receptors (residences, and other premises that may be impacted by the activities) within 1 km.

### **3.0 Technical and Management Alternatives**

In addition to the matters stipulated in Section 3 of the DPEMP General Guidelines the DPEMP must contain the following:

- Provide an overview of the design criteria and restrictions relevant to the proposed air emission control system, including size, operation, location on the site and venting.
- A brief discussion of the options for wastewater management and disposal that were considered (e.g. offsite treatment, alternative disposal, recycling or reuse etc.) and the feasibility of such options.

### **5.2 Existing Environment - Environmental Aspects**

Some existing environmental aspects relevant to the proposal may have been previously described and considered during the establishment of the Valley Central Industrial Precinct, Westbury. Information on the existing environment of the Land and surrounds is available from Meander Valley Council, and may be used to inform Section 5.2 of the DPEMP.

In addition to the matters stipulated in Section 5.2 of the DPEMP General Guidelines the DPEMP must contain the following:

- A description of existing environmental aspects on the Land and, or, surrounds (including flora and fauna, water bodies etc.)

### **6.1 Air Emissions**

In addition to the matters stipulated in Section 6.1 of the DPEMP General Guidelines the DPEMP must:

- Identify, describe and mark the locations (on a site map) of all possible sources of emissions to air (i.e. materials, equipment and activities including waste management and maintenance) from the proposed Aquaculture Feed Mill.
- For each identified emission source (i.e. point or fugitive) describe the likely composition (i.e. types of constituents), quantities and rates of emissions to the atmosphere.
- Provide an assessment of the potential for emissions to air from the different stages of the production process (including arrival of raw material) at the proposed Aquaculture Feed Mill facility with respect to the likelihood of causing environmental harm (includes environmental nuisance). The assessment should cover a variety of conditions including plausible worst case scenarios and, or, upset conditions, and it should contain information about time (of the day), duration, frequency and potential impact of the atmospheric emissions from the facility in order to establish suitable parameters for air dispersion modelling.

- Undertake atmospheric dispersion modelling, in relation to the contaminants of concern, to assess the impacts of air emissions from the proposed Aquaculture Feed Mill relative to criteria in the *Environmental Protection Policy (Air Quality) 2004 (Air EPP)*<sup>1&2</sup>. Modelling should be conducted by a suitably qualified specialist in accordance with the *EPA's Draft of Tasmanian Atmospheric Dispersion Modelling Guidelines (Modelling Guidelines)*<sup>3</sup>.
- Discuss the results of the assessment of the potential for emissions to air in relation to the Air EPP. Discuss the results in the context of the surrounding land uses, sensitive receptors and nearby industries in other ownership, including details of consultation that the proponent has undertaken with stakeholders.
- Identify and discuss measures to be implemented to mitigate any impacts that may cause environmental nuisance or environmental harm (includes environmental nuisance). This should include management of potential impacts associated with supply and handling of the odorous material as well as potential impacts associated with power failures or malfunction of the equipment used on the site. Management of potential impacts associated with the operation of the facility in adverse weather conditions that promote the concentration of airborne pollutants should also be considered.
- Provide detailed information about the management of any wastewater generated by the planned facility in a context of a potential to create odour issues that could cause environmental harm.
- Management measures for unavoidable emissions should be in accordance with the requirements of the Air EPP.

## 6.2 Liquid Waste and Surface Water

In addition to the matters stipulated in Section 6.2 of the DPEMP General Guidelines the DPEMP must contain the following:

- Description of each potential wastewater source and stream, including expected characteristics (quality) and flow rates (volumes of wastewater and, or, liquid waste).
- A description the proposed management of wastewater generated during normal operation and as a result of incidents, accidents and malfunctions.
- A schematic/conceptual model of wastewater management, storage and treatment and, or, disposal.
- Evidence that the proposal to discharge wastewater to sewer is supported in-principle by TasWater, Westbury, and the sewer system has sufficient capacity for Ridley AgriProducts Pty Ltd to discharge its wastewater.

NB: A trade waste agreement may be needed between Ridley AgriProducts Pty Ltd and TasWater as per the *Water And Sewerage Industry Act 2008* and *Water And Sewerage Industry (General) Regulations 2009*.

As appropriate, discuss contingency measures in case discharge to sewer is not possible.

---

<sup>1</sup> It is strongly recommended to discuss the scope and method of atmospheric dispersion modelling with the EPA's Air Modelling Officer prior to commencement.

<sup>2</sup> The Air EPP is available from [http://epa.tas.gov.au/documents/epp\\_air\\_quality\\_2004.pdf](http://epa.tas.gov.au/documents/epp_air_quality_2004.pdf)

<sup>3</sup> The Modelling Guidelines are available from <http://epa.tas.gov.au/epa/document?docid=1390>

## 6.4 Noise emission

In addition to the matters stipulated in Section 6.4 of the DPEMP General Guidelines the DPEMP must contain the following:

- Description of all major noise sources (fixed and mobile) onsite, e.g. mills, pumps, loaders etc. Include details of make, model, power rating, throughput capacity, sound power level, planned hours of operation, associated noise attenuation and any noise mitigation measures (as relevant)<sup>4</sup>.
- Identify all sensitive receptors within 1 kilometres of a major noise source.
- Provide a contour map of noise levels resulting from noise emitted from the site. Demonstrate that noise levels will not exceed 45 dB(A) during the day (7am to 6pm), 40 dB(A) during the evening (6pm to 10pm), 35 dB(A) during the night (10pm to 7am)<sup>5</sup> at noise sensitive receptors, and 65 dB(A) at any industrial premises in other ownership.
- Estimates of the number and type of vehicle movements during the day, evening and night.

## 6.5 Waste Management

In addition to the matters stipulated in Section 6.5 of the DPEMP General Guidelines the DPEMP must contain the following:

- Itemisation of all waste streams and a prediction of the volume of waste (including biosolids and any other unsalable by-products), as a daily rate and annual total, that will be generated by the activity.
- A description of the methods and facilities for waste management (minimisation/treatment/recycling/disposal), including for biosolids and any other unsalable by-products.

## 6.7 Biodiversity and Natural Values

Elevated populations of vermin/pest species could directly or indirectly affect the surrounding environment (environmental harm) and, or, cause environmental-nuisance to surrounding land users.

In addition to the matters stipulated in Section 6.5 of the DPEMP General Guidelines the DPEMP must contain the following:

- Information on any proposed strategy to prevent the attraction and provisioning of pest species.

## 6.20 Traffic Impacts

Meander Valley Council have provided the following comment:

- Access to the site is via a local road, which has been designed and constructed to accommodate the predicted traffic type and movements.

---

<sup>4</sup> The Environment Protection Policy (Noise) 2009 and the Noise Measurement Procedures Manual, 2008, are available on the EPA website at [http://epa.tas.gov.au/documents/epp\\_noise\\_2009.pdf](http://epa.tas.gov.au/documents/epp_noise_2009.pdf)

<sup>5</sup> Consideration should *also* be given to noise levels likely to be generated during the construction and start-up phases.

## **7. Monitoring and Review**

In addition to the matters stipulated in Section 7 of the DPEMP General Guidelines the DPEMP must contain the following:

- A description of monitoring and maintenance programs to support best practice environmental management.
- Specify reporting arrangements for each monitoring program.

# Appendix B

## Colorbond Pale Eucalypt

# COLORBOND® steel colours

## Pale Eucalypt®

Pale Eucalypt® is a favoured choice for Australian homes, reflecting the colour and grandeur of the Australian gum. Its gentle, muted hue is suggestive of tranquillity and beauty, and captures the essence of Australian flora.



# Appendix C

## Current Title Of The Land

SEARCH OF TORRENS TITLE

VOLUME 166084	FOLIO 17
EDITION 1	DATE OF ISSUE 12-Jul-2013

SEARCH DATE : 17-May-2017

SEARCH TIME : 01.51 PM

DESCRIPTION OF LAND

Parish of EXTON Land District of WESTMORLAND  
 Lot 17 on Sealed Plan 166084  
 Derivation : Part of Lot 35, 2470 Acres Granted to William Archer  
 Prior CT 160786/16

SCHEDULE 1

C947021 & C979892 DAVID JOHN CHARTERS CUNNINGHAM, LOIS MAY CUNNINGHAM and ROHAN CHARLES CUNNINGHAM Registered 29-Jul-2010 at noon

SCHEDULE 2

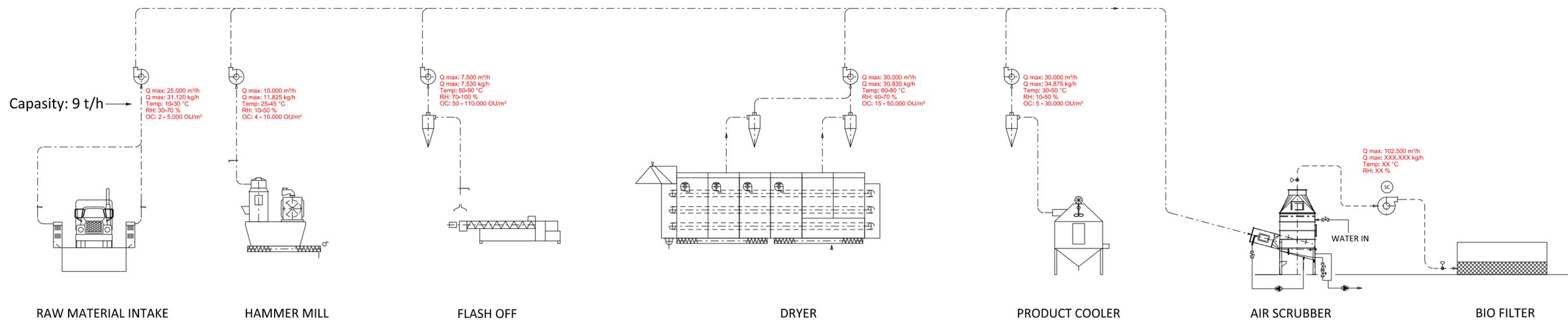
Reservations and conditions in the Crown Grant if any  
 SP166084 EASEMENTS in Schedule of Easements  
 SP166084 FENCING COVENANT in Schedule of Easements  
 SP158241 & SP160786 FENCING COVENANT in Schedule of Easements  
 C968655 AGREEMENT pursuant to Section 71 of the Land Use Planning and Approvals Act 1993 Registered 18-May-2010 at noon  
 C756617 MORTGAGE to Westpac Banking Corporation Registered 10-Sep-2010 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

# Appendix D

## Air Treatment Plan



## Preliminary Drawing Not for construction

REV.	DATE	DRAWN	RESP.	DESCRIPTION
C	08/06/2017	LL	PES	Changes on Flash-off
B	07/06/2017	LL	PES	
A	01/03/2017	LL	SPE	

CLIENT	Ridley Aquafeed	JOB.NO.	81-34441
SITE	Ridley Agriproducts Pty Ltd., Victoria		
JOB	Design of fish feed factory		
TYPE	PFD	RESPONSIBLE	PES
		DRAWN	LL
		DATE	01/03/2017
SUBJECT	Air treatment	SCALE	1:1

GRAINTEC A/S 40 Enghavevej · DK-7100 Vejle Phone +45 76 43 69 10 Fax +45 76 43 69 43 mail@graintec.com · www.graintec.com	REPLACES DRAWING NO. <b>3444101004</b> REV. <b>C</b>
---	--

This drawing is not to be copied, printed or to be made otherwise available to any unauthorized person without our specific permission. Page 193

# Appendix E

## Air Information

# Air Quality Impact Assessment

Ridley Aqua Feed Mill

**D R A F T**

## Air Quality Impact Assessment

Ridley Aqua Feed Mill

Client: Ridley Agriproducts Pty Ltd

ABN: 94006544145

Prepared by

**AECOM Australia Pty Ltd**

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13-Jul-2017

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# DRAFT

## Quality Information

Document Air Quality Impact Assessment

Ref

Date 13-Jul-2017

Prepared by Jenny Barclay

Reviewed by David Rollings

### Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
A	11-Jul-2017	Client Review	Jeff Smith Market Sector Leader - Environment, Power & Industrial, ANZ	

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# DRAFT

## 1.0 Introduction

Ridley AgriProducts Pty Ltd (Ridley) produces a range of world-class, high performance animal nutrition products for the beef, dairy, pig, poultry, horse, sheep, and pet food and aquaculture industries. Following the identification of demand within the Tasmanian aqua feed market, a facility for the production of high quality aqua feed has been proposed. This plant is planned to be constructed in an industrial estate to the North of the township of Westbury in central Tasmania (approximately 25km to west of Launceston). The location of the industrial facility and the proposed facility is provided in **Figure 1**.

The production of aqua feed is a process that has the potential to generate odours. In order to manage the odours produced by the Aqua Feed Mill, Ridley is planning to install a system of process air capture linked to a biofilter that will handle excess process air to a typical volume of approximately 70,000m<sup>3</sup>/hr. The biofilter will use moist organic materials to adsorb and then biologically degrade odorous compounds eliminating the majority of the odour from the captured air.

A biofilter is considered the most effective way to treat all of the odours associated with composting and a wide range of volatile organic compounds, including sulphur compounds and amines.

This report outlines the methodology and findings of an Air Quality Assessment into odours expected to be released into the atmosphere from a 540m<sup>2</sup> biofilter bed situated on the south eastern side of the proposed Ridley facility. The proposed biofilter has been designed by The Odour Unit which has a strong track record working with Ridley at its Narangba facility in Queensland and has a sound understanding of the Ridley production process.

### 1.1 Scope of Work

The scope of work for the air quality impact assessment included the following stages:

- Identification of potential sources of odour from the proposed Ridley Aqua Feed Mill;
- Development of an emissions inventory based on typical operational data as provided by Ridley.
- Preparation of dispersion modelling input files. These files will be prepared taking into account local meteorology, terrain and landuse data. The CALMET and CALPUFF models have been used to define the meteorology and dispersion in the area surrounding the Ridley facility.
- Emissions for this assessment are limited to an analysis of odour emissions from the production of aqua feed. Emissions from the on-site boiler will also be discussed but has not been included in the dispersion modelling.
- Three modelling scenarios have been considered for the assessment.
- This report has been prepared outlining the methods and findings of the dispersion modelling.

Dispersion modelling of the proposed operation of the Aqua Feed Mill was undertaken using the CALPUFF model. The assessment was undertaken in accordance with and/or in reference to the following documents:

- *Atmospheric Dispersion Modelling Guidelines*, Environment Protection Authority, Tasmania, Oct 2016
- *Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia'*, NSW EPA, Mar 2011



# DRAFT

## 2.0 Proposed Development

The aqua feed production is a batch flow process based on processed organic raw materials. The important components in aqua feed are protein, fat, vitamin and minerals. Proteins are mainly derived from dry material like vegetable or fish meal. This type of raw material is transported to the site and stored in silos at the mill. Fat is mainly provided as oil, either from fish or vegetable sources. The oil is also transported to the site and pumped into storage tanks. Vitamin and minerals are transported in one tonne bulk bags and stored in a warehouse, before being added to the process. The main process steps are dosing, grinding/milling and mixing batches of dry ingredients. Those batches will then sequentially be processed in an extruder under high pressure and temperature where moisture such as water or steam is added. This is a combined cooking and forming process resulting in pellets of nominal size. The pellets are then dried before entering a vacuum coater where the main oil content is added. After cooling and sieving they are packed into one tonne bags ready for delivery to the customer.

Odour emissions are released at various stages of the process, in particular at the Grinding and Milling stage, the extrusion cooking, the drying of the aqua feed and the cooling of the aqua feed once the coating of fats and oils has occurred.

Key elements of the proposed facility where odours could be produced include:

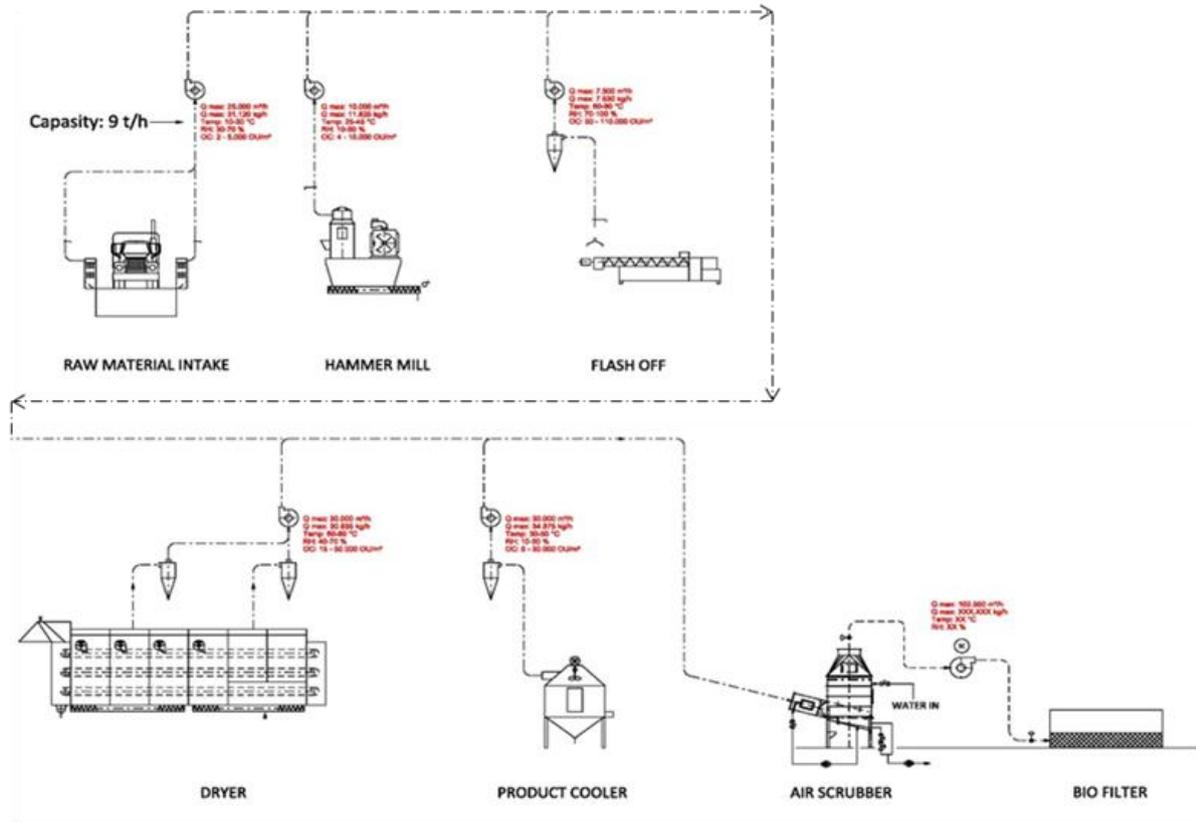
- Raw material intake
- Hammer Mill
- Extruder
- Dryer
- Coater

Ridley is committed to comply with the minimum odour requirements stipulated by the Environmental Protection Authority Tasmania. All process air flows will be recycled and contained as far as practicable. Process emissions will be contained and ducted to an appropriate odour control system. Section 6.1.1 describes each process stage and odour control.

## 2.1 Project Description

The Aqua Feed production process is a staged batch process whereby raw materials are sequentially passed through different process operations to produce the final product for shipping to customers. An air treatment process flowsheet outlining the different stages of the process where odour is emitted and captured is shown in **Figure 2** with an explanation of the individual stages provided below. Process air is collected at each of the production stages and vented through a biofilter prior to being emitted to the environment.

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**Figure 2 Air Treatment Process Flowsheet**

The full process is detailed in section 2.1.5, please refer to this section.

**2.2 Facility Operating Hours**

The operation of the Aqua Feed Mill is expected to be capable of operating 24 hours a day 7 days a week. In practice, this is not expected to occur given day to day maintenance outages, down times, etc. To ensure the assessment is conservative, the modelling has assumed emissions 24/7 for the entire 12 month period.

**2.3 Emission Sources**

There are two main sources of air pollutants on the site. The first is the odour from the production processes and the second is the pollutants emitted due to the combustion of natural gas in the boiler and dryer.

The combustion of natural gas in the dryer and boiler are expected to consume approximately 1300 m<sup>3</sup> of natural gas per year. Given the scale of these emissions and the low expected background concentrations of these pollutants, these sources have not been considered further by this assessment.

Odour emissions from the facility are all vented through the surface of the Biofilter positioned to the southeast of the main process building (refer **Figure 1**). The biofilter surface is expected to consist of a 540m<sup>2</sup> bed of biofilter media designed to achieve an odour emission concentration of 250 OU.

**2.4 Odour Control Equipment Outages Management**

Should any of the process fans or mitigation equipment fail, then the following will be implemented:

1. The facility can remain in operation provided the individual process fan can be isolated in such a way that odour is not emitted e.g. if the raw material intake fan fails and no deliveries are due then the process can continue until either the fan is repaired or until delivery is due.

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2. If a batch of feed is working its way through the process during an outage of either the process fans or the biofilter, the current batch will be completed but no new batch will be commenced until the outage has been repaired.

To minimise the potential for outages and breakdowns of the equipment (in particular the biofilter), a maintenance plan will be prepared to ensure there is regular maintenance of the biofilter and associated mitigation equipment on a daily, weekly and quarterly schedule (different activities and checks carried out on a different frequency).

## 2.5 Biofilter Maintenance

The maintenance procedure will incorporate the following activities:

### Daily Checks and Biofilter Procedure

- View the trends of the previous day
- View the Biofilter temperatures and pressures.
- Check / monitor the Relative Humidity regularly to ensure the correct levels are maintained.
- Fill in the record book.
- Check all capture points are working correctly.
- Check the Biofilter is producing water.
- Check the medium for dry patches also pay attention around the inlet points to the Biofilter.
- Check on top of the bed and downwind for odours.
- Record any issues in the log Book and contact the Maintenance Manager and the QSE Coordinator at once.
- Monitor the Biofilter temperature to ensure it is between a minimum of 30 degrees and maximum 46 degrees.

### Weekly Checks and Biofilter Procedure

- Record the biofilter temperatures and pressure.
- Clean the filters and coils.
- Record the trends.
- Check and record the pressure into the biofilter.
- Check all odour capture points for any leakage.
- Check that all the sprays are working and the humidity is at the correct level(s).
- Check that the drip irrigation is free of blockages.
- Check the medium is free of dry patches in several locations of the biofilter, at the same time check for any weeds and spray with an herbicide if required.
- If there is any concerns regarding any of the above contact the Maintenance Manager and the QSE Coordinator at once.

### Three Monthly Biofilter Procedure

- Check the level and condition of the medium in the Biofilter.
- Carry out spatial outflow across the Biofilter surface.
- Visually check that all sprays are working by undoing them from the ducting and turning them on.

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## 3.0 Pollutants of interest

### 3.1 Odour

Odour is a sensory response to the inhalation of one or more chemicals in the air we breathe. A person's perception of an odour can vary significantly depending on the sensitivity of the person, the acuteness of the person's sense of smell and the connotations that the odour bestows on that person. Odour may affect a person's quality of life and can have a large range of effects including stress and other physical symptoms.

### 3.2 Impact Assessment Criteria

The Tasmanian Environment Protection Authority (EPA) has an Odour Policy which is documented in the Tasmania EPA Policy (Air Quality) 2004, Schedule 3.

In addition to the general odour requirements, the Project specific guidelines for this development require that potential odour impacts from the Ridley Aqua Feed Mill to be assessed. Further, it must be demonstrated that the facility will not cause an environmental nuisance. Atmospheric dispersion modelling is to be performed to identify the key issue which is to examine the potential impacts of odour emissions on all sensitive receptors within 1km of the major source of odour, in this case the proposed biofilter.

The modelling is required to show that the predicted maximum ground level concentration does not exceed the concentration criteria specified in **Table 1**.

According to Schedule 3 the dispersion modelling calculations should consider the following:

- local terrain and meteorology;
- the effect of background concentrations;
- the contribution of adjacent sources (where relevant); and
- the need to preserve the capacity of the local environment to receive future emissions

As per the Tasmania EPA Air Quality Policy document, "*The maximum predicted ground level concentration specified in Column 2 of Table 6 (2 Odour units, or OU) is defined in terms of the percentile concentration specified in Column 4 of Table 6*". The EPA criteria have been reproduced in **Table 1**.

**Table 1 Tasmania Environmental Protection Authority – Odour Assessment Criteria**

Column 1	Column 2 Criterion	Column 3 Averaging Period	Column 4 Percentile
Known pollutant(s)	See schedule 2	See schedule 2	99.9 <sup>a</sup>
Unknown mixture	2 odour units <sup>1</sup>	1 hour	99.5 <sup>b</sup>

<sup>1</sup> "Odour unit" has the same meaning as in Australian Standard AS/NZS 4323.3 Stationary source emissions – Determination of odour concentration by dynamic Olfactometry.

<sup>a</sup> Modelled 99.9 percentile concentration at or beyond the boundary of a facility (whichever is higher) in cases where local high-quality meteorological and emissions data are available. In cases where such data are not available, the 100 percentile concentration modelled at or beyond the boundary of a facility applies.

<sup>b</sup> Modelled 99.5 percentile concentration at or beyond the boundary of a facility (whichever is higher) in cases where local high-quality meteorological and emissions data are available. In cases where such data are not available, the 100<sup>th</sup> percentile concentration modelled at or beyond the boundary of a facility applies.

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Given that the composition of the odours being released from the proposed Aqua Feed Mill are unknown, the “Unknown mixture” pollutant type outlined in **Table 1** has been adopted for this assessment. The concentrations have been calculated for both the 100<sup>th</sup> and 99.5<sup>th</sup> percentile statistics as there is some doubt over the quality of the meteorological data used for the Westbury region. An analysis of the meteorological data has been provided in **Section 5.3** and **Appendix A** and summarised as follows:

- Hourly meteorological data is available for the Westbury monitoring site (situated approximately three kilometres to the south of the proposed Aqua Feed Mill),
- Concerns have been raised in relation to the quality of the data as there are a significantly high number of calms and light winds measured from the 3m meteorological mast, compared to other nearby stations at Cressy Research Centre (30km to the SSE) and Launceston Airport (31km to the east).
- Wind directions from the Westbury station are similar to the Cressy and Launceston stations taking into account the location of Westbury in the large Valley which includes Westbury, Cressy and Launceston.
- The different geographically distant meteorological monitoring stations share the same large valley and would be expected to have broadly similar wind statistics.
- The meteorological modelling has included the Westbury meteorological site mostly for conservatism reasons in order to utilise the very high percentage of calm and light wind conditions which are considered to represent the worst case conditions for odour dispersion.

Although there is no on-site measured data, a large amount of data from a similar facility situated in Narangba, Queensland has been examined to ensure the estimated data is as accurate as possible. On this basis, the emissions data can be considered high quality data from the perspective of the criteria selection.

On the basis of the meteorology and the emissions data, the facility has been assessed against the 99.5<sup>th</sup> percentile concentrations, with the 100<sup>th</sup> percentile concentrations provided for context.

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## 4.0 Existing Environment

### 4.1 Regional Air Quality

Tasmania EPA maintains a number of environmental monitoring stations throughout Tasmania. In the area surrounding Westbury, the monitoring stations are positioned at the following locations:

- Westbury (approximately 2.6km to the south of the Ridley site)
- Poatina (approximately 34km to the south of the Ridley site)
- Longford (approximately 26km to the east south east of the Ridley site)
- Perth (approximately 30km to the east south east of the Ridley site)
- Hadsphen (approximately 20km to the east of the Ridley site)
- Exeter (approximately 14km to the west of the Ridley site)
- Deloraine (approximately 14km to the west of the Ridley site)

Monitoring data for the above stations focuses on the monitoring of particulate matter and meteorology only, with only PM<sub>10</sub> and PM<sub>2.5</sub> data available for all of the above stations. Given the expected low level of particulate matter potentially emitted during the combustion of natural gas, the background data has not been considered further.

There are no identified sources of odour close to the Ridley facility and as such no background odour concentrations have been included.

### 4.2 Climate

The BOM collects meteorological data from various sites in Tasmania. The station at Launceston Airport is approximately 25km to the east, northeast of the site, while the Cressy Research station is approximately 32 km to the southeast of the site. The meteorological data collected from these two stations is considered representative of the long term meteorology and provides an indication of the climate in the area around Westbury.

#### 4.2.1 Cressy Station

Average maximum temperatures in summer range from 22.8 °C to 25.2 °C, while minimum temperatures range from 8.5 °C to 10.5 °C. In winter, the average maximum temperature ranges from 11.9 °C to 12.9 °C and the average minimum temperature ranges from 1.7 °C to 2.5 °C.

The annual average humidity reading collected at 9 am from the site is 79 %, and at 3 pm the annual average is 56 %. Rainfall data collected at Cressy shows, on average, that the wettest months are May to November, with average rainfall of greater than 50 mm for each of the intervening months.

#### 4.2.2 Launceston Airport

Average maximum temperatures in summer range from 22.5 °C to 25.0 °C, while minimum temperatures range from 11.8 °C to 13.0 °C. In winter, the average maximum temperature ranges from 9.0 °C to 11.1 °C and the average minimum temperature ranges from 2.2 °C to 2.9 °C.

### 4.3 Terrain

The location of the proposed Ridley project site is on the north western edge of a large valley situated in north, central Tasmania. The elevation of the proposed site is approximately 180-190m AHD. The surrounding landform rises to the northwest into the Brushy Rivulet Forrest Reserve and falls to the east to south into a large gently undulating valley with elevations of approximately 140 – 180m AHD. The large valley and the elevated terrain to the northwest of the proposed facility are expected to dominate the meteorology in the area surrounding Westbury and at the project site.

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## 5.0 Dispersion Modelling Methodology

### 5.1 Overview

Dispersion modelling was undertaken to predict the potential effects of the operation of the Ridley Aqua Feed Mill. The following sections outline details of the dispersion model used and its inputs (specifically meteorology, terrain, building parameters, modelling scenarios, source characteristics and emissions inventory), sensitive receptor locations, and the methodology used in the estimation of pollutant concentrations.

### 5.2 Dispersion model

The CALPUFF air dispersion model was used in the AQIA in accordance with the Tas EPA Draft Atmospheric Dispersion Modelling Guidelines (Tas EPA, 2016). CALPUFF is a non-steady-state, three-dimensional Gaussian puff model developed for the US Environmental Protection Agency (USEPA) for use in situations where basic Gaussian plume models are not effective, such as areas with complex meteorological or topographical conditions, including coastal areas with re-circulating sea breezes.

Input parameters used in the CALPUFF dispersion modelling are summarised in **Table 2**.

**Table 2 CALPUFF Input Parameters**

Parameter	Input
CALPUFF version	7.2.1
Modelling domain	12 km x 12 km
Modelling grid resolution	20m - 50m (finer grid closer to the facility)
Terrain data	Included in CALMET
Building wake data	Not included in model
Dispersion algorithm	Dispersion coefficients computed from micrometeorology
Hours modelled	8784 hours (366 days)
Meteorological data period	1 January 2016 – 31 December 2016

Inputs to CALPUFF are discussed in the following sections.

### 5.3 Meteorology

The latest version of CALMET (Version 6.5.0) was used to develop the three dimensional flow field for the modelling domain. CALMET was run in "Observations Mode", which utilised a combination of surface and upper air observation sites which have been used to develop the three dimensional flow field.

Three surface stations located at the Cressy Research Centre, Launceston Airport and at the Tas EPA Westbury monitoring station were all used to develop the surface wind field and Hobart Radiosonde data has been used to provide the model with upper air data. **Table 3** provides the meteorological names as well as the Station IDs, Coordinates and Anemometer heights.

**DRAFT****Table 3 Surface and Upper air Station data used in the Modelling**

Station Name	Station ID	X, Y Coord (km) UTM 55S Datum WGS-84	Time Zone	Anemometer Height (m)	Elevation (m)
Surface Stations					
Westbury	12345	486.234 5402.393	10	3	186.4
Cressy Research Centre	91306	506.653 5380.198	10	10	148.0
Launceston Airport	91311	517.513 5400.163	10	10	166.9
Upper Air Station					
Hobart Airport	94975	541.475 5257.227	10		4

**Table 4** outlines the critical CALMET settings that were used to develop the meteorological data. Eleven vertical levels were used in the model. Cloud cover and cloud ceiling height from Launceston Airport were used to develop atmospheric stability. Because of the low level release of odour from the proposed facility and because the Hobart airport is located far away, vertical extrapolation of the surface data was allowed. This is a conservative approach specifically done to allow the full use of the Westbury meteorological station to be used to determine dispersion at the proposed Aqua Feed Mill both at the surface and up to approximately 30m in the model.

**Table 4 Critical CALMET switches**

Critical CALMET Switches	Value	Description
R1 (relative weighting-surface stats)	1.8	R1 is given a small value – mostly due to near field effects of Westbury
RMAX1 (max weighting surface stat)	2.5	
R2 (relative weighting up stat)	80	Hobart is located far away, it is mostly being used above 120m, the higher above the surface the more influence it will have over the proposed facility
RMAX2 (max weighting up stat)	100	
TERRAD	7	Suitable for local terrain – terrain is not underestimated
IEXTRP	4	Vertical extrapolation using similarity theory is used in place of far distant Hobart
BIAS	-1.0,-0.8,-0.3,0.0,0.0,0.0,0.5,0.8,1.0,1.0,1.0	Bias is used here to turn off the far distant Hobart upper air station at the surface stations. Above the dominant terrain height bias is used to turn off the effects of the surface station aloft
Vertical Levels	0,20,40,80,160,320,640,1000,	Vertical levels used in the model

Analysis of the meteorology produced by the CALMET model has been included as **Appendix A**.

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**5.4 Terrain**

The NASA Shuttle Radar Topographic Mission (SRTM) provides digital elevation data (DEM) for over 80% of the globe. The SRTM data are available as 3 arc second DEMs, which provide a resolution of approximately 90 m. The vertical error of the DEMs is reported to be less than 16 m.

Digital terrain data required by CALMET were obtained for an area of approximately 29.1 km x 29.1 km at a 150m grid spacing from the global SRTM database (terrain elevations shown in **Figure 3**. The 90 m resolution data were included in the CALMET GEO.dat input file and used together with the TAPM, EPA and BOM meteorological data for determination of the three dimensional modelling meteorological data file required by CALPUFF.

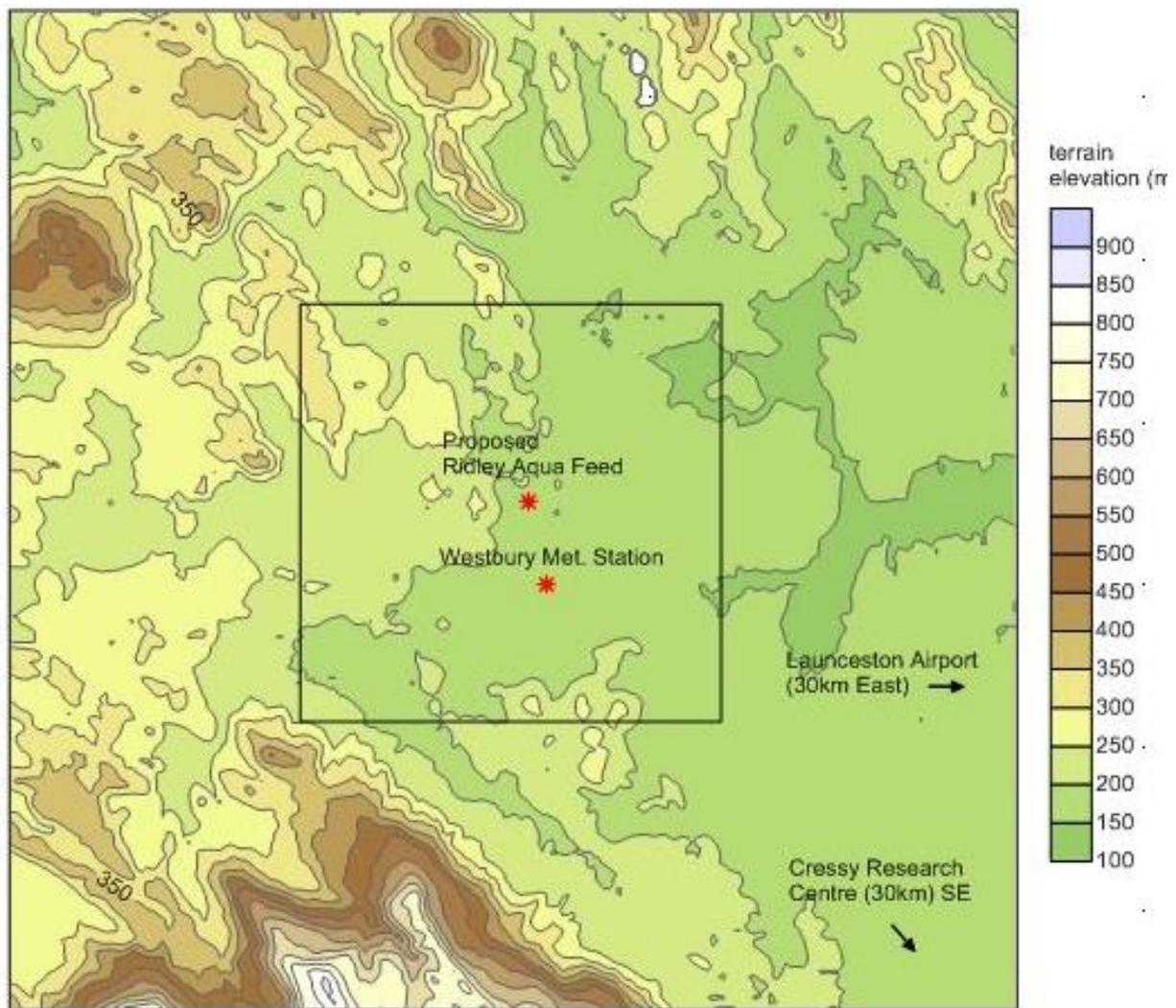


Figure 3 CALMET Modelling Domain Terrain

**5.5 Modelling Scenarios**

Dispersion modelling results for this investigation have been presented in terms of results obtained from three operational scenarios. These scenarios are intended to represent the three potential operating configurations that may be selected for the facility. The three scenarios and their assumptions are shown in **Table 5**.

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**Table 5 Dispersion modelling Scenarios**

Scenario Number	Assumptions
1	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 95,000 m <sup>3</sup> /hr Odour Concentration of 500 OU
2	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 70,000 m <sup>3</sup> /hr Odour Concentration of 500 OU
3	Two equal biofilter beds, each bed with an area of 270m <sup>2</sup> Process air flow rate of 70,000 m <sup>3</sup> /hr Odour Concentration of 250 OU

## 5.6 Emissions Inventory

The emissions inventory for the proposed Feed Mill is based around the following assumptions:

- All process air is captured and vented through the biofilter i.e. no fugitive emissions. Location of the biofilter and flow conditions for the air flow is shown in **Table 6**.
- The biofilter odour concentration is based on an upper and lower design concentration for odour emissions i.e. 500 OU for the upper design limit (Scenarios 1 and 2) and the lower design limit of 250 OU (Scenario 3). Flow characteristics and emissions data for the three scenarios are as follows:
  - Scenario 1** – total maximum air flow rate of 95,000m<sup>3</sup>/hr, each 270m<sup>2</sup> biofilter bed has an air flow rate of 13.19 m<sup>3</sup>/s and a total odour emission rate of 6,597 OU m<sup>3</sup>/s assuming 500 OU. This equates to an odour emission rate of 24.43 OU m/s.
  - Scenario 2** – anticipated standard operating conditions with an air flow rate of 70,000m<sup>3</sup>/hr is expected over the entire biofilter bed. Each 270m<sup>2</sup> biofilter bed has an air flow rate of 9.722 m<sup>3</sup>/s and a total odour emission rate of 4861 OU m<sup>3</sup>/s assuming 500 OU. This equates to an odour emission rate of 18.00OU m/s.
  - Scenario 3** – Based on the anticipated standard operating conditions, an air flow rate of 70,000m<sup>3</sup>/hr is expected over the entire biofilter bed. Each 270m<sup>2</sup> biofilter bed has an air flow rate of 9.722 m<sup>3</sup>/s and a total odour emission rate of 2431 OU m<sup>3</sup>/s assuming 250 OU. This equates to an odour emission rate of 9.00OU m/s.

**Table 6 Biofilter Characteristics**

Source Label	Vertices	Easting	Northing	Area (m <sup>2</sup> )	Volumetric Flow Rate (m <sup>3</sup> /s)	Odour Concentration (OU/m <sup>3</sup> )	Emission Rate (OU/s)
Biofilter #1	Corner 1	485.653	5404.923	270	9.722	500 OU <sup>1</sup> 250 OU <sup>2</sup>	6597 4861 2431
	Corner 2	485.653	5404.933				
	Corner 3	485.680	5404.933				
	Corner 4	485.680	5404.923				
Biofilter #2	Corner 1	485.653	5404.933	270	9.722	500 OU 250 OU	6597 4861 2431
	Corner 2	485.653	5404.943				
	Corner 3	485.680	5404.943				
	Corner 4	485.680	5404.933				

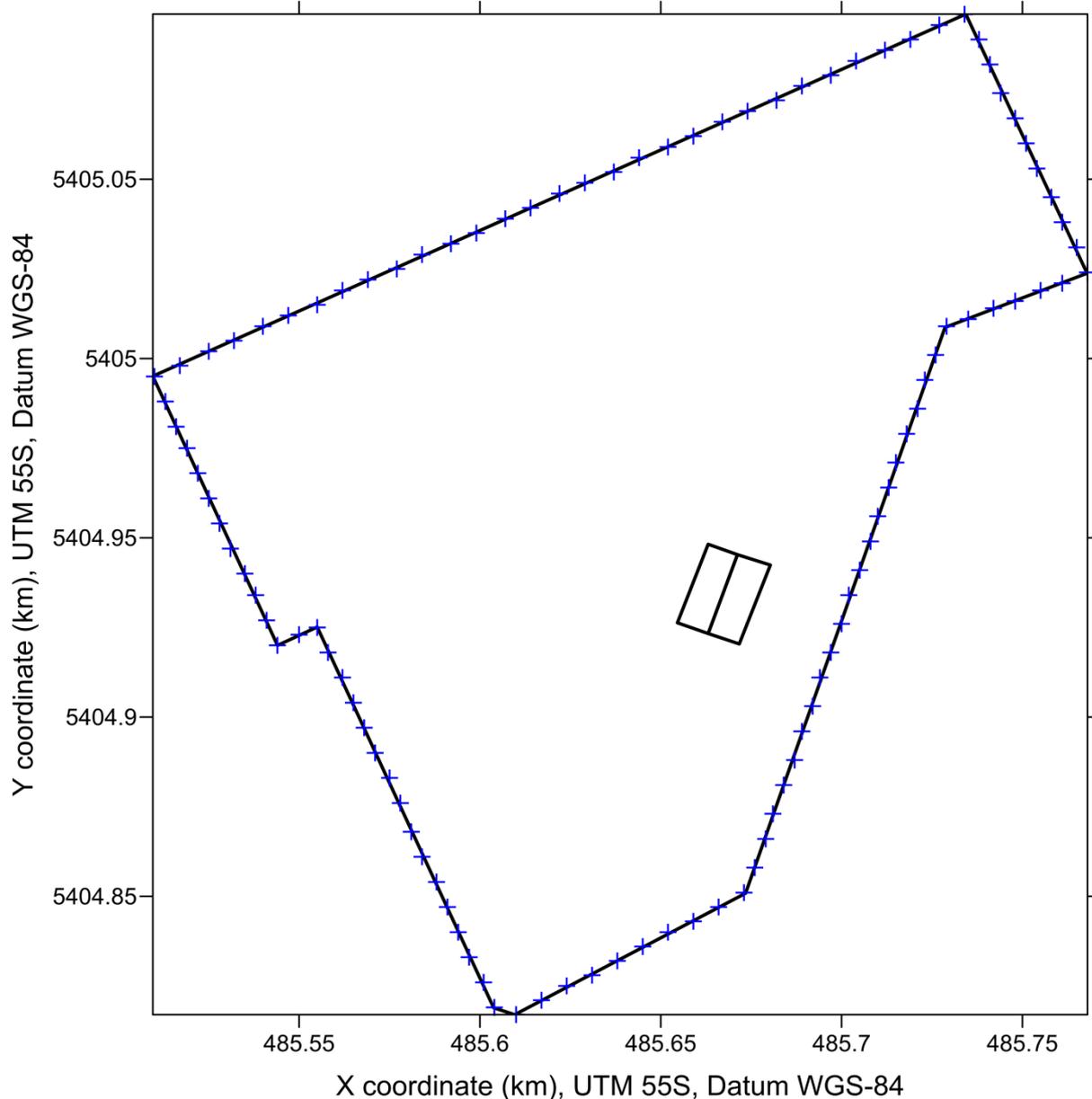
<sup>1</sup> Scenario 1 and 2 odour emission concentration

<sup>2</sup> Scenario 3 odour emission concentration

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The location of the biofilter on the site is shown in Figure 4. The biofilter at the southern side of the main industrial building is shown. The blue stars indicate fence line or property boundary receptors.

The biofilter has been modelled as two adjacent area sources, each consisting of 2 x 270m<sup>2</sup> beds which have been modelled as 27m long and 10m wide. The total area of both beds is ~540m<sup>2</sup>.



**Figure 4 Biofilter location within the proposed site**

The upper design limit of 500 OU is considered a standard biofilter design specification for the industry, with biofilters designed to typically meet this level. To achieve a limit of 250 OU would require a higher degree of scrubbing to achieve this level of odour treatment. Maintenance of the biofilter would need to be carefully planned to ensure the biofilter is operating at its optimum level.

There has been concern raised in consultation with Tas. EPA whether a biofilter can operate at a level lower than 500 reliably in the long term. To investigate this question, analysis was undertaken on a facility operated by Ridley at its Narangba Queensland facility. This location has a biofilter designed to operate below 500 OU and has been tested quarterly since January 2015. Results of the testing of the Narangba plant are shown below in **Table 7**.

**DRAFT****Table 7 Narangba Plant Odour Emissions**

	Surface - South	Surface - North
Jan 2015	128	181
Apr 2015	137	158
Jul 2015	239	589
Oct 2015	150	200
Jan 2016	130	280
Apr 2016	99	470
Jul 2016	190	380
Oct 2016	280	510
Jan 2017	360	730
Cell Average	190	388
All Data Average	289	

Results of the analysis show that for the Narangba plant designed for 500 OU performance, the cell performance is averaging 289 OU over the 2 plus year operational; life of the biofilter. In particular, the South Biofilter has operated below the 250 OU concentration limit proposed for Scenario 3. Based on these results, for a biofilter designed for an outlet concentration of 250 OU would be expected to be able to meet the design limit. On this basis, the emissions for scenario 3 are considered acceptable and the results from this scenario reliable from an emissions perspective.

## 5.7 Sensitive Receptors

Receptors have been entered into the model using a mixture of arbitrary gridded receptors, boundary receptors located on the facility boundary and discrete receptors situated on the known location of a receptor of interest e.g. house of industrial facility.

The total number of receptors used in the assessment was 7844, each with its own terrain height. One hundred of these discrete receptors are placed 20m apart around the fence line of the facility. Thirteen of these receptors have been placed at each of the residential houses located within 2km of the proposed facility. The remaining 7731 are placed at 50m interval from the boundary of the property out to 2km. **Figure 5** shows all modelled receptor locations, **Figure 6** show the receptor locations close to the proposed Ridley facility and **Table 8** lists the receptor labels and coordinates for the receptors close to the proposed Ridley facility.

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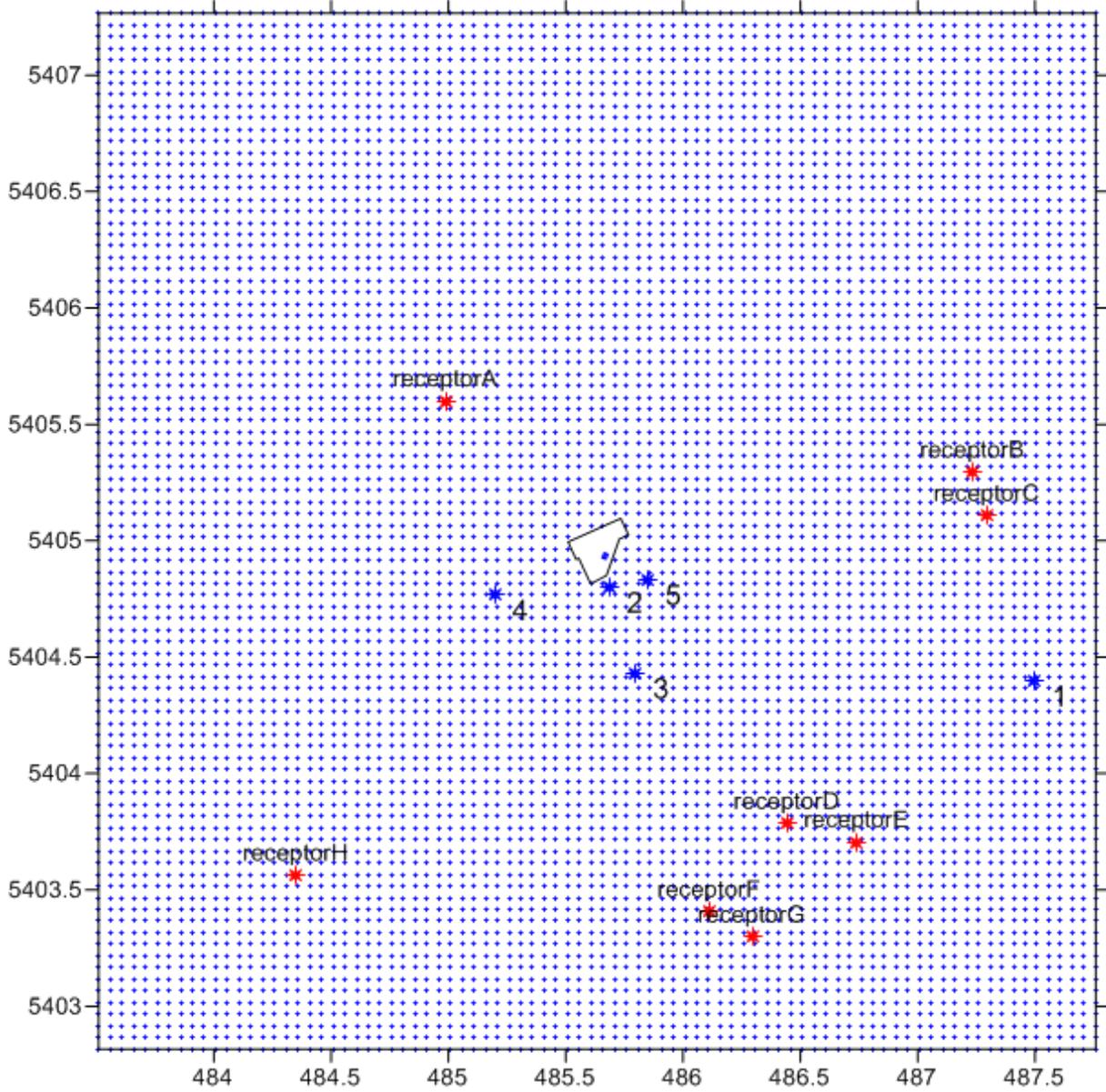


Figure 5 Receptor grid including gridded, boundary and discrete receptor locations

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**Figure 6 Discrete receptor names and locations**

**Table 8 Receptor Locations**

Discrete Receptor Name	X Coord (km) UTM 55S WGS-84	Y Coord (km) UTM 55S WGS-84
Receptor A	484.991	5405.601
Receptor B	487.238	5405.296
Receptor C	487.298	5405.108
Receptor D	486.446	5403.786
Receptor E	486.743	5403.706
Receptor F	486.115	5403.407
Receptor G	486.297	5403.299
Receptor H	484.354	5403.563
Industrial 1	487.498	5404.398
Industrial 2	485.686	5404.800
Industrial 3	485.798	5404.432
Industrial 4	485.198	5404.768
Industrial 5	485.851	5404.833

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## 6.0 Results

**Table 9** and **Table 10** provide the odour concentration results for the proposed Ridley Aqua Feed Mill assuming one large biofilter bed of 540 m<sup>2</sup>. **Table 9** presents the peak odour concentration at the boundary of the property of 90.5 OU for Scenario 1, 66.7 OU for Scenario 2 and 33.4 OU for Scenario 3. These values exceed the EPA odour assessment criteria of 2 OU at the boundary.

**Table 10** presents the peak and 99.5<sup>th</sup> percentile 1 hour average odour concentrations for each of the discrete residential and industrial locations. All residential receptors are predicted to have a concentration below the 2 OU assessment criteria. 4 of the 5 industrial receptors are expected to experience odour concentrations above the criteria. Concentration contours showing the distribution of the odour in the environment (figure 7 to figure 12).

**Table 9 Peak odour concentration at the property boundary.**

Scenario	Concentration Statistic	Receptor Location	Odour Concentration (OU)	Tas. EPA Criteria (OU)
Scenario 1	Maximum Concentration	Boundary	90.5	2
	99.5 <sup>th</sup> Percentile Concentration	Boundary	87.0	
Scenario 2	Maximum Concentration	Boundary	66.7	
	99.5 <sup>th</sup> Percentile Concentration	Boundary	64.1	
Scenario 3	Maximum Concentration	Boundary	33.4	
	99.5 <sup>th</sup> Percentile Concentration	Boundary	32.0	

**Table 10 Odour concentrations at industrial and sensitive receptors surrounding the proposed facility**

Discrete Receptor Name	Odour Concentration (OU)					
	Scenario 1		Scenario 2		Scenario 3	
	Max 1 hr	99.5% 1 hr	Max 1 hr	99.5%1 hr	Max 1 hr	99.5%1 hr
Receptor A	0.78	0.37	0.57	0.28	0.29	0.14
Receptor B	0.30	0.16	0.22	0.12	0.11	0.06
Receptor C	0.36	0.20	0.27	0.14	0.14	0.07
Receptor D	0.51	0.36	0.38	0.26	0.19	0.13
Receptor E	0.46	0.29	0.34	0.22	0.17	0.11
Receptor F	0.37	0.23	0.27	0.16	0.14	0.08
Receptor G	0.33	0.20	0.24	0.15	0.12	0.08
Receptor H	0.29	0.11	0.19	0.08	0.10	0.04
Industrial 1	0.42	0.25	0.31	0.19	0.16	0.10
Industrial 2	<b>20.65</b>	<b>15.59</b>	<b>15.51</b>	<b>11.49</b>	<b>7.76</b>	<b>5.75</b>
Industrial 3	<b>2.80</b>	<b>1.94</b>	<b>2.05</b>	1.44	1.03	0.72
Industrial 4	<b>2.53</b>	1.86	1.86	1.36	0.93	0.68
Industrial 5	<b>10.64</b>	<b>10.89</b>	<b>7.84</b>	<b>8.03</b>	<b>3.92</b>	<b>4.02</b>

**Bold text denote exceedance of the criteria**

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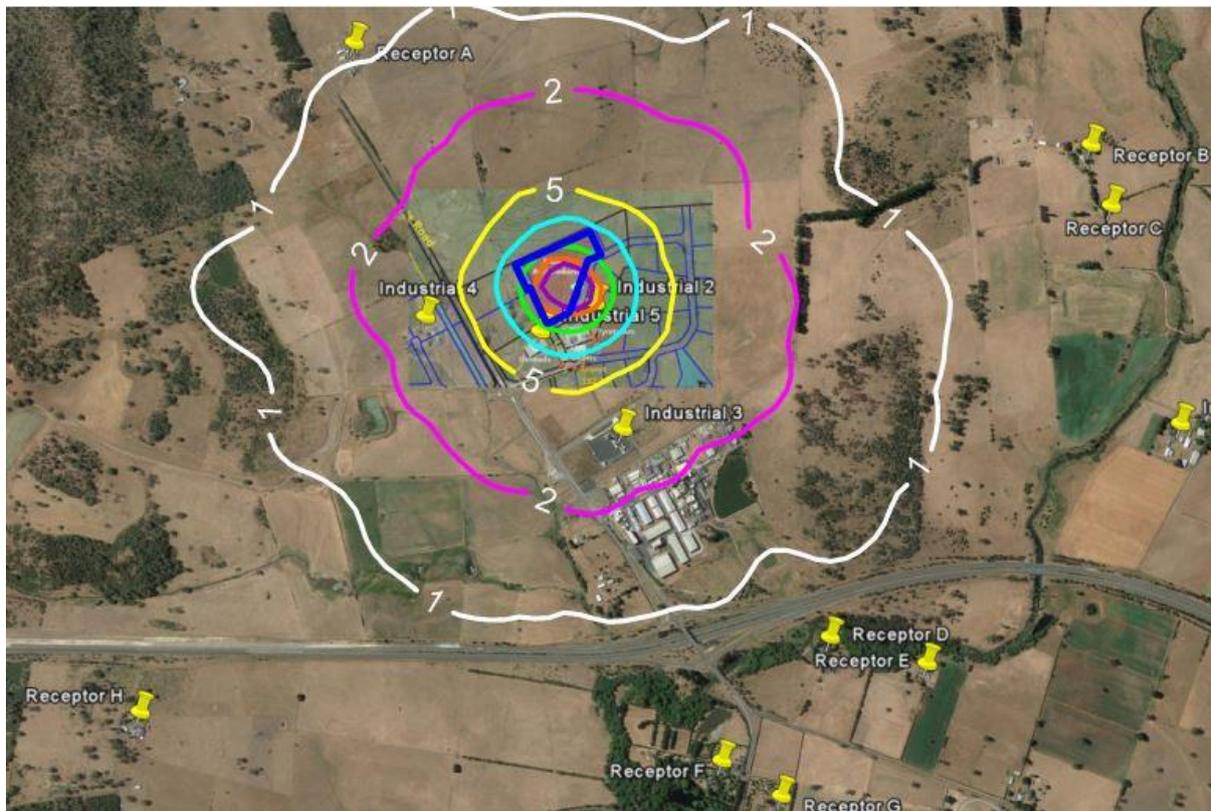


Figure 7 Scenario 1 – Maximum Concentrations.

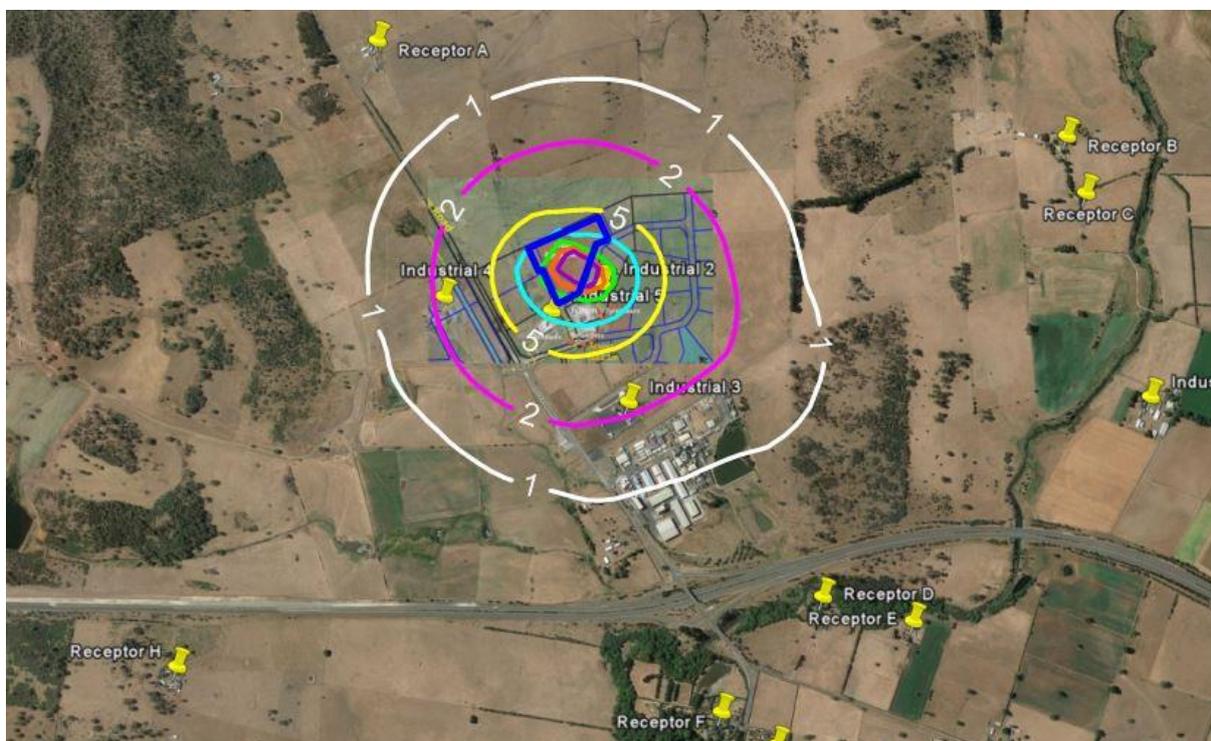


Figure 8 Scenario 1 – 99.5<sup>th</sup> Percentile Concentrations.

Note: the 2 OU assessment criteria value is shown in magenta. The turquoise isopleth represents 10 OU; the green isopleth represents 20 OU and the orange represents 30 OU.

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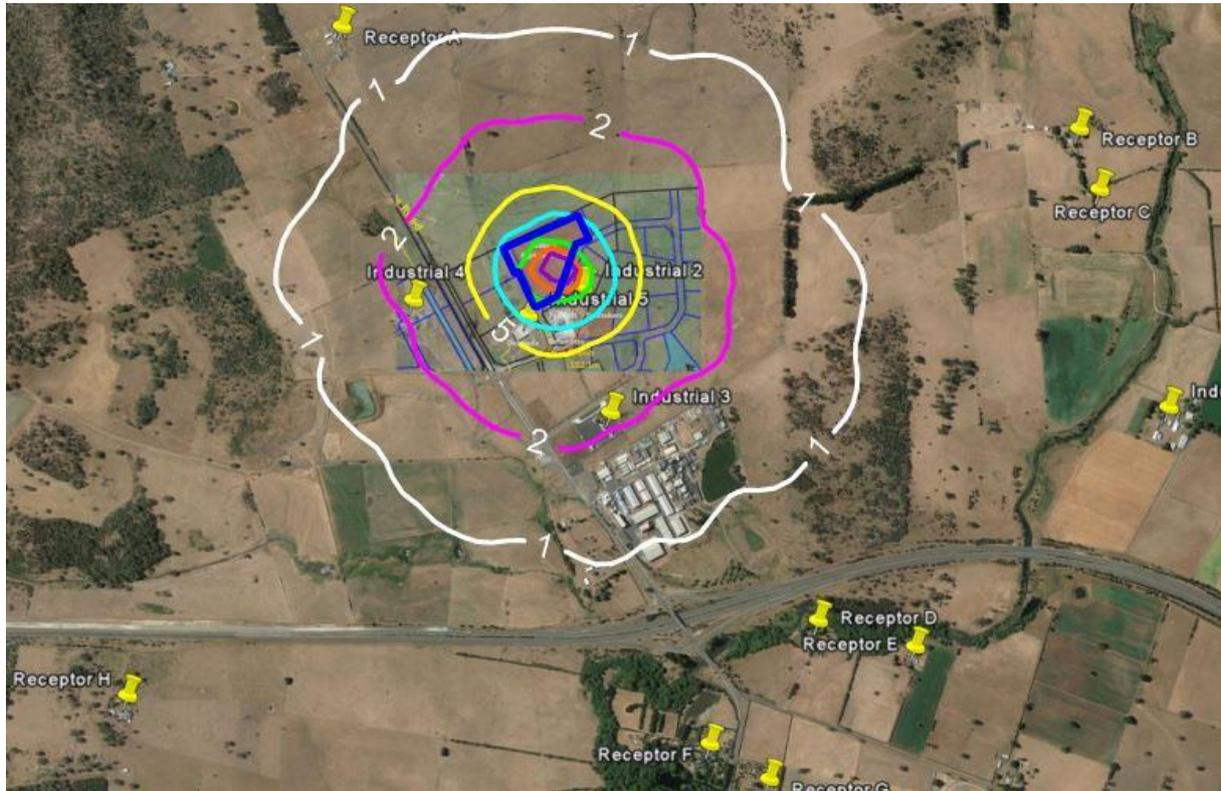


Figure 9 Scenario 2 – Maximum Concentrations.

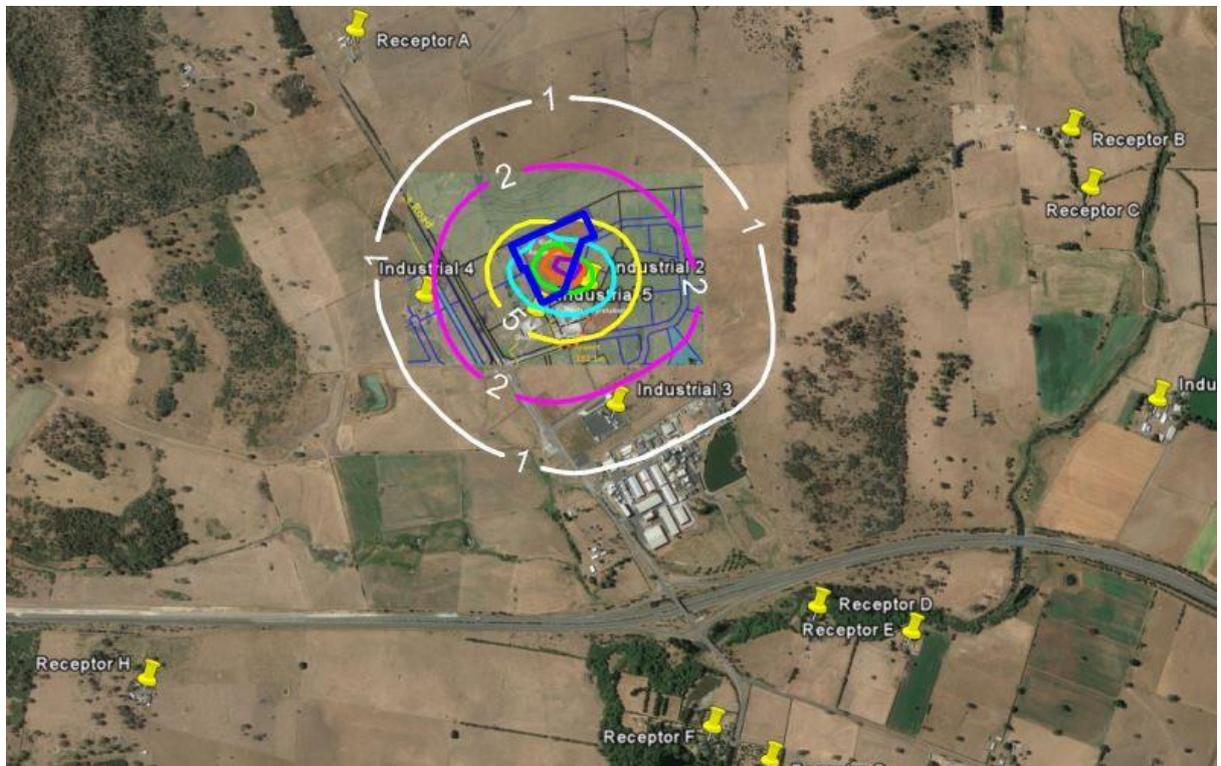


Figure 10 Scenario 2 – 99.5<sup>th</sup> Percentile Concentrations.

Note: the 2 OU assessment criteria value is shown in magenta. The turquoise isopleth represents 10 OU; the green isopleth represents 20 OU and the orange represents 30 OU.

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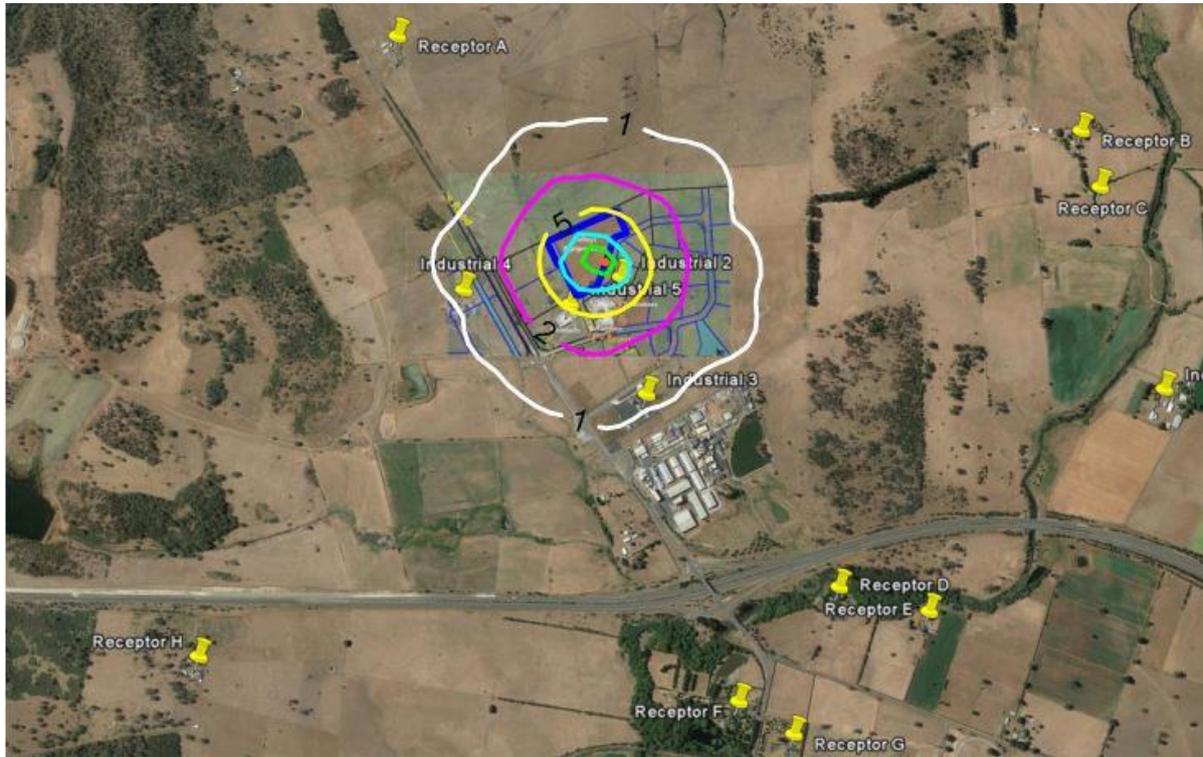


Figure 11 Scenario 3 – Maximum Concentrations.

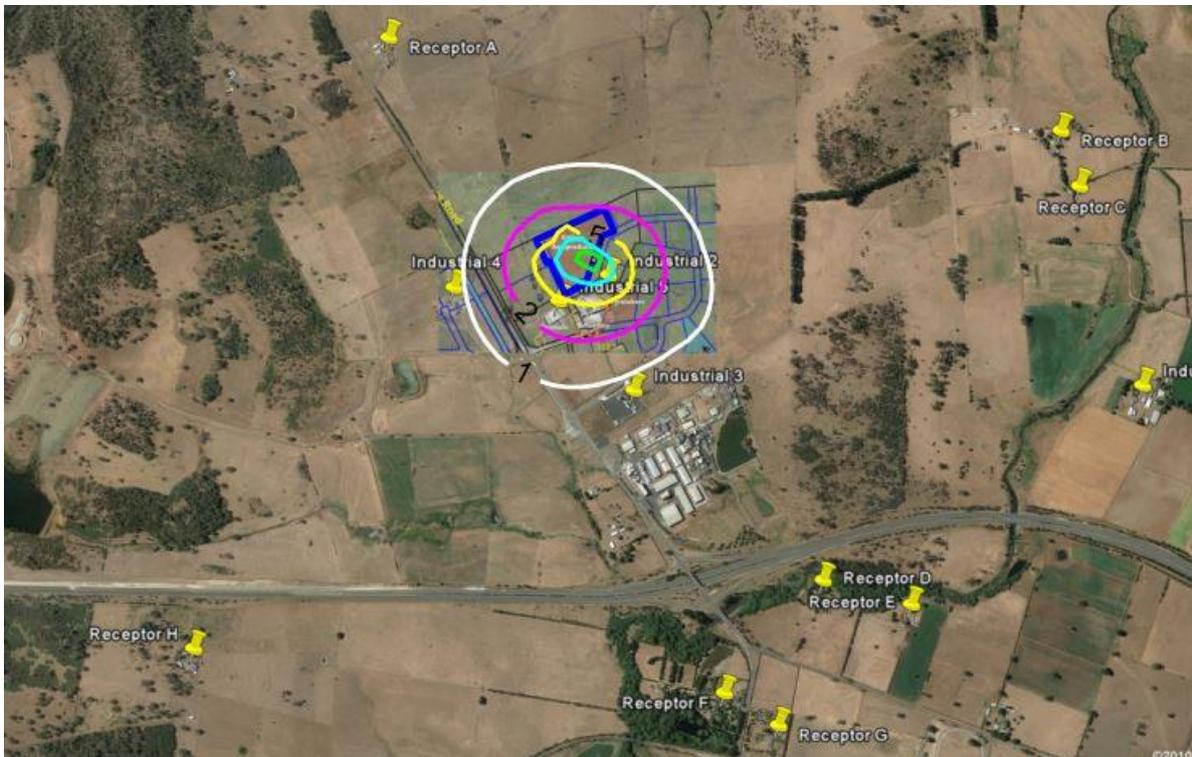


Figure 12 Scenario 3 – 99.5<sup>th</sup> Percentile Concentrations.

Note: the 2 OU assessment criteria value is shown in magenta. The turquoise isopleth represents 10 OU; the green isopleth represents 20 OU and the orange represents 30 OU.

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Three scenarios assuming maximum operating conditions (95,000 m<sup>3</sup>/hr) and standard operating conditions (70,000 m<sup>3</sup>/hr) have been modelled from two adjacent biofilter beds each 27m long and 10m wide with a total area of 540 m<sup>2</sup>. The assessment criteria used in this study is 2 OU as the maximum 1 hour value over a full year period at the plant boundary. The 99.5 percentile values are also shown. Thirteen discrete receptors are located within 2km of the proposed source. The highest 1 hour maximum concentration recorded at any of the sensitive receptors was at Industrial Receptor 2 of 20.65 OU for Scenario 1 and 15.51 OU for Scenario 2. The 99.5 percentile value at this receptor was 15.59 OU for Scenario 1 and 11.49 OU for Scenario 2.

The maximum peak odour concentration at the facility boundary was 90.5 OU, 66.7 OU and 33.4 OU for Scenarios 1, 2 and 3, respectively. The 99.5 percentile 1 hour odour concentration at the facility boundary was 87.0 OU, 64.1 OU and 32.0 OU for Scenarios 1, 2 and 3 respectively. The receptor recording these values (Receptor No. 7755) is located directly east of the biofilter bed and is only 20m from the biofilter surface.

There is conservatism built into the modelling results which are discussed below;

- Odour produced by the biofilter is not considered offensive and is generally known to be earthy and musty in nature. Biofilter odour from food processing facilities like the proposed Ridley Aqua Feed Mill is not expected to resemble the primary odour in any way. The modelling has not taken into consideration hedonic tone. Further discussion on the Hedonic Tone is provided below.
- It can be argued that the use of the Westbury meteorological site which is located just a few kilometres away is equivalent to an 'on-site meteorological tower'. On this basis it is considered that the facility warrants assessment at the 99.5<sup>th</sup> percentile limit which is the 44th highest concentration in the year. These results have been provided. Although the property boundary does not meet the 2 OU at the 99.5% limit, the 2 OU concentration isopleth is reduced and is closer to the property boundary than the 100<sup>th</sup> percentile.
- The modelling assumes operation of the facility occurs 24 hours per day, 7 days per week. In reality full time operation 24/7 is not expected to occur on commissioning and may take some time to reach full capacity. For a period of time after commissioning, the facility will operate 24 hours per day for 5 days a week. If significant odours occur at the lower operating times an odour management plan can be put in place before commencement of 24/7 operating times. The emissions rate assumes a constant odour emission rate for both Scenarios for all hours of the day throughout the entire year. This is unrealistic and flow rate is expected to vary on a frequent basis.

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## 7.0 Conclusion

Atmospheric dispersion modelling has been undertaken to investigate the potential odour impacts associated with the operation of the proposed Aqua Feed Mill north of Westbury in Tasmania. This assessment has addressed the potential impacts of air emissions on all nearby residential and industrial locations within 2km of its proposed location. The modelling has predicted a maximum concentration at the site boundary of 90.5 OU, 66.7 OU and 33.4 OU for operating scenarios 1, 2 and 3 respectively. These predicted odour concentrations decrease to 87.0 OU, 64.1 OU and 32.0 OU for operating scenarios 1, 2 and 3 respectively when assessed at the 99.5 percentile limit. All boundary odour concentrations exceed the design criteria specified in the Air EPP of 2 OU at the boundary.

Out of the off-site, non-boundary receptors modelled in the assessment (residential and industrial receptors), the highest predictions were at the industrial locations (Industrial receptors 2 and 5) which are located immediately south of the proposed facility. The highest predicted odour concentrations at the industrial receptors (Industrial-2) were 20.7 OU for Scenario 1, 15.5 OU for Scenario 2 and 7.8 OU for Scenario 3. The 99.5 percentile value at this receptor was 15.6 OU for Scenario 1, 11.5 OU for Scenario 2 and 5.8 OU for Scenario 3. Given the scale of the results, it is expected that the plant will need to operate at its standard operating conditions (70,000m<sup>3</sup>/hr) at a maximum odour emission concentration from the Biofilter of 250 OU to ensure minimal odour emissions from the facility.

An odour management plan will be developed to accompany the facility from its commencement. The management plan will include details of the following:

- Odour collection at the point of generation and how these will be maintained to ensure effective capture
- Maintenance procedures for the biofilter and contingency plans in case the biofilter fails
- Verification sampling program for the period following completion of the facility covering an agreed period of time following commissioning (after which time sampling may decrease or cease).

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# Appendix A

## Meteorological Data Analysis

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## Appendix A Meteorological Data Analysis

The following Appendix provides seasonal and time of day wind roses for each of the surface meteorological stations. The wind direction at all three stations is determined by the surrounding topography which consists of multiple valleys that are generally orientated north-south. Launceston airport winds are largely determined by the Tamar Valley which is a small north-south valley system embedded in the much larger north-south valley in which both Cressy Research Centre and Westbury stations are located. Because of the elevated terrain just 4km to the northwest of Westbury Township, the Westbury met station is expected to have a more northwest-southeast orientated annual wind rose compared to either Launceston airport or Cressy Research centre.

The Westbury meteorological station records hourly values of wind speed, wind direction, temperature, relative humidity, rainfall and pressure. Although the station is located on the south side of some large buildings the data record is consistent and the data is of a good quality. There is very little missing data. The Westbury meteorological site provides a similar directional wind rose to the BOM weather stations but records a significantly higher percentage of calm and light winds than either of the BOM sites.

Because the data was generally of a good quality, the Westbury meteorological site which is located just a few kilometres from the proposed facility has been used. **Table A1** provides the number of hours of calm and light winds from each of the surface stations used in the modelling. It is possible that the calm weather is not a true reflection of the Westbury site and the building located directly to the north of it may be providing a shadow effect. However, its inclusion into the model is a conservative approach as calms and light wind conditions are expected to produce worst case dispersion conditions from the biofilter.

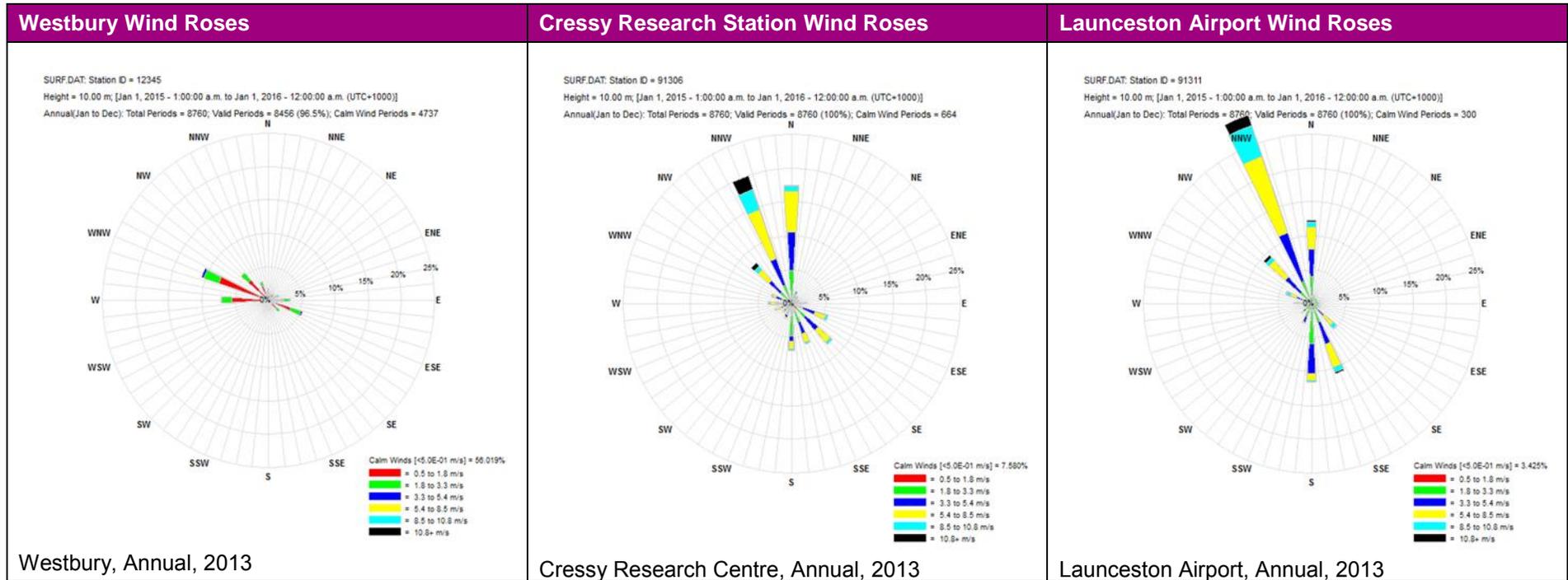
**Table A1** Number of hours of calms and light winds (< 0.5 m/s) at the three surface stations used in the modelling

Station Name	No. of hours where wind is <0.5 m/s	Percentage of year that is calm (< 0.5 m/s)
Westbury	4747	56%
Cressy Research Centre	664	7.6%
Launceston Airport	300	3.4%

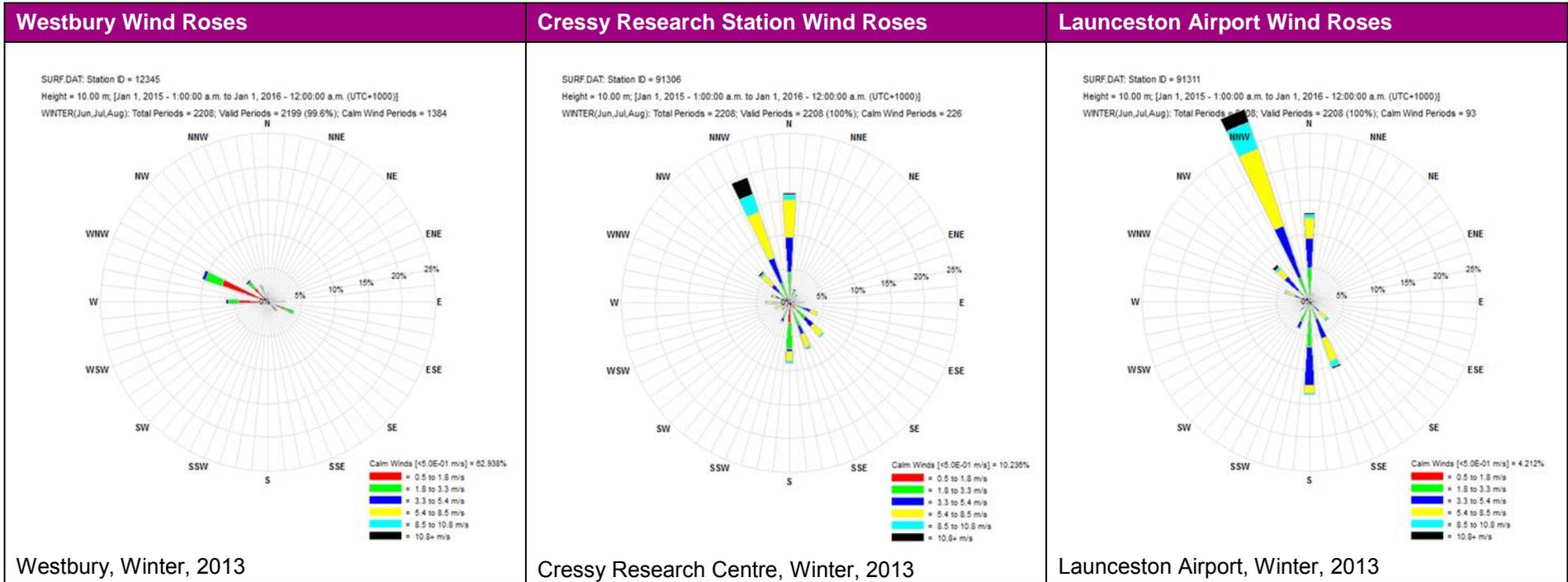
Based on the data presented in the following appendix and the analysis of the locations of the monitoring station, it was concluded that the meteorology is fit for use in this situation and is likely to result in conservative modelling results given the relatively high frequency of calm and light wind conditions observed in the meteorology.

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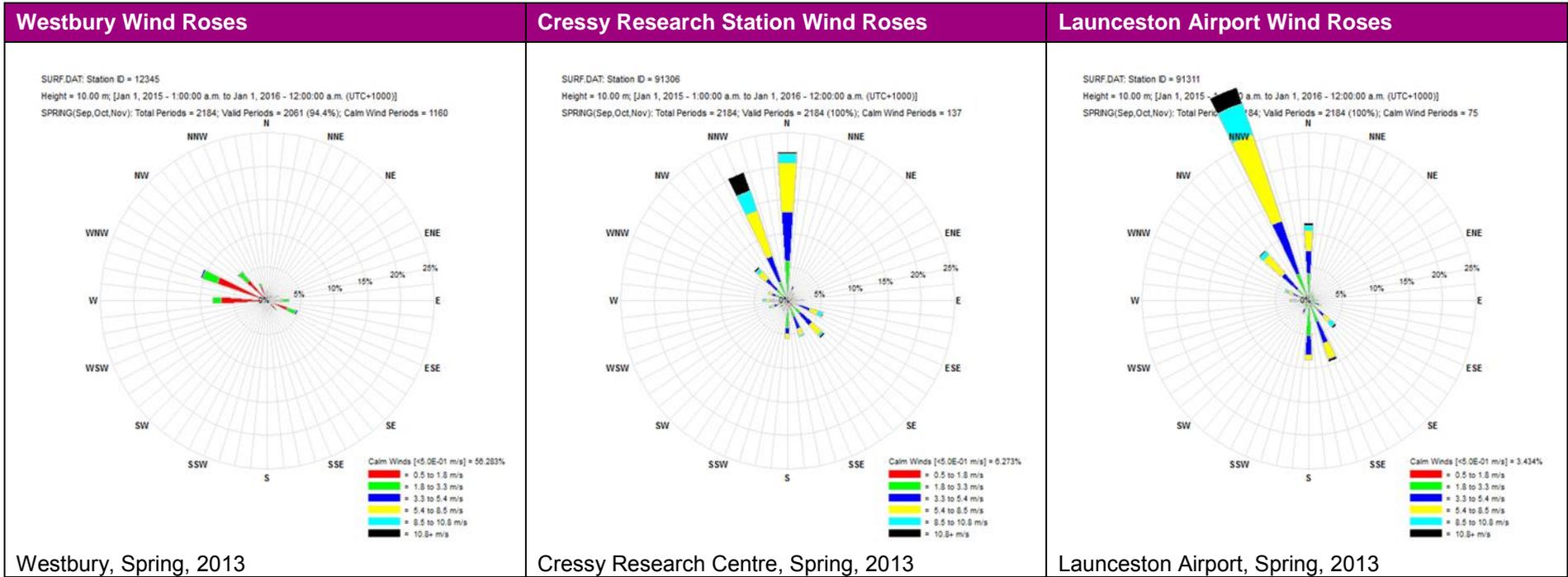
**Figure A.1 Surface Wind roses for Westbury, Cressy Research Centre and Launceston airport for 2013. Wind roses are by season and by time of day**



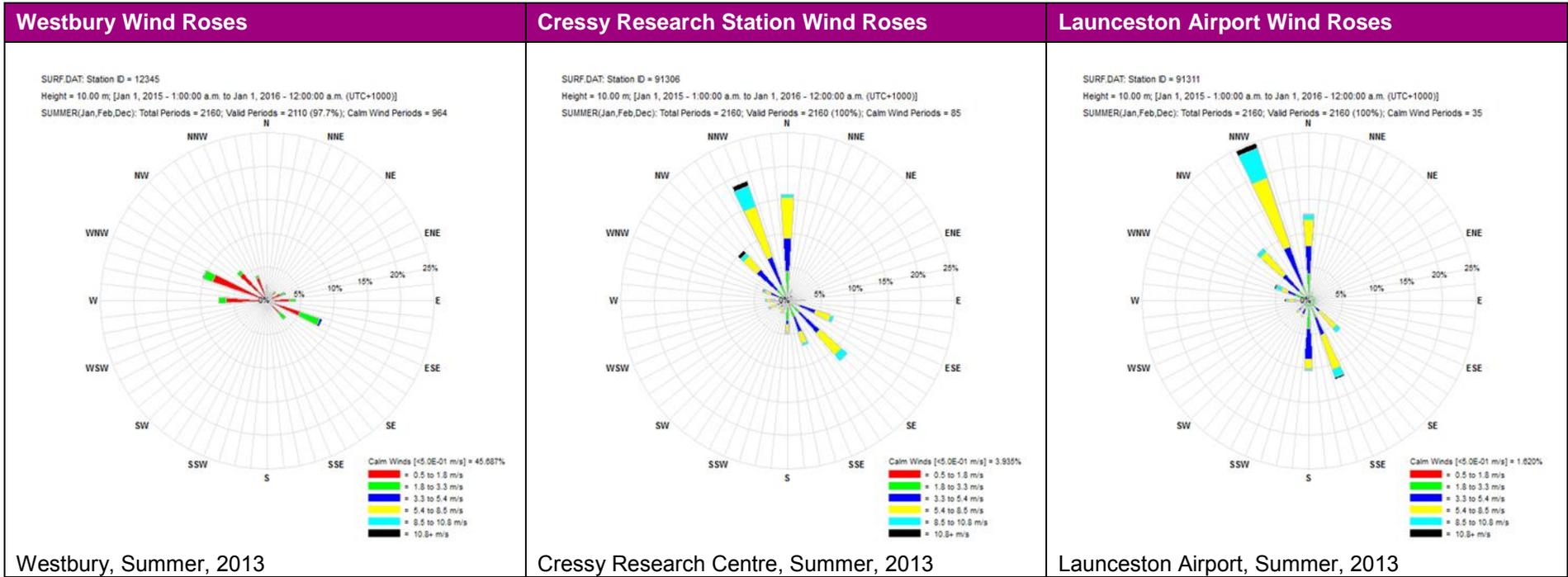
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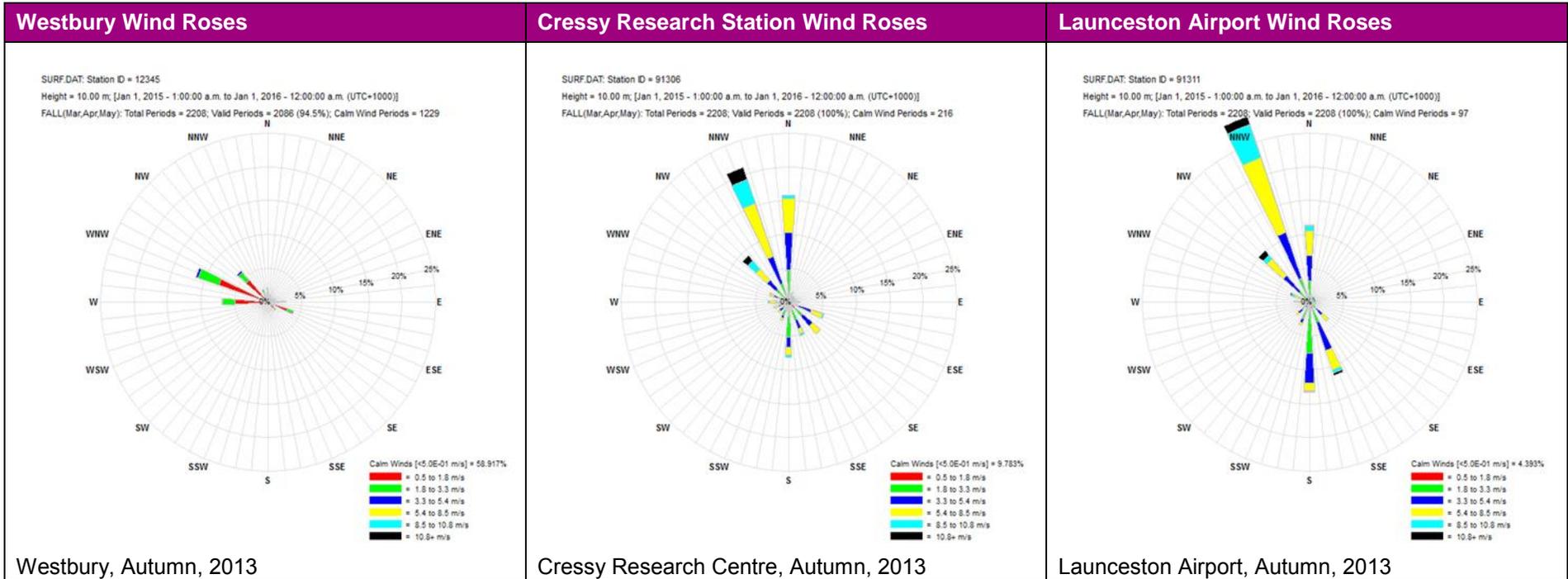
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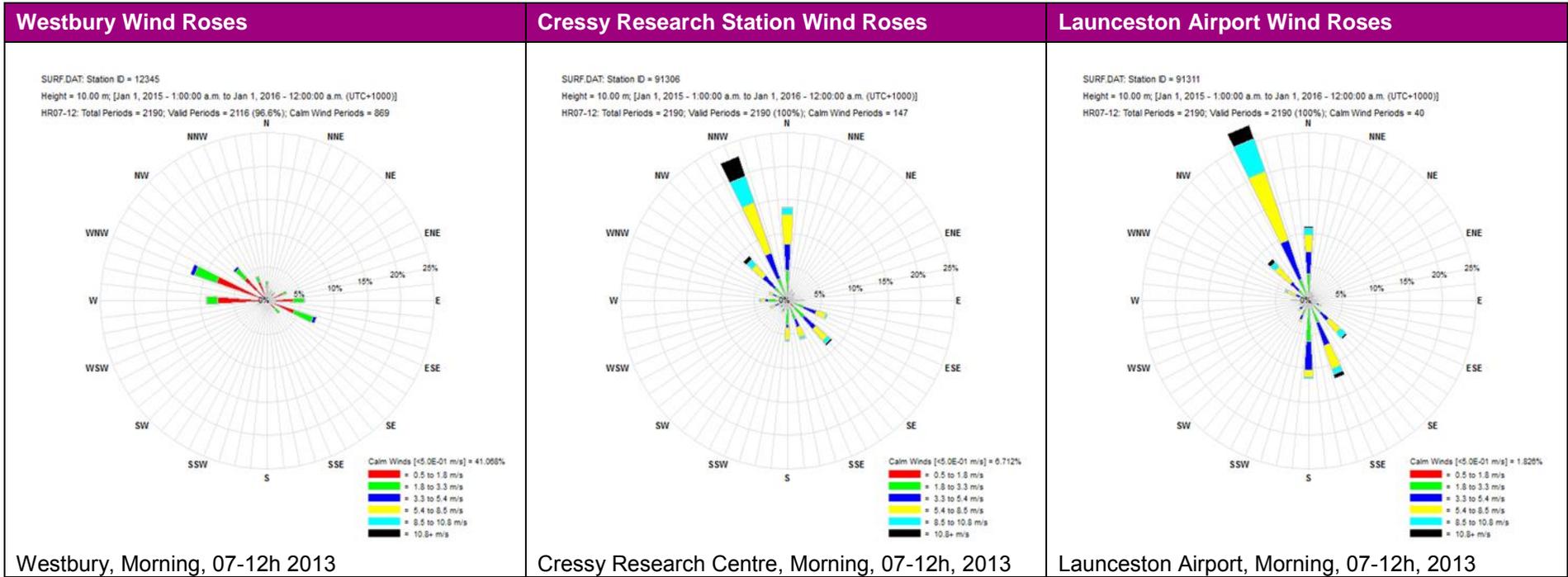
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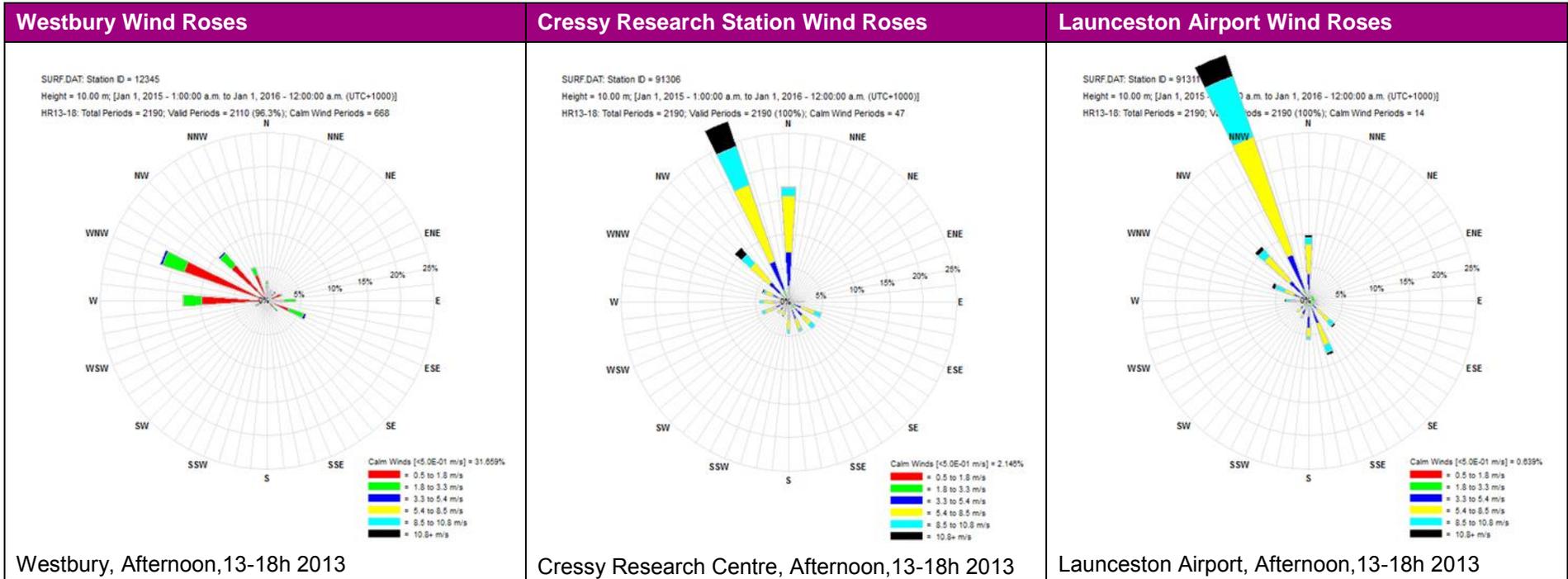
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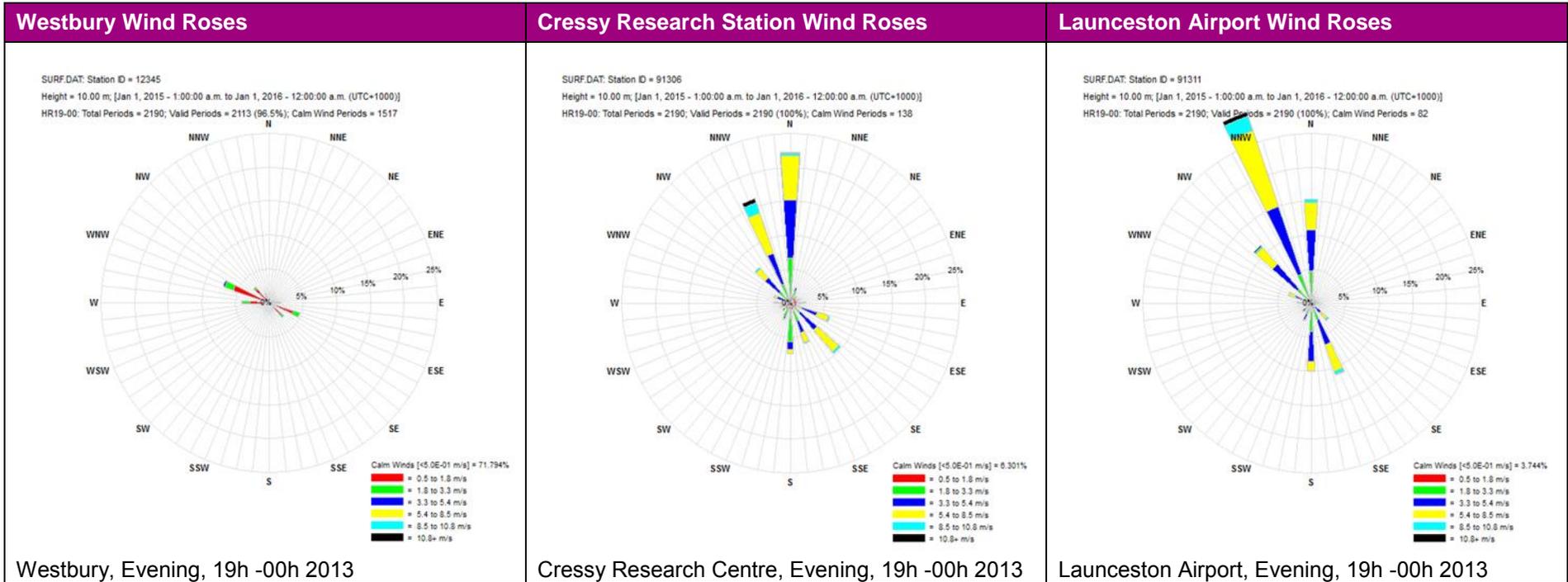
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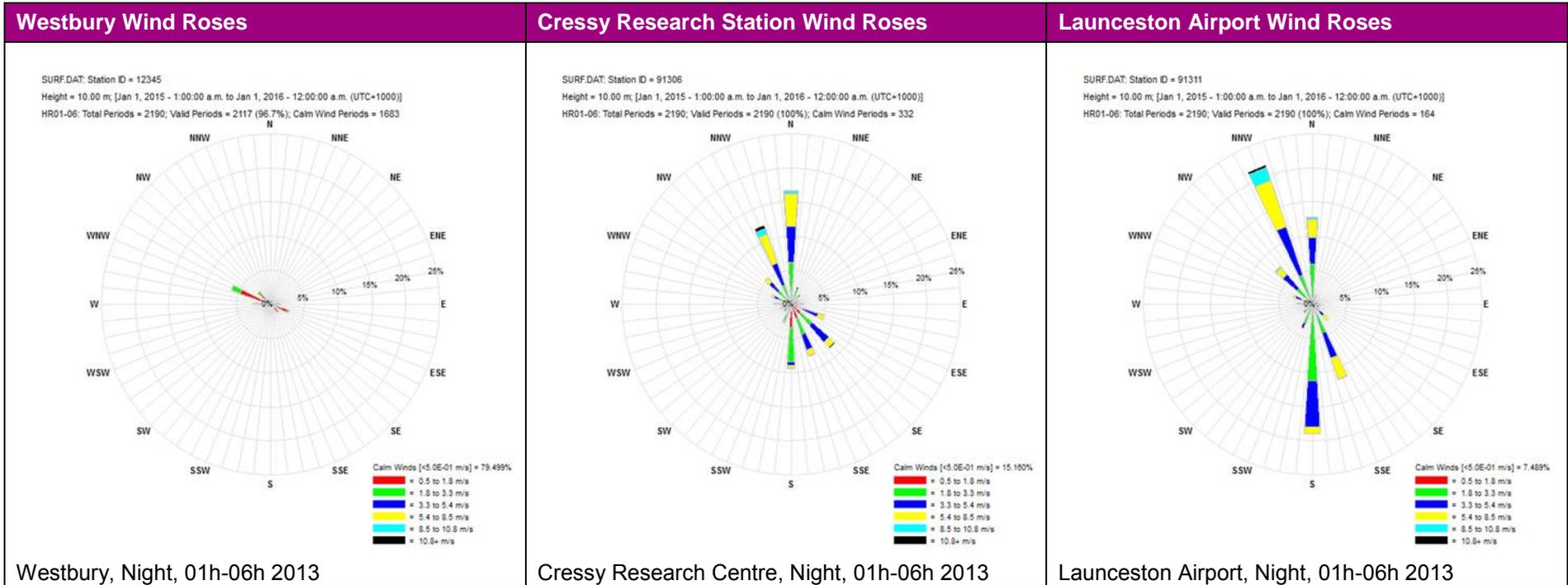
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**DRAFT****Table A.2 Wind speed and wind direction frequencies for Westbury Meteorological station for 2015. The sum over all wind directions is listed at the bottom of the table for all three surface stations.**

Wind Direction	0.5-1.8	1.8-3.3	3.3-5.4	5.4-8.5	8.5-10.8	> 10.8	SUM
North	1.57%	0.21%	0.02%	0.00%	0.00%	0.00%	1.81%
North North East	0.88%	0.08%	0.01%	0.00%	0.00%	0.00%	0.97%
North East	0.95%	0.14%	0.02%	0.00%	0.00%	0.00%	1.11%
East North East	1.40%	0.27%	0.01%	0.00%	0.00%	0.00%	1.68%
East	2.27%	0.90%	0.04%	0.00%	0.00%	0.00%	3.21%
East South East	3.47%	1.72%	0.20%	0.00%	0.00%	0.00%	5.38%
South East	1.63%	0.60%	0.04%	0.00%	0.00%	0.00%	2.27%
South South East	0.21%	0.02%	0.00%	0.00%	0.00%	0.00%	0.24%
South	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
South South West	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
South West	0.10%	0.01%	0.00%	0.00%	0.00%	0.00%	0.11%
West South West	0.85%	0.17%	0.00%	0.00%	0.00%	0.00%	1.02%
West	5.55%	1.48%	0.12%	0.00%	0.00%	0.00%	7.14%
West North West	7.89%	2.42%	0.32%	0.00%	0.00%	0.00%	10.63%
North West	4.07%	1.28%	0.15%	0.01%	0.00%	0.00%	5.51%
North North West	2.27%	0.60%	0.04%	0.00%	0.00%	0.00%	2.91%
Sum Westbury	33.09%	9.91%	0.97%	0.01%	0.00%	0.00%	43.9%
Sum Cressy Res	12.21%	22.49%	22.93%	24.94%	6.76%	3.08%	92.4%
Sum LauncestonAir	7.42%	22.97%	27.16%	27.65%	8.38%	3.00%	96.6%

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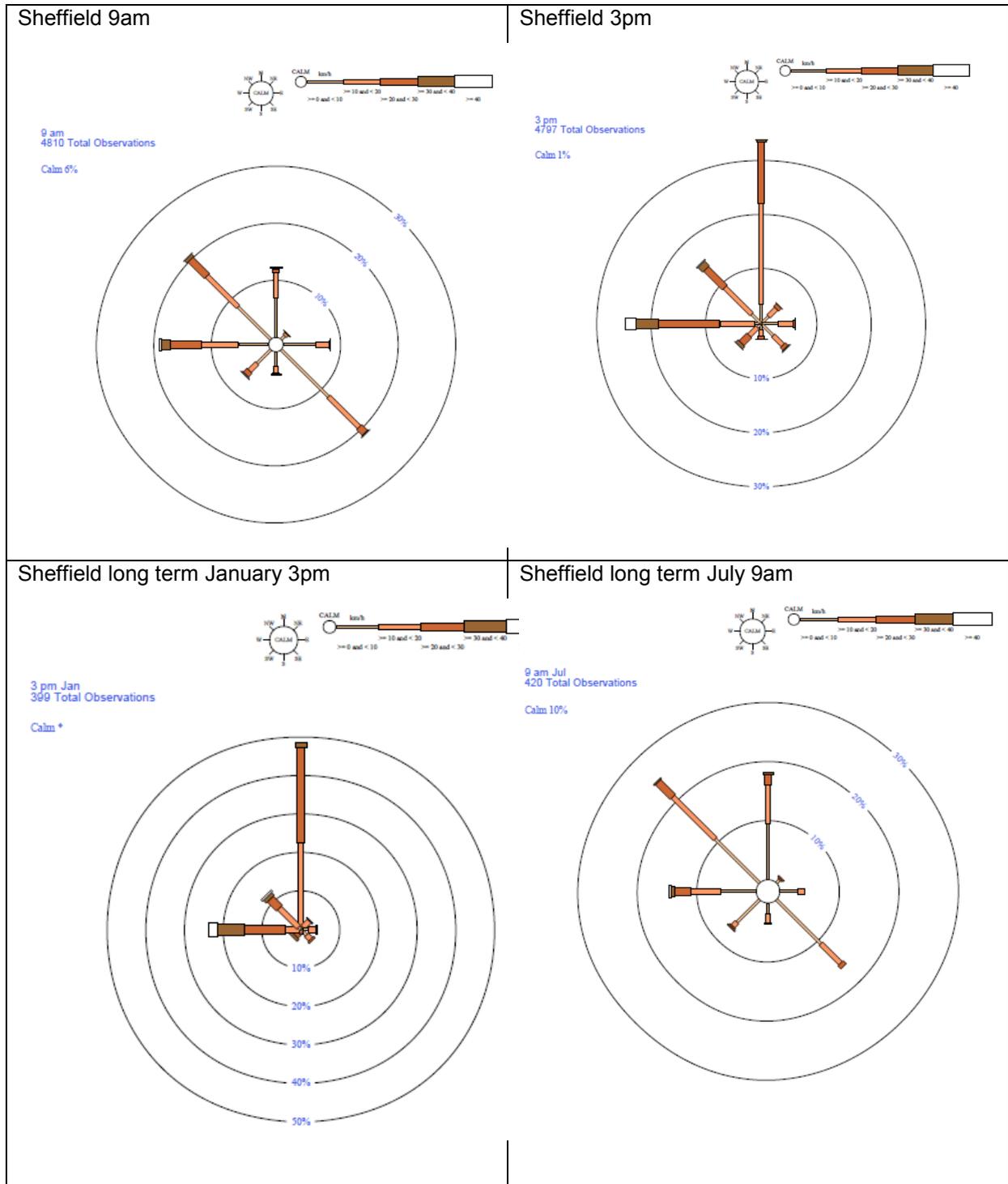


Figure A.2 BOM Station, Sheffield long term wind roses for 9am and 3pm.

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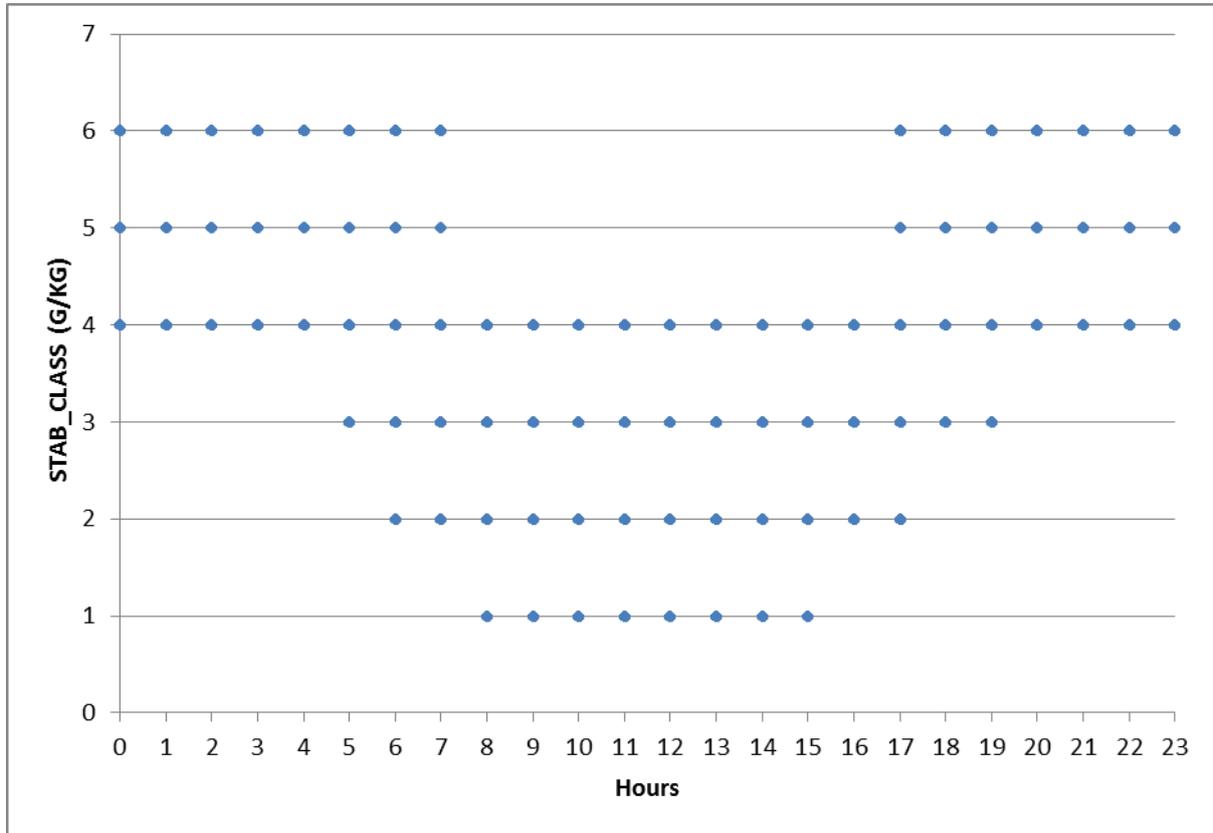


Figure A.3 Diurnal Stability Classes at Ridley Aqua Feed Mill. Output from TAPM but generated from Cloud data from Launceston Airport

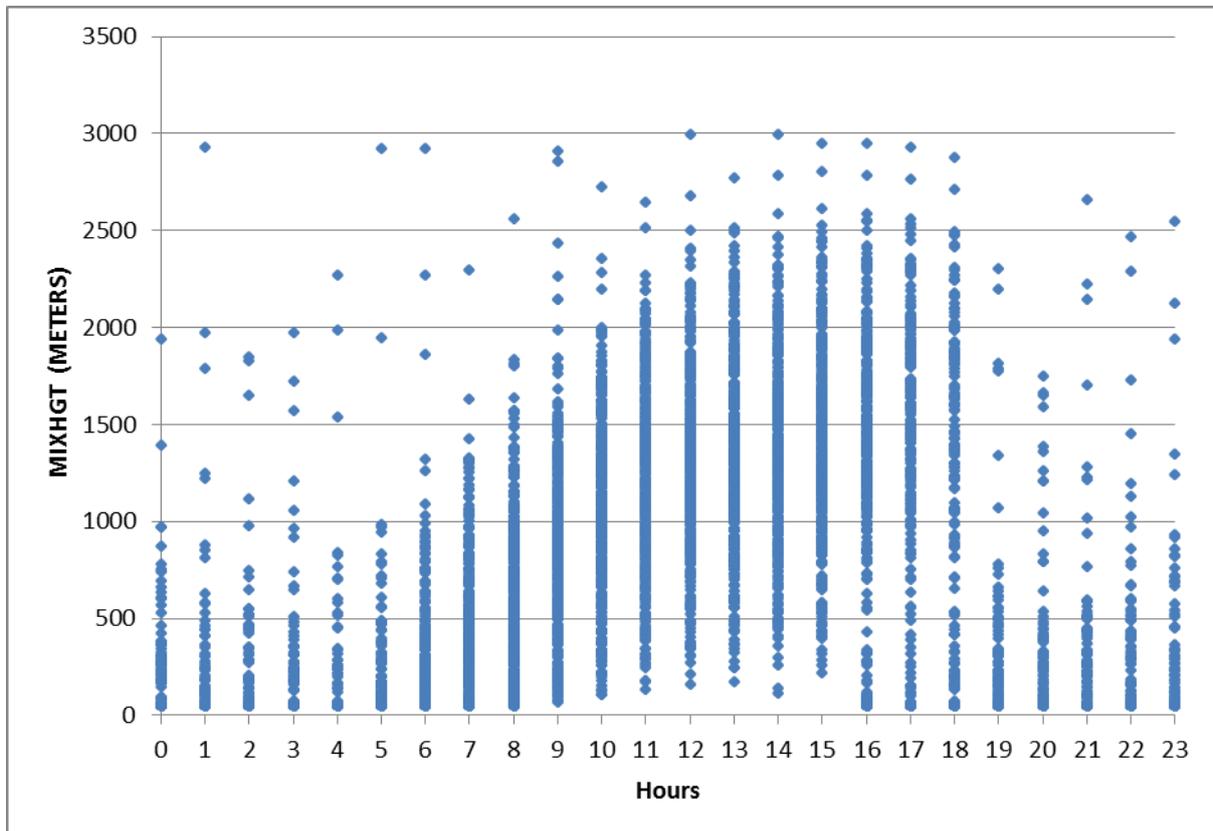


Figure A.4 Diurnal Scatterplot of Mixing Height (m) at Ridley Aqua Feed Mill for 2015.

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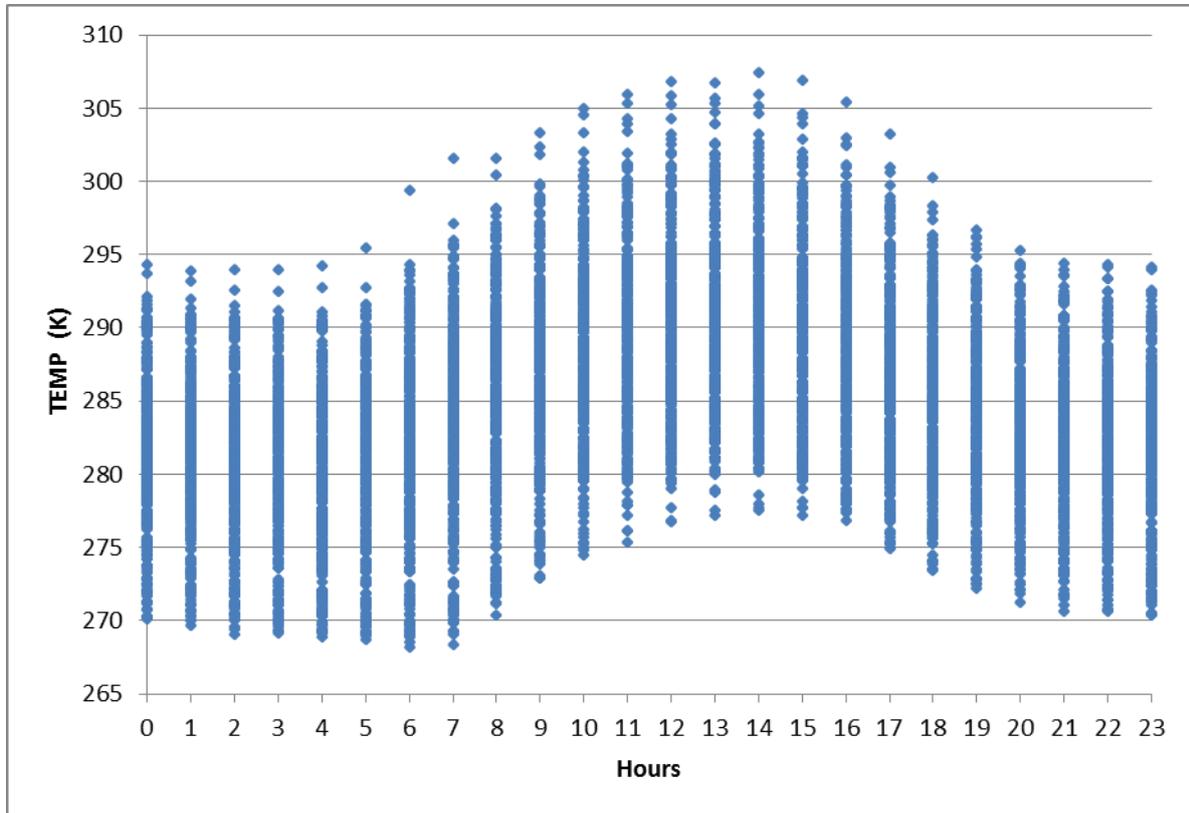


Figure A.5 Diurnal Scatterplot of Temperature (K) at Ridley Aqua Feed Mill for 2015.

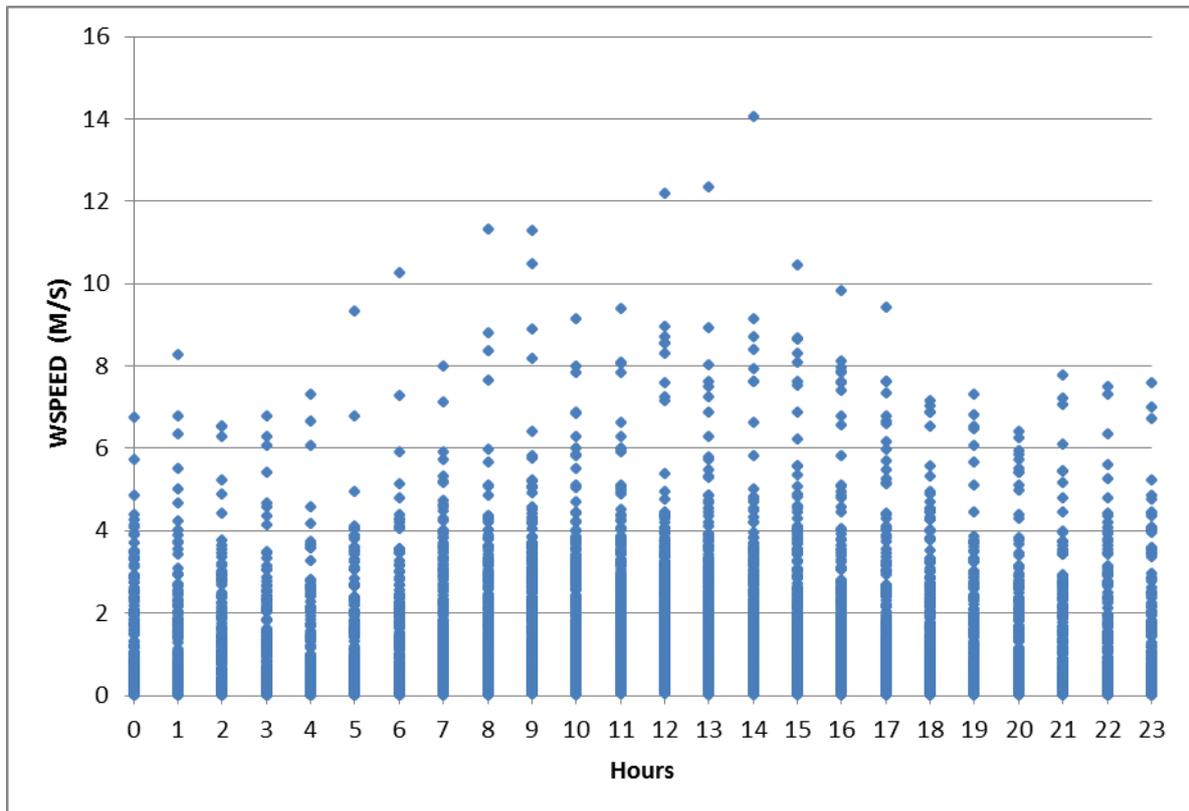


Figure A.6 Diurnal Scatterplot of Wind Speed (m/s) at Ridley Aqua Feed Mill for 2015.

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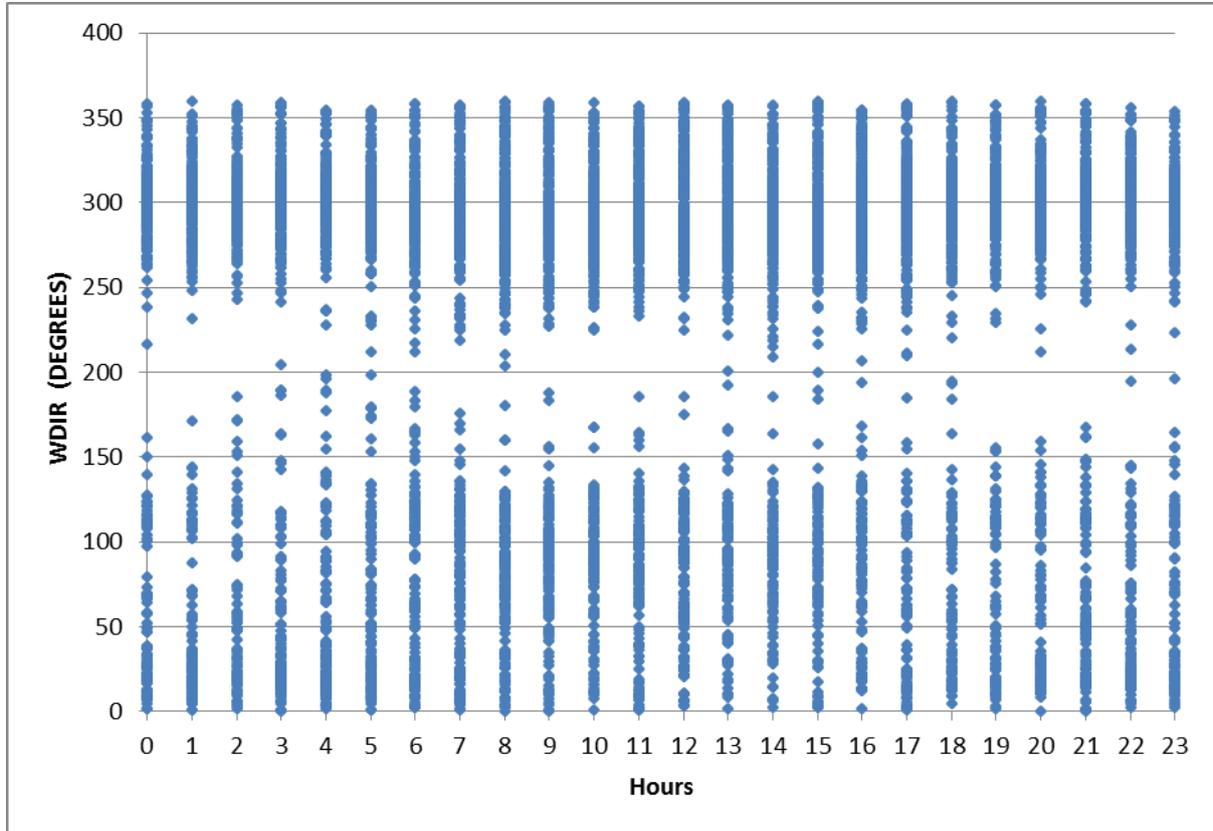


Figure A.7 Diurnal Scatterplot of Wind Direction (deg) at Ridley Aqua Feed Mill for 2015.



# **RIDLEY AGRIPRODUCTS PTY LTD**

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## **Odour Control System Manual and Biofilter Commissioning and Management Plan**

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### **Westbury Aqua Feed Plant**

August 2017

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**Project Number:** N2184

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Report Version	Date	Description
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Report Preparation		
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<b>Report title:</b> Ridley Agriproducts Pty Ltd, Westbury, TAS – Draft Odour Control System Manual and Biofilter Commissioning and Management Plan		

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# 1 INTRODUCTION

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## 1.1 BACKGROUND

In April 2017, Ridley Agriproducts Pty Ltd (Ridley) engaged The Odour Unit Pty Ltd (TOU) to develop a concept design for a biofilter-based odour control system (OCS) for a proposed aqua feed plant at Westbury, Tasmania. This concept design was accepted by Ridley and TOU was further retained to develop a detailed design for the OCS in August 2017.

The OCS design is based on a system capturing all of the major processing odours and the treatment of this air in a fully engineered, modern biofilter.

At the time of writing the detailed design is being developed from the concept originally proposed. The design process is on hold, pending formal approval for the development from the Tasmanian Environment Protection Authority (EPA).

This document is the first draft of the Odour Control System Operating Manual and Biofilter Management Plan. Its preparation has been brought forward as an aid to obtaining EPA approval for the development. It would normally be prepared prior to the commissioning of the OCS. The document contains background material on the biofiltration process, initial design details for the OCS, and operating and monitoring instructions for the system. It also contains information on the commissioning of the system. It does not contain design drawings of the OCS as these are still in development.

It is expected that the final version of the Odour Control System Operating Manual and Biofilter Management Plan will be completed in time for the commissioning of the Westbury plant.

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## 2 BIOFILTRATION

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### 2.1 GENERAL DESCRIPTION

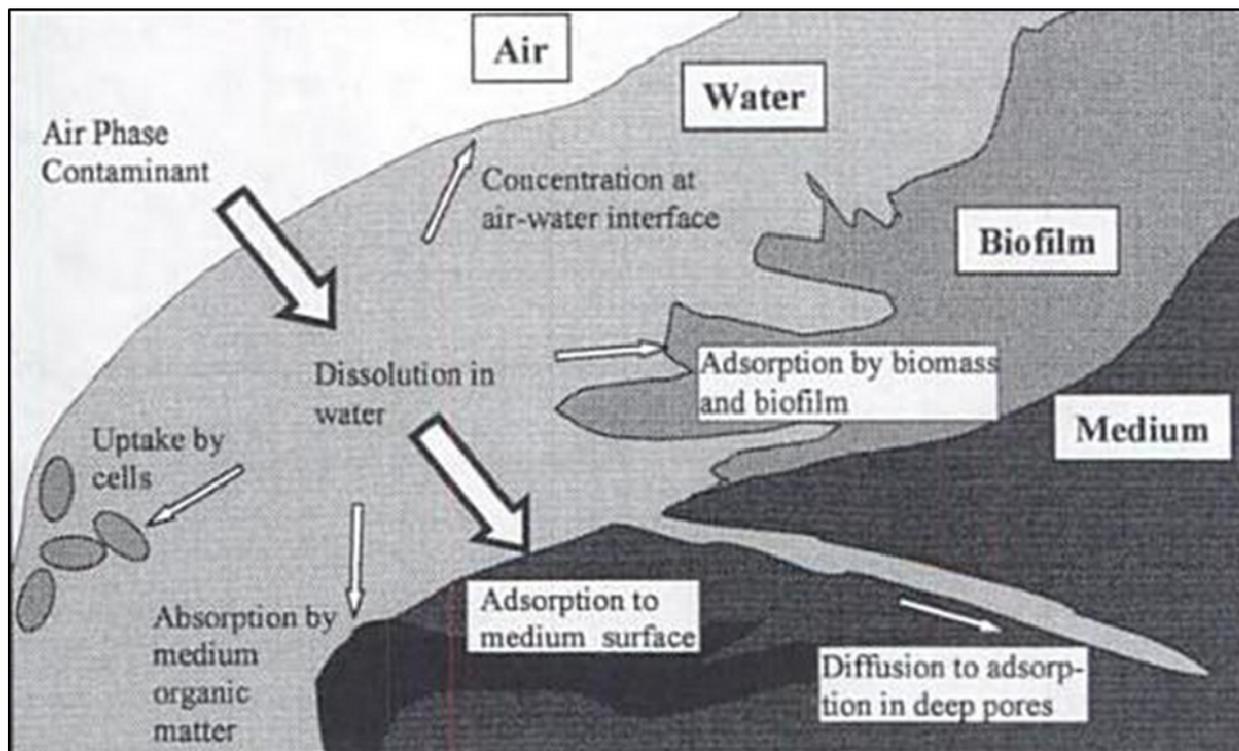
Biofiltration involves the biological oxidation of odorous compounds in the polluted air stream to non-odorous end products. The process typically occurs in a bed of organic bark and/or compost material, moistened to encourage the growth and sustenance of micro-organisms. A single passage of foul air through the biofilter bed is sufficient for adequate odour removal. Biofilters typically remove all of the odour character from the untreated air stream, substituting it with a mild odour from the organic medium. This odour is neutral in character and is not offensive or detectable at a distance from the biofilter.

The oxidation is carried out by micro-organisms carried in a medium which provides for intimate contact with the air. This medium may be earth, compost, bark, wood chips, etc. The material at the correct moisture contact should be porous, and for practical purposes a mixture giving a pressure drop of less than 0.5 kPa through a 1.5 to 2.0 metre depth is ideal.

Two actions occur in the medium including:

1. The odorous molecules are either adsorbed on to the surface of the solid material or are absorbed into the liquid film on the surface. This is a comparatively quick reaction in the short contact time of 30 – 60 seconds of the air in the biofilter. The efficiency of absorption depends on the characteristics of the molecule and of the number of hydrophilic or hydrophobic groupings it contains; and
2. The micro-organisms carry out the biological oxidation. This is a much slower reaction and may take minutes, hours, or even days.

Equilibrium will be set up between the rate of absorption and the rate of oxidation and this will determine the maximum quantities of odorants which may be removed. **Figure 2.1** illustrates the basic mechanisms for biofiltration of odorous compounds.



**Figure 2.1** – Basic mechanisms for biofiltration of odorous compounds  
(Image source: Deving JS et al, 1999)

## 2.2 AIR PRE-TREATMENT

The performance of a biofilter will be dependent on the quality of the odorous air to be treated. This depends upon a number of parameters including temperature, solids and humidity.

### 2.2.1 Temperature

The aerobic micro-organisms in biofilters are living creatures and the majority have a practical upper operating limit of 45°C. Up to this temperature the normal laws of biological activity apply and a 10°C rise in temperature will result in a doubling of the oxidation rate. Thus at very low temperatures the reaction will become slow. With respect to the absorption process, the reverse will apply as gases become less soluble in water as the temperature rises.

The desirable maximum temperature for air being treated in a biofilter is 45°C. While higher temperatures of up to 50°C are possible, problems can occur with accelerated decomposition of the biofilter medium, with resultant excessive pressure losses and moisture control problems.

### 2.2.2 Solids

If possible, all particulate matter should be removed as this will block the biofilter and necessitate premature replacement of the medium. Thus it is necessary to take care on exhaust air from many industrial processes and preconditioning of these exhaust airstreams should be undertaken. There are several options for this, and the type of option will depend upon the design requirements.

As with most aqua feed plant systems, no solids removal control will be required for the Westbury airstream other than the foul air humidification system installed upstream of the biofilter.

### 2.2.3 Humidity

It is necessary that the inlet air to the biofilter is as close as possible to 100% relative humidity (R.H.). Without this the bed can dry out, microbial activity is reduced and short circuiting of the odorous air stream can occur. As such, it is desirable to use a packed, spray type humidifier vessel and/or an air atomised spray humidification system to saturate the airstream prior to biofiltration. The type of humidification system/s selected will depend on design requirements.

It is generally found that even with an efficient humidifier or in-duct spray humidification system it is difficult (however not impossible) to achieve greater than 85% R.H. and the bed can gradually dry out in hot weather conditions. Under such conditions an irrigation system on the top of the bed using garden sprinklers or a drip irrigation system actuated by a timer is generally employed to assist in countering this effect. It is important to note, however, that excessive water application may give problems due to water logging as the biofilter bed ages, and result in uneven airflow due to varying pressure drops arising from uneven bed moisture.

To achieve the desired air humidity levels at the Westbury plant a dedicated humidifier/scrubber unit will be installed (see **Section 3.4** for details). This vessel will be designed by TOU to saturate the airstream to approximately 95% R.H. The biofilter will be supplemented by a drip irrigation system on the bed surface to prevent the bed from drying out.

## 2.3 SIZE AND LOADING RATES

Normally this is defined in terms of specific surface flow rate of foul air, and is stated as flow through a unit area, irrespective of bed depth, i.e.  $\text{m}^3/\text{m}^2/\text{hr}$ . The range of values may depend upon the characteristics and biodegradability of the foul air stream and varies between a highly conservative  $30 \text{ m}^3/\text{m}^2/\text{hr}$  for a simple soil bed biofilter on sewage applications, to over  $200 \text{ m}^3/\text{m}^2/\text{hr}$  for conventional biofilters. Some of the specialised, modular 'off-the-shelf' units are loaded as high as  $300 \text{ m}^3/\text{m}^2/\text{hr}$ , but with mixed results.

In recent years the bed depth of biofilter media has increased from the 'standard' 1.0 metre to up to 2.0 metres. Clearly the depth of the medium will affect odour removal performance, for a given surface loading rate. In the case of the Westbury biofilter a bed depth of 2.0 metres has been selected, across a total biofilter surface area of  $540 \text{ m}^2$ . The design airflow capacity for the biofilters is  $77,500 \text{ m}^3/\text{hr}$ , equivalent to a surface loading rate of  $180 \text{ m}^3/\text{m}^2/\text{hr}$ . This is equivalent to a specific volumetric loading rate of  $100 \text{ m}^3/\text{m}^3/\text{hr}$ . At these loading rates, the Empty Bed Retention Time (EBRT), that is the theoretical time it will take for untreated air to pass through the biofilter bed if it were empty, is 36 seconds. Based on TOU's experience, this is a conservative loading rate, and higher loadings may be possible in the future, without adversely affecting odour removal performance.

## 2.4 BIOFILTER MEDIUM

The aim is to provide a material with the maximum possible surface area for absorption and for support of the biomass but with the minimum pressure drop through it. The medium also needs to have 'structural' strength, to maximise its operating life. These three aims can be conflicting and a compromise is usually necessary. The medium also provides a source of nutrients to the micro-organisms, as the medium slowly breaks down.

In addition, it is necessary that the medium be free draining to allow removal of excess water from rainstorm. A well formulated composition will equilibrate in the range of 45% to 55% moisture content in the presence of air at 100% R.H. and this is the ideal. The medium mixture normally consists of a blend from components such as various

barks, composted materials of a fibrous nature, and in some cases wood chips. The exact composition depends largely on local availability of suitable materials. TOU has found that the composition of the medium is not a critical factor in sustainable good biological performance, provided that sufficient organic material is included.

The requirements are for a reasonable resistance to flow, equivalent to 0.2 to 1.0 kPa, for the design bed depth. This will enable good lateral air distribution in the plenum area beneath the biofilter bed, and minimise power consumption by the biofilter fan. In addition, a reasonable structural strength is required so that there is minimal compression under the weight of material on the top.

The life of the medium will depend on the composition of the material and the operating conditions but should be of the order of four to five years. Over this period of time there will be gradual breakdown of the structure with shrinkage away from the cell walls and a slow increase in pressure drop across the beds. This breakdown could be accelerated with high temperatures and pH conditions. At the end of this period the medium may be replaced completely, or else removed, mixed with fibrous material such as bark and reused. In some instances, at the mid-point of the life of the medium, the beds may be topped-up with fresh material without disturbing the existing medium.

It is desirable that weed growth be discouraged although adverse impacts on air distribution are unlikely for low weed cover. It is worth covering the medium with a layer of 100 mm of bark or wood chips. Any weeds should be removed.

## 2.5 MICRO-ORGANISMS

These are the working heart of the biofilter and the design should ensure optimal conditions for them. Analysis of the medium shows very large populations (in the order of  $10^9$ /g) comprising a range of bacteria, fungi, and actinomycetes as the principal components.

Biofiltration studies have been carried out in the laboratory on the oxidation of single compounds with a single strain of bacteria and optimal conditions determined. However, in practice it has been found that the types in the original inoculum usually

have disappeared over a period of months and have been replaced by other species, suited to the odorants present.

Accordingly it is considered that on a practical level it is usually not worth inoculating with specific micro-organisms since there is always a wide range of odorous compounds to deal with and the particular types necessary to deal with these compounds will begin to proliferate and prosper over a period in any case. For this reason it is not generally necessary or beneficial to monitor microbial cultures in the biofilter. The primary emphasis in operating a biofilter should be to provide optimum environmental conditions in the biofilter bed for microbial growth (moisture, temperature, surface area and nutrients). Inoculation can be used, however, in some instances to accelerate microbial growth, especially in the event where the compounds in the untreated airstream are well established.

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## 3 ODOUR CONTROL SYSTEM DESCRIPTION

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The OCS at Westbury will consist of three key components including:

1. A new collection duct system extracting process air from all significant aqua feed processing units;
2. A packed-bed humidifier/scrubber vessel; and
3. The Biofilter.

### 3.1 COLLECTION SYSTEM DESIGN DETAILS

#### 3.1.1 Design Airflows

In developing a design for the OCS each process unit within the plant was allocated a design airflow from that collection point, sufficient for good capture of all odorous process emissions. Each of these individual process unit airflows has been combined into the Total Process Airflow for the plant. In practice actual airflows may differ slightly from the design flows once the collection system is flow and pressure-balanced during commissioning.

The design of the internal collection system has been carried out by Grintec, the company supplying the processing equipment. The design of the external ductwork, humidifier and fan will be completed by TOU. The Total Process Airflow is 77,500 m<sup>3</sup>/hr. The breakdown of the Process Airflow is shown in **Table 3.1**. It can be seen that the raw materials and receivals area is not connected to the OCS, on the basis that this area is unlikely to be odorous.

The OCS is depicted in **Table 3.1**. This shows the airflows and collection points. It should be noted that not all process airflows will operate continuously. For example, the Raw Materials Receival Pit area will contain raw materials for only one hour at a time, several times daily. Outside of these times it may be possible to reduce the airflow to the biofilter by 25,000 m<sup>3</sup>/hr.

<b>Table 3.1 – Process airflows to biofilter</b>	
<b>Process Item</b>	<b>Airflow (m<sup>3</sup>/hr)</b>
Raw Materials Receiving Area	25,000 (intermittent)
Hammer Mill	10,000
Flash Off	7,500
Dryer	30,000
Product Cooler	30,000
<b>Design Maximum Airflow: 102,500 m<sup>3</sup>/hr</b>	
<b>Design Base Airflow: 77,500 m<sup>3</sup>/hr</b>	

DRAFT

### 3.2 DUCTING

Process airflows will be conveyed by 304 Stainless Steel ducting internal and external to the building, to the humidifier, fan and biofilter. The diameter of this duct will be 1500 mm. The fan will discharge into the biofilter distribution chamber.

### 3.3 BIOFILTER - DESIGN CONCEPT

The OCS consists of a point-source capture system for the most odorous process units, with this process airstream treated in a new biofilter. It is TOU's experience that the capture and treatment of process air, in the manner proposed, will result in only 5-10% of the odour generated in the aqua feed plant being discharged into the aqua feed environment, and ultimately to the atmosphere (i.e. 90-95% odour destruction).

The collected airstream will be humidified before biofiltration. Humidification of the air to approximately 85% relative humidity (RH) is required to ensure sustainable, strong biofilter performance. Lower levels will invariably result in uneven and possibly dry patches in the biofilter medium, and incomplete odour removal. Inadequate humidification is the single largest reason for poor biofilter performance in Australia.

#### 3.3.1 Biofilter Fan

The OCS is powered by a centrifugal fan located adjacent to the biofilter. This fan will be sized to draw process air from all the point source airflows (102,500 m<sup>3</sup>/hr), but will be able to operate at the base flow of 77,500 m<sup>3</sup>/hr. The individual airflows will be adjusted and balanced by dampers on each of the main branch ducts and most of the source ducts. The specifications for the fan are summarised below in **Table 3.2**.

<b>Table 3.2 - Westbury Biofilter Fan Specifications</b>	
<b>Fan Type</b>	<b>Centrifugal</b>
<b>Materials</b>	All wetted parts in 304 Stainless Steel
<b>Capacity</b>	102,500 m <sup>3</sup> /hr
<b>Pressure Duty</b>	3.5 kPa
<b>Power Draw/Motor</b>	120 kW / 160 kW
<b>Speed Control</b>	Variable speed drive (VSD)

The actual airflow at commissioning should be set to the design flow at the initial low biofilter back-pressure by the use of the VSD. The VSD ensures that full design airflow can be achieved right up to the end of the life of the biofilter medium, when the biofilter back-pressure will have increased to 2.0-2.5 kPa.

### 3.3.2 Biofilter Details

The biofilter will be designed for the maximum design airflow of 102,500 m<sup>3</sup>/hr, but will operate at a reduced base flow of 77,500 m<sup>3</sup>/hr, except when the raw materials receipt system is in operation (for approximately one hour, several times per day). Under these conditions the biofilter will be under loaded for the majority of the time.

**Table 3.3** below outlines the design specifications for the biofilter. While the technical specifications for the biofilter are not expected to change, the layout and configuration of the biofilter will be subject to site availability and may vary from the 3-cell arrangement depicted in the photo.

<b>Table 3.3 - Westbury Biofilter Operating Specifications</b>	
<b>Specification</b>	<b>Value</b>
<b>Area</b>	540 m <sup>2</sup>
<b>Configuration</b>	Two or three cell, 'hopper-front', open bed (see example photo below)
<b>Air distribution</b>	Full plenum distribution chamber
<b>Depth of medium</b>	2.0 m
<b>Temperature</b>	45°C (max.)
<b>Design Flow rate</b>	102,500 m <sup>3</sup> /hr (max.), 77,500 m <sup>3</sup> /hr (base)
<b>Specific loading rates (at max. flow)</b>	190 m <sup>3</sup> /m <sup>2</sup> /hr 95 m <sup>3</sup> /m <sup>3</sup> /hr 38 seconds EBRT
<b>Plenum floor</b>	Proprietary TOU design, full cavity floor
<b>Biofilter medium</b>	TOU proprietary medium, based on oversized composted and bark material sourced locally
<b>Pressure drop across medium</b>	0.1 to 0.5 kPa (new medium) Up to 2.5 kPa (exhausted medium)
<b>Air inlet</b>	Horizontally, into end of distribution plenum chamber



Photo of biofilter of similar design to that proposed

### 3.3.3 Biofilter Medium Details

The medium for the biofilter will be a blend of materials sourced from locally available materials. This blend is a proprietary TOU formula and consists broadly of an oversized partially-composted fraction, mixed with bark nuggets and other organic materials. The life of the medium is expected to be 4-5 years, with a mid-life cycle 'refreshing' of the media expected after 24-30 months from the commissioning date. This involves loosening and turning the medium, and incorporating some new medium if required. Replacement of the entire medium will require the old medium to be removed and new material installed in the same manner as the existing medium. When reloading the new medium an additional 30% to the calculated medium volume is needed, to allow for consolidation and compaction during placement. Some incorporation of the spent medium is recommended to serve as an inoculant to the new medium.

The medium will be loaded by means of a long reach excavator. This machine will load the medium from the open front of the cells, depositing it carefully across the cell. It is not desirable to bulk-load the cells by dropping the medium in the centre of the cell and allowing it to distribute to the walls, as this results in segregation of the medium and air distribution problems.

To minimise and manage odour during medium replacement period's medium can, if needed, be replaced one bay at a time, during processing periods. This will have no effect of the biofilter performance. The alternative is to replace all three beds on weekends or during shutdown periods when the plant is not running. Spent material will contain no contamination and can be disposed of to land.

### 3.4 INLET BIOFILTER AIRSTREAM CONDITIONING

The need to condition the airstream prior to biofiltration consists of two key performance parameters including:

1. Relative humidity level of the airstream; and
2. Temperature.

A biofilter requires the biofilter medium in the beds to be adequately moistened in order to maintain sustainable performance. It is TOU's experience that inadequate bed moisture control is the single largest contributor to poor biofilter performance, and that the air to a biofilter should be as close to saturation as possible under all climatic conditions. In this case a two-stage approach to achieving this objective has been selected. Humidification of the inlet airstream to the biofilter will be the primary means of achieving bed moisture control, and involve the use of a dedicated humidifier/scrubber vessel.

This pre-conditioning of the airstream brings about adiabatic cooling of the airstream and an increase to relative humidity to near saturation levels. The humidifier system is described in **Section 3.4.1**.

#### 3.4.1 Humidifier Design

Due to likelihood that the inlet air flows will at times be less than fully saturated, it is essential to humidify the air stream prior to biofiltration. For the biofilter inlet airstream, this will be achieved by a humidifier/scrubber installed on the suction side of the biofilter fan. The system will be designed in-house by TOU and manufactured specifically for this application.

The humidifier system will be designed for the base airflow of 77,500 m<sup>3</sup>/hr and be capable of operating for short periods at the maximum airflow of 102,500 m<sup>3</sup>/hr. It will feature a humidifier vessel with the following specifications:

Design:	single-stage, counter-current, packed bed vessel
Material:	304 stainless steel or GRP
Colour:	SS or green
Diameter:	3.3m
Height:	7.0 m
Packing depth:	1.4m of random packing (Tellerettes)
Ducting diameter	1500 mm
Motor:	One 7.5 kW (approx.) liquor recirculation pump

The humidifier will utilise a counter-current air/water flow design, with a target performance of better than 90% relative humidity in the biofilter inlet airstream. A single recirculation pump at the base of each vessel will recirculate scrubbing water from the base of the vessel to the spray nozzle above the packing layer. The scrubbing liquor will need to be systematically removed from the vessel and disposed of to trade waste. This can be via a continuous slow bleed from the vessel, or through the entire contents being dumped on a regular basis.

### 3.4.2 Biofilter Bed Surface Drip Irrigation Systems

A secondary biofilter humidification system has been designed, in the form of surface drip irrigation system on the biofilter beds. This system is timer-controlled from a localised control box mounted on the southern end of the biofilter. The drip irrigation system will be a commercial system used in the horticultural industry. As the secondary biofilter humidification system, this system should be operated only when additional moisture is needed in the biofilter bed. A typical operating regime would be 10-30 minutes of operation 3-6 times daily, depending on seasonal conditions.

The drip lines are positioned at 300 mm centres across the bed, and will have drip holes also at 300 mm centres. The drip irrigation system will be installed by a local contractor, as part of the TOU biofilter internals supply-and-install package.

### 3.4.3 Drainage

Leachate from each cell of the biofilter will drain across the plenum floor to a spoon drain which will be constructed at the end distant from the inlet. It is collected there and removed to one of the two common sumps by means of a 75 mm line with an 'S' bend type water seal to prevent loss of untreated air. These may be removed in the event of blockage and a hose inserted for clearing. The 'S' bend type water seal also needs to be visible for the operator to inspect the drainage from the biofilter plenum. This leachate is then pumped to Trade Waste, along with the humidifier 'blow-down' liquor.

### 3.5 BIOFILTER LOADING RATE

TOU has found that the odour destruction performance of this type of biofilter is not dependent to any significant extent on inlet odour concentrations, in aqua feed processing plant applications. The proposed EBRT loading of 38 seconds has been proven to be conservative for this application, with loadings as low as 30 seconds still able to achieve satisfactory performance.

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## 4 BIOFILTER COMMISSIONING AND OPERATION

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### 4.1 COMMISSIONING

A well designed odour collection system will start up with more than adequate airflows at each of the process unit collection points, sufficient to capture all odorous emissions. In the first few days the system will be flow balanced to optimise capture efficiency in order to use the available airflows to best advantage, but in general terms the system works well from the first day of operation.

It is TOU's strong experience that a well-designed biofilter will work well from the time it is commissioned, removing the required level of odour from the inlet air stream. There are two reasons for this. Firstly, a biofilter has a large odour adsorption capacity, by virtue of the large and damp mass of biofilter medium and its very large surface area. Secondly, and most significantly, the biofilter medium, being based on a range of composted materials, is biologically active from day one. Over several weeks the biomass in and on the medium will continue to acclimatise to the specific odour compounds present in the air stream, but will be sufficiently active at commissioning to remove enough odour so as not to cause off-site odour impacts. Indeed, aqua feed processing plant biofilters are amongst the easiest to commission by virtue of the readily biodegradable nature of the odour compounds forming the odour (mostly aldehydes and ketones). There is therefore little need for microbiological examination of the biomass in the biofilter during the commissioning phase.

The key to maximising the action of both of the above effects is to ensure that the biofilter medium is close to its optimum moisture level before turning on the system. This must be part of the commissioning process.

The operation of the Ridley biofilter will be comparatively simple and normally changes will occur very gradually. TOU has found clearly that a most important factor leading to good biofilter operation is the appointment of one person to manage the biofilter's efficient operation. In this way one person will be responsible for the operation, maintenance and monitoring of the biofilter systems. Biofilters that are not regularly checked have a tendency to suffer problems, usually in the bed moisture control area.

## 4.2 MONITORING

A suggested monitoring routine is outlined below.

### 4.2.1 Daily Biofilter Management Procedures

- Inspect the biofilter system and check that the fan is running and the humidification system is operating.
- Check the drainage sumps, particularly the delivery from the drains. This should be a steady, fast drip or dribble. Too little suggests insufficient irrigation and too much suggests over-irrigation.
- Check the temperature of the foul air stream into the biofilters (post-fan).
- Check the under bed pressure in the inlet air distribution chambers.
- Check above each bed and downwind for any odours. Check the surface of the medium for dry patches and adjust watering regime if necessary. Particularly note any odours or dry areas around the walls. Log any adverse results. Identify any areas where odour and/or short-circuiting may be occurring and rectify as required.

### 4.2.2 Weekly Biofilter Management Procedures

- Check and record the back-pressure into the biofilter, as indicated by the fixed pressure gauges at the end of the inlet chambers. It is desirable that the back-pressures be graphed, as to demonstrate any sudden changes that may have occurred from the previous operating period. This gives assistance when the six monthly checks are carried out. A gradual falling in back pressure may indicate that the beds are drying out. A sudden increase indicates over-watering or accumulation of water in the plenum, while a gradual increase over a period of years indicates normal bed consolidation.
- Inspect the top surface of the biofilters. Remove any weeds. If the problem is persistent the use of a light surface spray of herbicide is acceptable (e.g. Roundup). Check for any dry spots. If these occur, water well with a hand hose or sprinkler and consolidate the area by tramping. These are most likely at the inlet chamber/medium interface. During filling these areas were filled a little higher and given extra tramping to consolidate. In the event that any problems develop it may be necessary to spread extra compost and compact well.

- Inspect the action of the irrigation drippers. Check that the surface of the beds is uniformly moist and that all drippers are free from blockages. Adjust irrigation timer if necessary.
- Check that negative pressures are being maintained within the foul air collection systems, by observing process air capture at the extremities of the system.

#### **4.2.3 Monthly Biofilter Management Procedures**

- Measure and record the foul airflow to the biofilters. Check against set-point airflow to determine whether the air capture system is operating effectively.
- Assess the air distribution between each of the biofilter cells, by observing the steamy outflow from the surface of the cells. This is best done in the early morning.
- Check and record the relative humidity and temperature in the foul airstream into the biofilter, using either a combined anemometer/RH meter or a wet/dry bulb thermometer system. Investigate reasons for lower than desirable RH if present. Check the operation of the spray humidification system.
- Check the moisture of the biofilter beds. This can best be done by digging to a depth of at least 300mm and observing the condition of the medium. If dry areas are evident the surface drip irrigation system should be adjusted to increase irrigation times.

#### **4.2.4 Half-yearly or Yearly Assessments**

- In the first year of operation six-monthly assessments of the OCS by an external consultant have been found to be highly beneficial. Subsequent assessments can extend to yearly visits if operation is satisfactory.

#### **4.2.5 Complaints Management**

- An Environmental Complaints procedure will need to be developed for the OCS. This should include a complaint form/register, response protocols, and management responsibilities.

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## 5 OPERATING PARAMETERS

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### ***Back-pressure for the biofilter***

The pressure reading is dependent upon the nature of the biofilter medium. It could be as low as 0.1 kPa at commissioning or as high as 0.5 kPa. Any sudden increase in pressure should be investigated and its cause determined. Excessive moisture in the biofilter beds is a likely cause. This can be managed by decreasing the frequency of the drip irrigation system.

### ***Pressure reading in the odour collection system***

Any measurable negative pressure reading at the extremities of the ducting system is acceptable, and indicates that fugitive odour emissions in the system are unlikely. The ideal pressure reading at each collection point is -20Pa or lower.

### ***Optimum inlet air temperature***

An aqua feed plant generates large amounts of heat and the airstream prior to humidification could be 10<sup>0</sup>C higher than ambient. The humidification system has been designed to moisten and adiabatically cool the airstream to less than 45<sup>0</sup>C. The optimum temperature for biofiltration is 35-40<sup>0</sup>C.

### ***Higher than expected temperature***

If a higher than expected temperature is recorded, check the operation of the humidifier to ensure it is working optimally. Check that the water recirculation pump is operating correctly. The target relative humidity value for the airstream into the biofilter is 90%.

### ***Acceptable odour level leaving the biofilter surface***

There should be minimal or no processing odour character in the treated airstream. The presence of such odour indicates a problem that should be investigated.

### ***Weeds on surface of the biofilter***

Weeds will not affect biofilter performance but can indicate a lack of attention to the biofilter. They should be removed manually or by the use of a herbicide.

### ***Turning off the biofilter for short periods***

The biofilter will operate best when receiving a consistent odour loading. Given that processing is not a 24/7 activity at the plant there is scope to reduce the airflow during times of low activity, by adjusting the fan speed. Biofiltration involves a biological composting process which generates small amounts of heat. The biofilter should not be fully turned off for periods longer than 2 days.

### ***Turning off the biofilter for longer periods***

During extended plant inactivity or major shutdowns the biofilter can be turned off for the bulk of the time, provided that the fan is operated daily for a period of at least 1 hour. This provides cooling of the beds and retains bed moisture levels.

### ***Drying out of bed, despite the humidification system***

If this occurs, the drip system should be operated continuously for 24 hours, including the period when no processing is occurring. During this period the fan should be turned off to encourage the even penetration of water through the beds. 'Spot' watering of dry patches may be required under extreme hot weather conditions.

### ***Short-circuiting of air occurs around the walls of the cells***

There will be some shrinkage of medium at times such that a small gap appears around the walls of the cells. While this is a sign of inadequate bed moisture, it can occur as the medium ages. This condition can be corrected by manual compaction of the medium around the walls (out to a distance of 300mm).

### ***Topping up the biofilter medium***

It is normal for the biofilter beds to settle after commissioning, by up to 200mm. The beds will slowly decrease in height with time, without adversely affecting odour removal performance. If needed, the beds can be topped up with new material, at the mid-point of the life of the material.

### ***Lifespan of biofilter bed***

The life of the biofilter medium material will depend upon its composition and the operating temperature. For systems operating above 35<sup>0</sup>C a bed life of 3-4 years is a realistic expectation. At lower temperatures beds can last 1-2 years longer.

### ***Replacing biofilter medium***

This is best determined by a biofilter specialist. Excessive back-pressure and difficulties in maintaining even bed moisture levels are an indication of the approaching need for medium replacement. It is rare for the biofilter performance to suffer, even at the end of the life of the medium. Spent material can be disposed of by land application.

# APPENDIX A

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## Odour Control System Drawings

(detailed design drawings to be added when available)

Draft

# Appendix F

## Groundwater and Geology Information

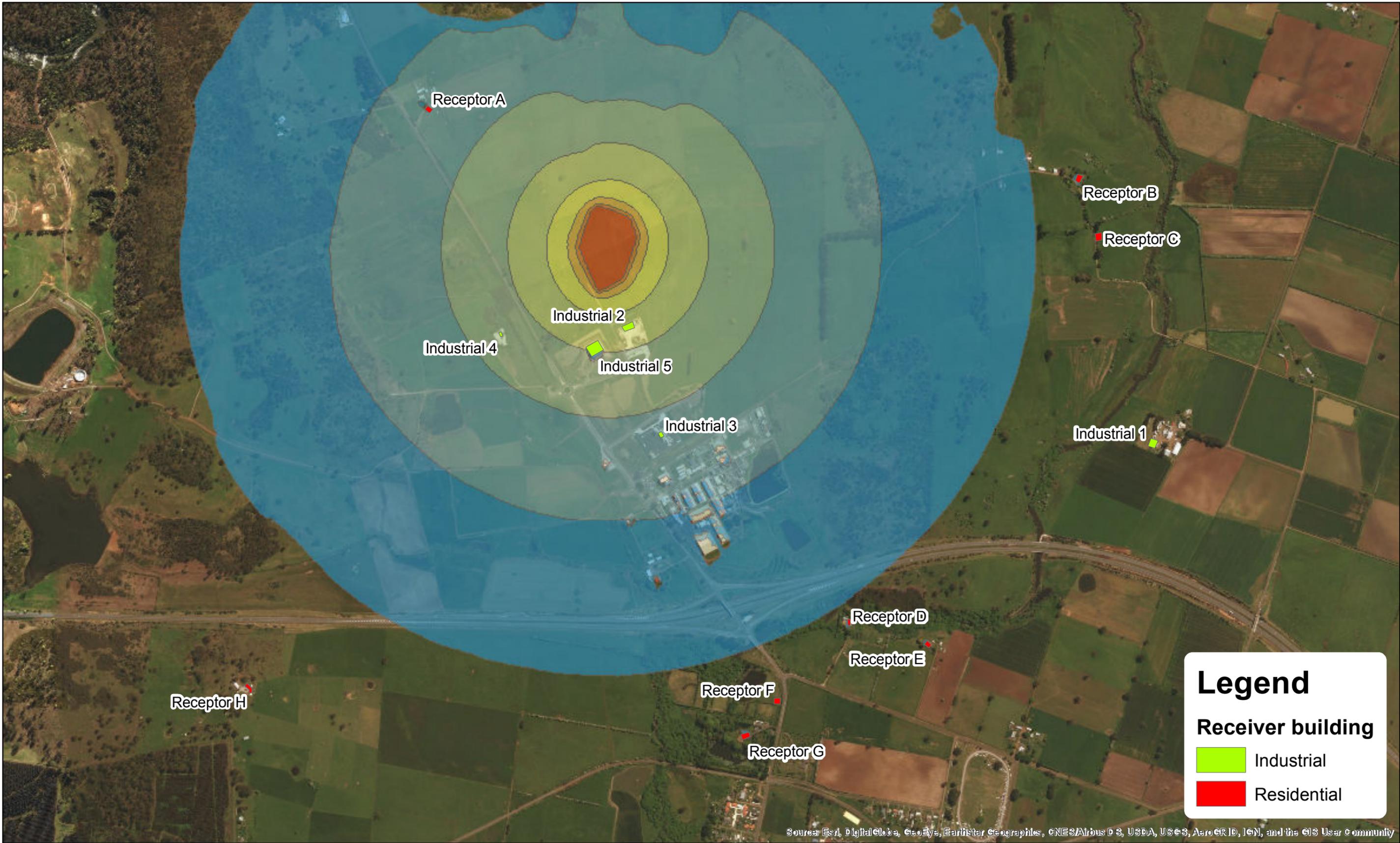


# Appendix G

## Noise

Sound power level	The total sound emitted by a source.																						
Sound pressure level	The amount of sound at a specified point.																						
Decibel [dB]	The measurement unit of sound.																						
A Weighted decibels [dB(A)]	The A weighting is a frequency filter applied to measured noise levels to represent how humans hear sounds. The A-weighting filter emphasises frequencies in the speech range (between 1kHz and 4 kHz) which the human ear is most sensitive to, and places less emphasis on low frequencies at which the human ear is not so sensitive. When an overall sound level is A-weighted it is expressed in units of dB(A).																						
Decibel scale	<p>The decibel scale is logarithmic in order to produce a better representation of the response of the human ear. A 3 dB increase in the sound pressure level corresponds to a doubling in the sound energy. A 10 dB increase in the sound pressure level corresponds to a perceived doubling in volume. Examples of decibel levels of common sounds are as follows:</p> <table border="0"> <tr> <td>0dB(A)</td> <td>Threshold of human hearing</td> </tr> <tr> <td>30dB(A)</td> <td>A quiet country park</td> </tr> <tr> <td>40dB(A)</td> <td>Whisper in a library</td> </tr> <tr> <td>50dB(A)</td> <td>Open office space</td> </tr> <tr> <td>70dB(A)</td> <td>Inside a car on a freeway</td> </tr> <tr> <td>80dB(A)</td> <td>Outboard motor</td> </tr> <tr> <td>90dB(A)</td> <td>Heavy truck pass-by</td> </tr> <tr> <td>100dB(A)</td> <td>Jackhammer/Subway train</td> </tr> <tr> <td>110 dB(A)</td> <td>Rock Concert</td> </tr> <tr> <td>115dB(A)</td> <td>Limit of sound permitted in industry</td> </tr> <tr> <td>120dB(A)</td> <td>747 take off at 250 metres</td> </tr> </table>	0dB(A)	Threshold of human hearing	30dB(A)	A quiet country park	40dB(A)	Whisper in a library	50dB(A)	Open office space	70dB(A)	Inside a car on a freeway	80dB(A)	Outboard motor	90dB(A)	Heavy truck pass-by	100dB(A)	Jackhammer/Subway train	110 dB(A)	Rock Concert	115dB(A)	Limit of sound permitted in industry	120dB(A)	747 take off at 250 metres
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100dB(A)	Jackhammer/Subway train																						
110 dB(A)	Rock Concert																						
115dB(A)	Limit of sound permitted in industry																						
120dB(A)	747 take off at 250 metres																						
Frequency [f]	The repetition rate of the cycle measured in Hertz (Hz). The frequency corresponds to the pitch of the sound. A high frequency corresponds to a high pitched sound and a low frequency to a low pitched sound.																						
Equivalent continuous sound level [L <sub>eq</sub> ]	The constant sound level which, when occurring over the same period of time, would result in the receiver experiencing the same amount of sound energy.																						
L <sub>max</sub>	The maximum sound pressure level measured over the measurement period.																						
L <sub>min</sub>	The minimum sound pressure level measured over the measurement period.																						
L <sub>10</sub>	The sound pressure level exceeded for 10% of the measurement period. For 10% of the measurement period it was louder than the L <sub>10</sub> .																						
L <sub>90</sub>	The sound pressure level exceeded for 90% of the measurement period. For 90% of the measurement period it was louder than the L <sub>90</sub> .																						
Ambient noise	The all-encompassing noise at a point composed of sound from all sources near and far.																						

Background noise	The underlying level of noise present in the ambient noise when extraneous noise (such as transient traffic and dogs barking) is removed. The $L_{90}$ sound pressure level is used to quantify background noise.
Traffic noise	The total noise resulting from road traffic. The $Leq$ sound pressure level is used to quantify traffic noise.
Day	The period from 0700 to 1800 h Monday to Saturday and 0800 to 1800 h Sundays and Public Holidays.
Evening	The period from 1800 to 2200 h Monday to Sunday and Public Holidays.
Night	The period from 2200 to 0700 h Monday to Saturday and 2200 to 0800 h Sundays and Public Holidays.
Assessment background level [ABL]	The overall background level for each day, evening and night period for each day of the noise monitoring.
Rating background level [RBL]	The overall background level for each day, evening and night period for the entire length of noise monitoring.

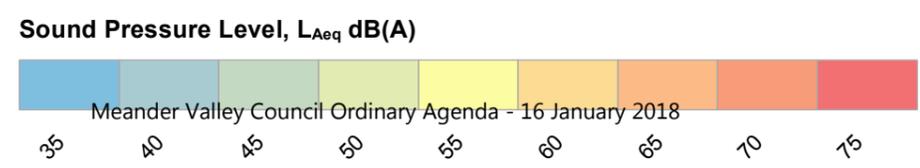


**Legend**

Receiver building

- Industrial
- Residential

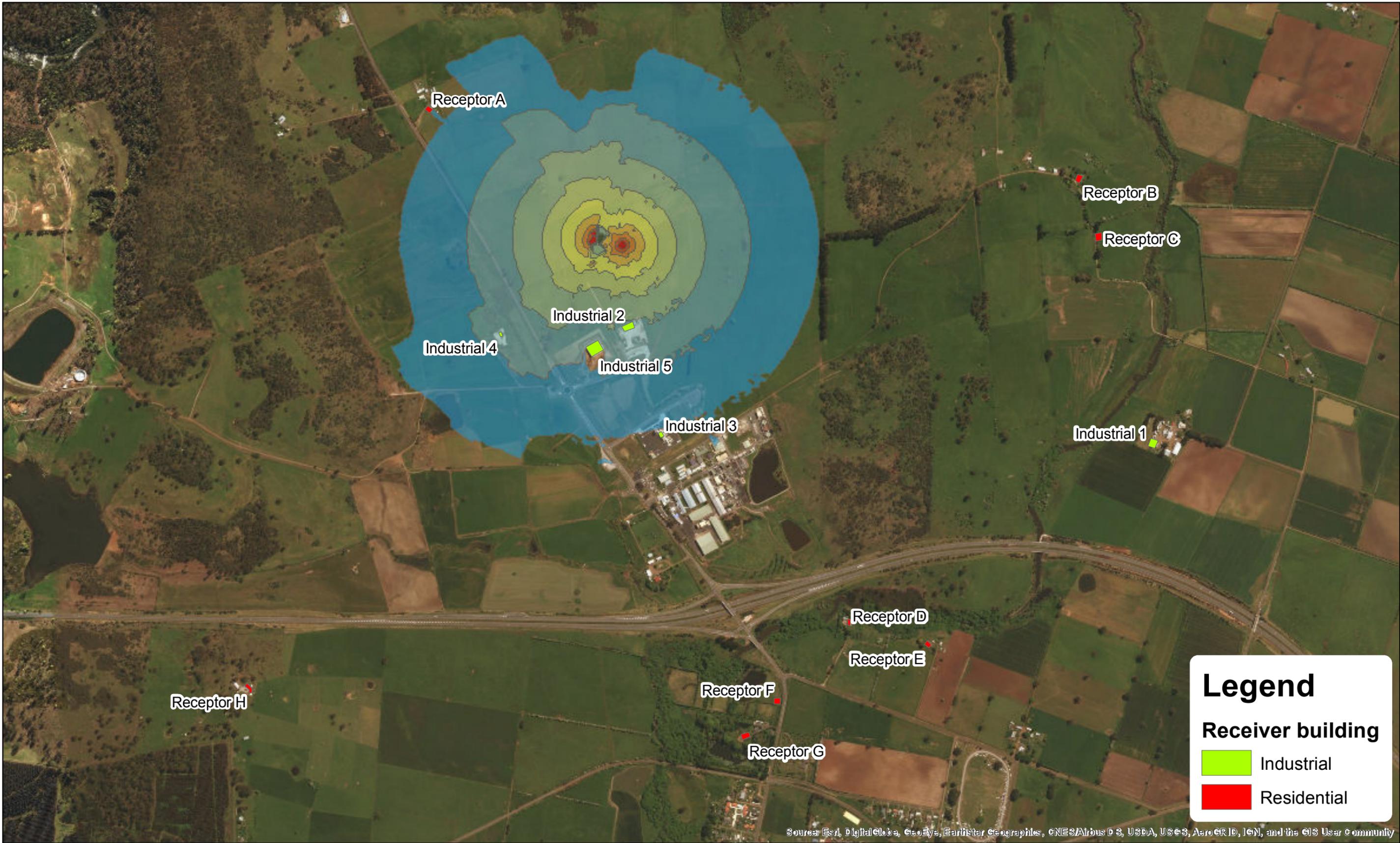
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**RIDLEY FISH FEED MILL** May 2017  
 Construction noise contour map - Site establishment 60537374

0 250 500 1,000 m

Page 59 Fig. 1



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sound Pressure Level,  $L_{Aeq}$  dB(A)



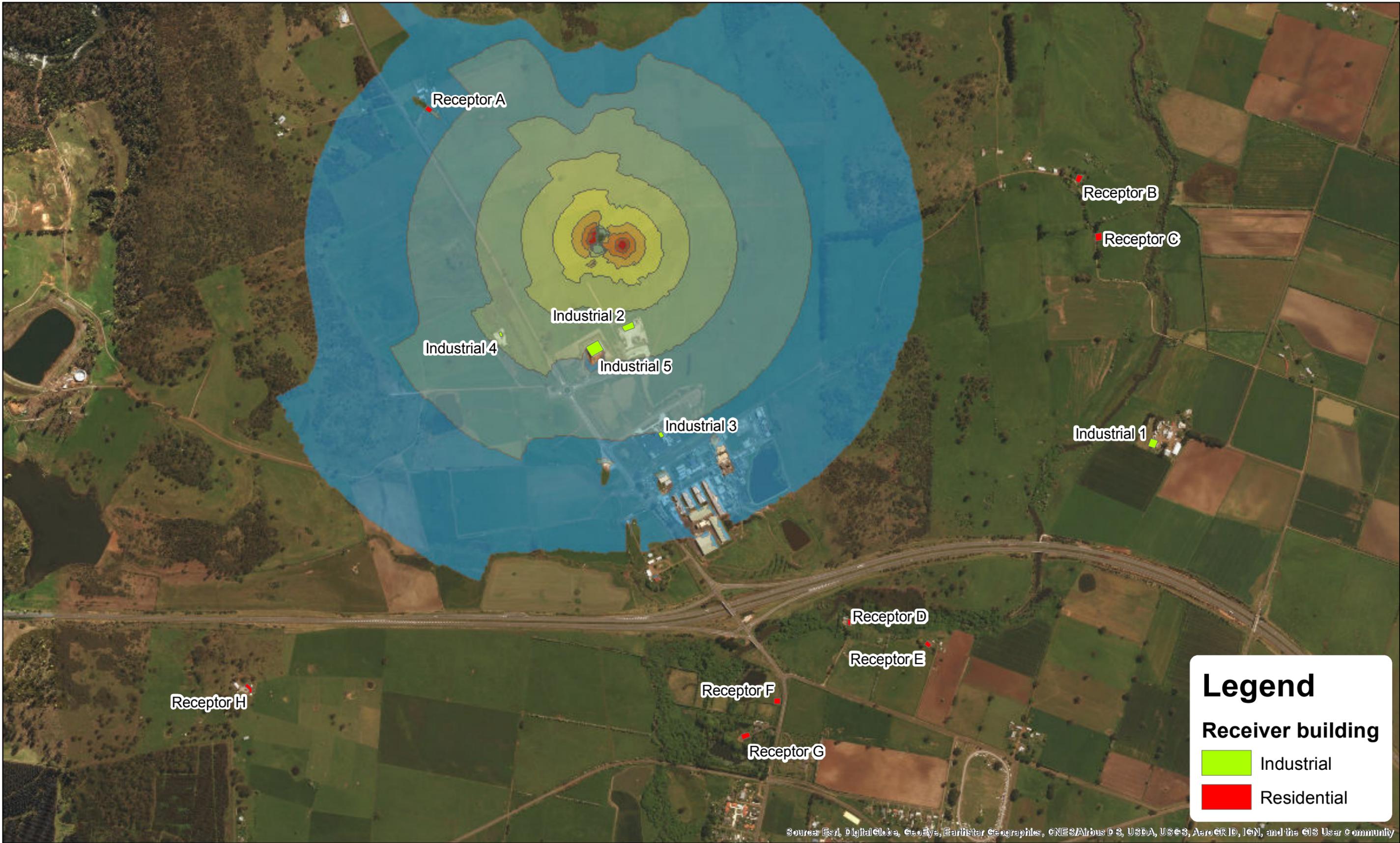
RIDLEY FISH FEED MILL

May 2017

Operational noise contour map - Day & evening, neutral weather

60537374





**Legend**

**Receiver building**

- Industrial
- Residential

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sound Pressure Level,  $L_{Aeq}$  dB(A)



RIDLEY FISH FEED MILL

May 2017

Operational noise contour map - Day & evening, worst weather

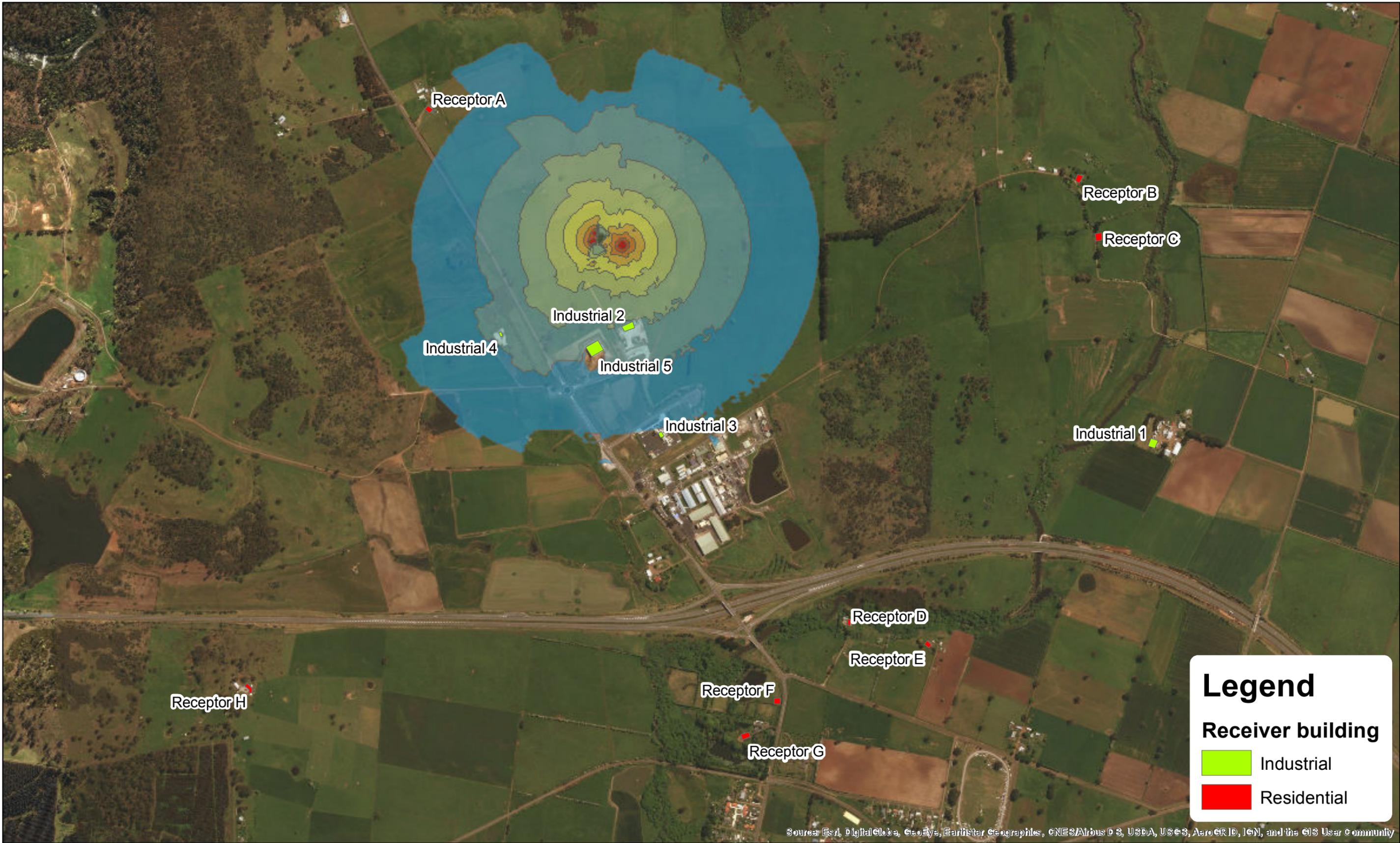
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C&DS 1

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Fig. 3



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sound Pressure Level, L<sub>Aeq</sub> dB(A)



RIDLEY FISH FEED MILL

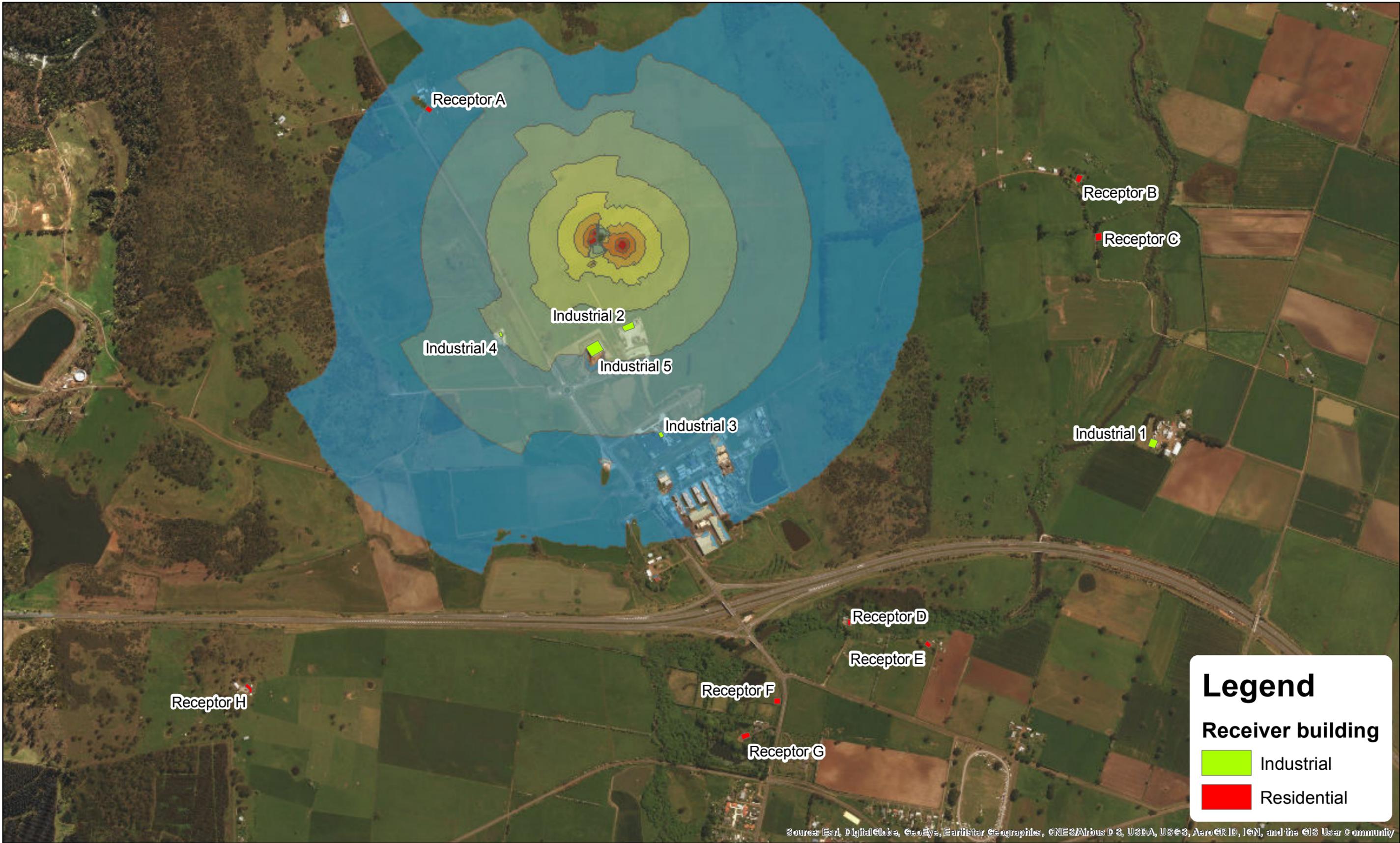
May 2017

Operational noise contour map - Night, neutral weather

60537374



C&DS 1



**Legend**

**Receiver building**

- Industrial
- Residential

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sound Pressure Level,  $L_{Aeq}$  dB(A)



RIDLEY FISH FEED MILL

May 2017

Operational noise contour map - Night, worst weather

60537374



C&DS 1

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Fig. 5

# Appendix H

## Greenhouse Gas Estimations and Calculations

## Ridley Greenhouse Gas Emissions - Operations

Emission source	Assumptions	Quantity per annum	Quantity Unit	Emissions factor	Emissions factor unit	Emissions factor source	Tonnes CO2e
<b>Scope 1</b>							
Natural gas	- Used in boiler and drier - 5% estimated for other use (e.g. hotwater heating) - Figures based on a 10 hour day, 50 hour week, 25 days per month, 50 weeks per year - Diversity assumption applied are Daily =10%, Weekly = 15% and yearly =20%	51,219	GJ	51.53	kg CO2e/GJ	National Greenhouse Account Factors: Australian National Greenhouse Accounts (August 2016)	2,639.32
Vehicles (site-owned)	- Assumed 2 utility vehicles and 1 SUV (all assumed Dual Purpose 4x4) - Each assumed to travel 10,000 km/yr	30,000	km	0.2298	kg CO2e/km	UK Government GHG Conversion Factors for Company Reporting (DEFRA; 2016)	6.89
<b>Total Scope 1</b>							<b>2,646.21</b>
<b>Scope 2</b>							
Electric motors	- Motors range in quantity and size (from <1 kW to >100 kW) - Total connected load is 3,309 kW - Total diversified load at 78% is 2,581 kW - Calculation of estimated annual kWh provided below	16,105,440	kWh	0.12	kg CO2e/kWh	National Greenhouse and Energy Reporting Scheme Measurement: Technical Guidelines for the estimation of emissions by facilities in Australia (August 2016)	1,932.65
Other electricity consumption	- Assumed 5% of the above - Includes lighting, IT, air conditioning, refrigerator etc.	80,527.20	kWh	0.12	kg CO2e/kWh	National Greenhouse and Energy Reporting Scheme Measurement: Technical Guidelines for the estimation of emissions by facilities in Australia (August 2016)	9.66
<b>Total Scope 2</b>							<b>1,942.32</b>
<b>Total Estimated GHG Emissions</b>							<b>4,588.53</b>

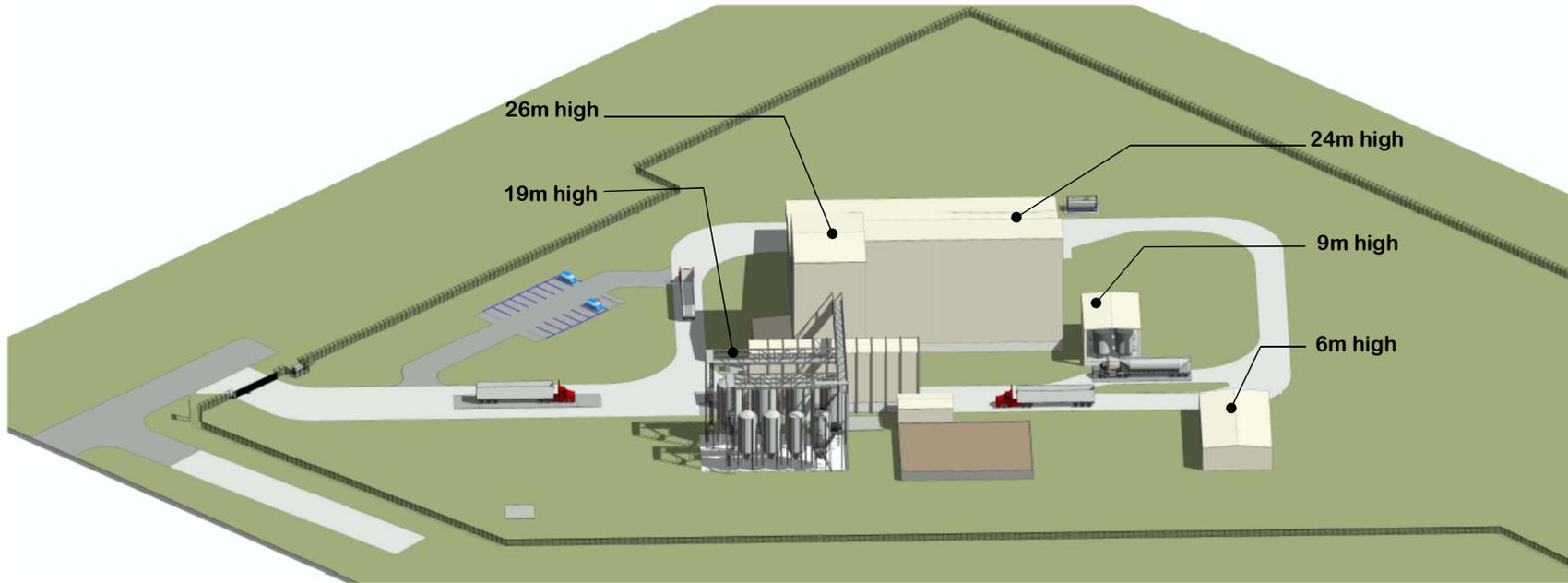
<b>Calculation of estimated annual kWh</b>	
Total diversified load (kW)	2,581
Hours	24
Days	5
Weeks	52
<b>Total estimated kWh/yr</b>	<b>16,105,440</b>

# Appendix I

## Site Layout 3D Model

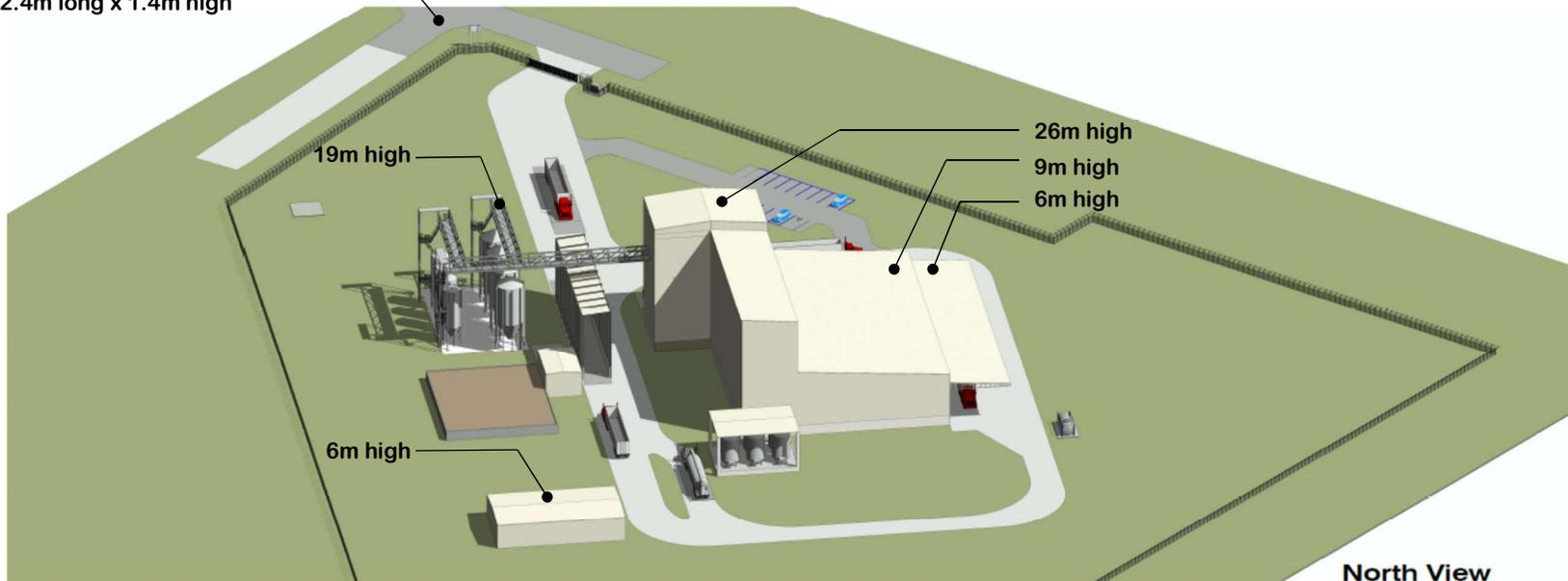
# RIDLEY AQUA FEEDMILL WESTBURY, TASMANIA

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East View

Pylon Sign – Front Entry  
 2.4m long x 1.4m high



North View

Date	Issue	Amendment	Init
17/05/17	4	FUTURE WORKS REMOVED	NRP
15/05/17	3	POSITION ON SITE REVISED	NRP
08/05/17	2	GENERAL REVISION	NRP
06/05/17	1	ISSUE FOR DRUMP SUBMISSION	NRP

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Project  
**RIDLEY**

PROPOSED FEEDMILL  
 LOT 17, INTEGRITY DRIVE  
 WESTBURY, TASMANIA

Drawing Title  
**3D VIEWS**

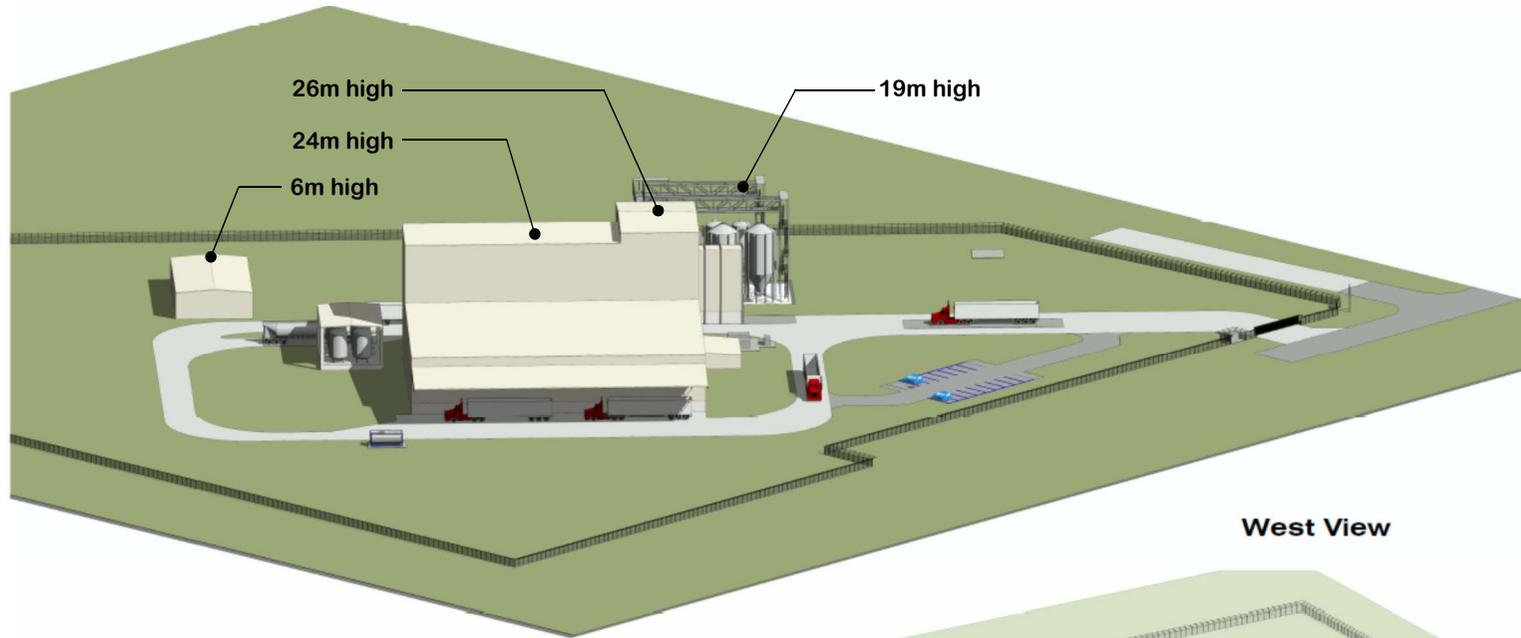
Drawn	NRP	Date	15/05/2017
Project No.	W20661	Bigg No.	00
Drawing No.	00A010	Issue	4

**PRELIMINARY**

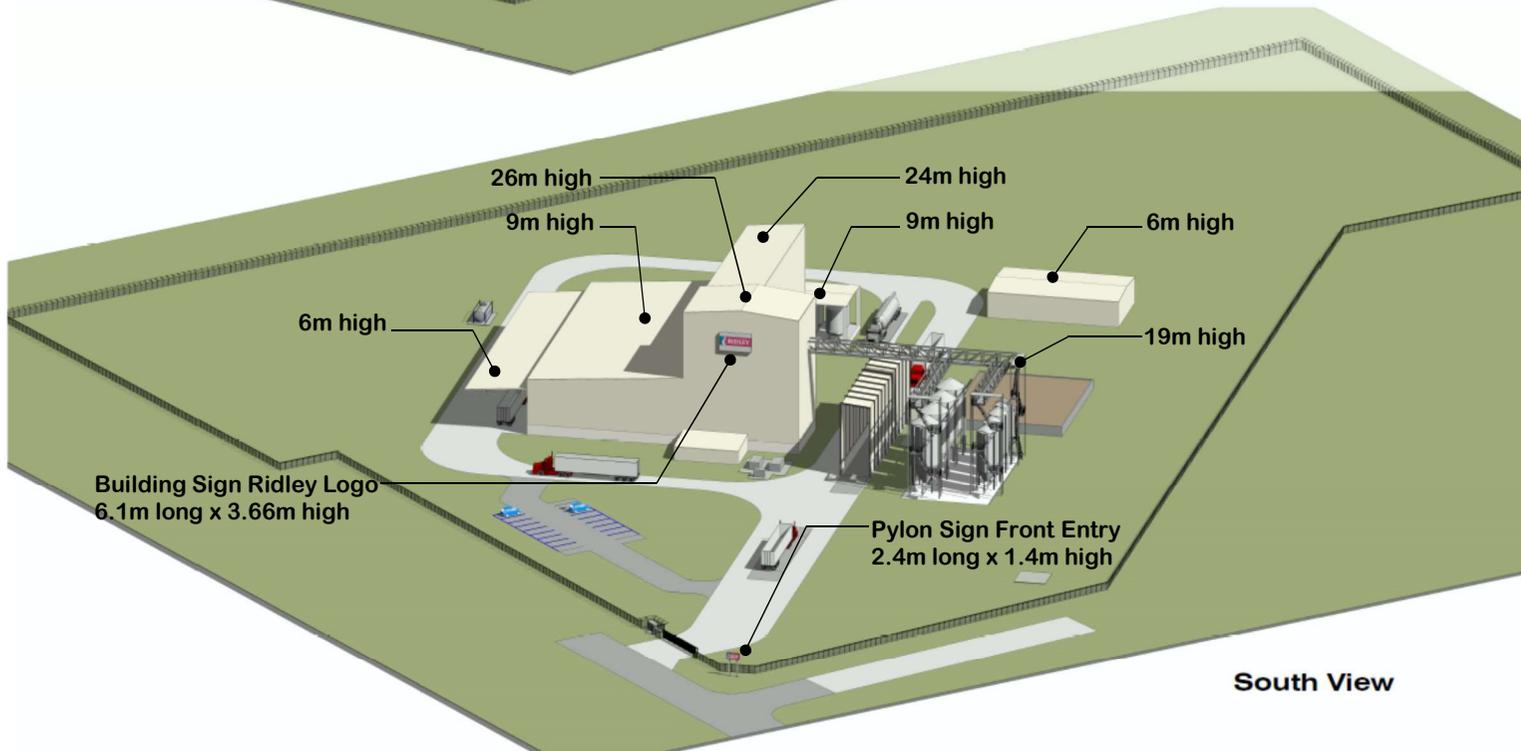
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# RIDLEY AQUA FEEDMILL WESTBURY, TASMANIA

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West View



South View

Date	Issue	Amendment	Int
17/05/17	4	FUTURE WORKS REMOVED	NFP
15/05/17	3	POSITION ON SITE REVISED	NFP
09/05/17	2	GENERAL REVISION	NFP
05/05/17	1	ISSUE FOR DEMP SUBMISSION	NFP

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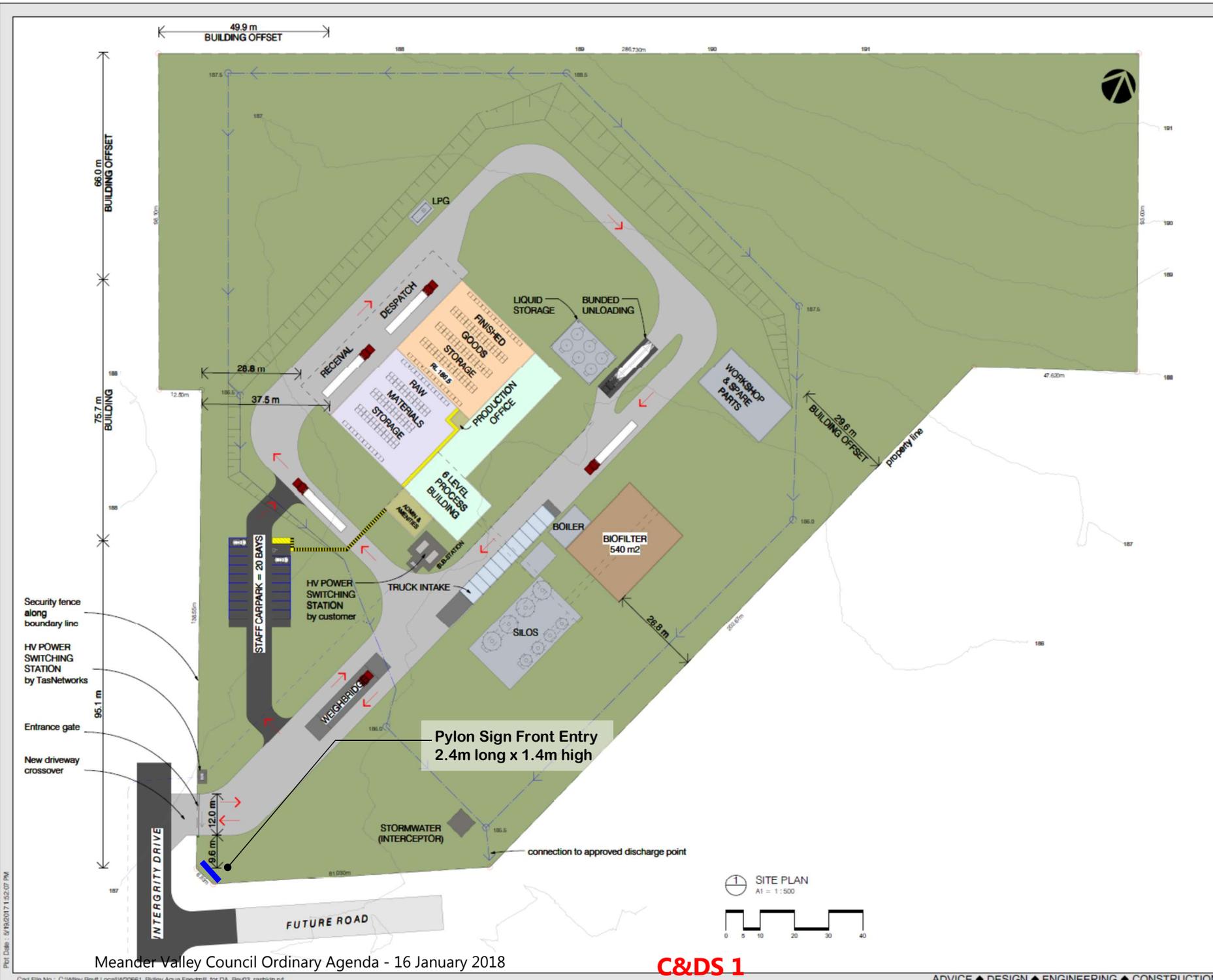
PROPOSED FEEDMILL  
 LOT 17, INTEGRITY DRIVE  
 WESTBURY, TASMANIA

Drawing Title  
 3D VIEWS

Scale	Drawn: NFP	Date: 15/05/2017
Project No. W20661	Bldg No. 00	
Drawing No. 00A011	Issue 4	

**PRELIMINARY**

Plot Date : 5/15/2017 1:30:28 PM



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BUILDING SCHEDULE			
COL	SPACE	DIMENSION (m) (L x W)	HIGHER LEVEL (m)
	SILOS	30 x 17	18
	TRUCK INTAKE	35 x 5	15
	PROCESS BUILDING	55 x 22	20
	RAW MATERIALS	30 x 28	12
	FINISHED GOODS	30 x 28	12
	LIQUID STORAGE	16 x 12	9
	ADMIN & AMENITIES	12 x 8	9.5
	WORKSHOP & SPARE PARTS	25 x 14	9

LEGEND	
	SMALL DRAWN AND DIRECTION OF FLOW
	CUT IN GROUND
	RL 186.5 TYPICAL PLATFORM LEVEL

Date	Issue	Amendment	Int
17/06/17	4	FUTURE WORKS REMOVED	NRF
15/06/17	3	POSITION ON SITE REVISED	NRF
09/06/17	2	GENERAL REVISION	NR
08/06/17	1	ISSUE FOR DREMP SUBMISSION	NRF

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PROPOSED FEEDMILL  
 LOT 17, INTEGRITY DRIVE  
 WESTBURY, TASMANIA

Drawing Title  
**SITE PLAN**

Scale	Drawn <b>NRF</b>	Date <b>05/17/17</b>
Project No.	W20661	Blgd No. <b>00</b>
Drawing No.	<b>00A001</b>	Issue <b>4</b>

**PRELIMINARY**

Plot Date: 04/19/2017 11:52:07 PM

## Signage Standard – Main Entrance



The main entrance signage standard is a large red rectangular sign with a white stylized 'R' logo on the left and the word 'RIDLEY' in white capital letters on the right.

**BARASTOC**

**TERANG MILL**  
Sales: 1800 100 151  
Administration: (03) 5591 8900

**COBBER**

**RIDLEY AGRIPRODUCTS PTY LTD**  
ACN 006 544 145  
ABN 94 006 544 145

  
Rumevite



2.4M long x 1.4M  
HIGH

## Signage Standard – Mill

6.1m long x 3.66m high



## Safety Sign Standard – Front Entrance

**REFLECTIVE @  
2.44M HIGH X 2.44M LONG**



800M High x 1200M Long



750M High x 750M Long



180M High x 500M Long



180M High x 500M Long



200M High x 1300M Long



300M High x 600M Long



BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

Level 6, 134 Macquarie Street, Hobart TAS  
GPO Box 1550, Hobart, TAS 7001.Australia



ENVIRONMENT PROTECTION AUTHORITY

Enquiries: Helen Mulligan  
Ph: +61 3 6165 4628  
Fax: +61 3 6173 0254  
Email: helen.mulligan@epa.tas.gov.au  
Web: www.epa.tas.gov.au  
Our Ref: EN-EM-EV-DE-252180 | H777318 | CouncilLetter\_3ABC\_Decision

21 December 2017

Mr Martin Gill  
General Manager  
Meander Valley Council  
PO Box 102  
WESTBURY TAS 7303

Email: mail@mvc.tas.gov.au

Index No.		20189	
Doc No.			
RCVD	- 2 JAN 2018		MVC
Action Officer	NW	Dept.	CDS
EO		OD	✓

Dear Mr Gill

**DETERMINATION ON ENVIRONMENTAL IMPACT ASSESSMENT  
PERMIT APPLICATION (PA 18\0018)  
RIDLEY AGRIPRODUCTS PTY LTD, AQUA FEED MILL FACILITY, WESTBURY**

I am writing to you about the above permit application which was referred to the Board of the Environment Protection Authority (the Board) for assessment under the *Environmental Management and Pollution Control Act 1994* (EMPC Act) and received on 28 July 2017.

The Board's environmental impact assessment of the application is now complete. All supporting information and any relevant comments received from the public and government agencies were taken into account.

In accordance with section 25(5) of the EMPC Act, I am notifying Meander Valley Council that the conditions and restrictions in the enclosed Permit Part B, together with the definitions in Schedule 1 and the associated attachments, must be contained in any permit granted in respect of the application by Council under the provisions of the *Land Use Planning and Approvals Act 1993*.

A copy of the Environmental Assessment Report (EAR) detailing the reasons for the Board's decision is attached. The Assessment Report is also available on the EPA website at <http://epa.tas.gov.au/assessment/completed-assessments>. Permit Part B is provided as Appendix 3 of the EAR.

Please note that, to satisfy the requirements of section 25(8) of the EMPC Act, the Council must:

- not include any other condition or restriction which is inconsistent with, or which extends the operation of, any conditions or restrictions which the Board requires to be contained in the permit; and
- notify the Board of its decision to grant or refuse to grant a permit; and
- at the same time as it notifies the applicant of its decision on the application, provide the EAR, including attachments (or a link to the EAR on the EPA website) to the applicant, and anyone who made representations.

It is suggested Council:

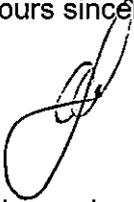
- Call the Council's portion of the permit 'Part A';
- include a condition in 'Part A' along the lines of 'The person responsible for the activity must comply with the conditions contained in Schedule 2 of Permit Part B, which the Board of the Environment Protection Authority (EPA) has required the planning authority to include in the permit, pursuant to section 25(5) of the *Environmental Management and Pollution Control Act 1994*', and
- attach the enclosed Permit Part B to the permit, including Schedules 1, 2 and 3 and any attachments.

I understand Council will advise the applicant and any representors of appeal rights in relation to its decision.

If a permit is granted, please provide EPA Tasmania with a full copy of the final permit (including all attachments).

If you have any queries regarding the above, please contact Helen Mulligan, Manager (Assessments)] on (03) 6165 4628.

Yours sincerely



Warren Jones  
**CHAIRPERSON**

Encl. Permit Part B – Permit Conditions Environmental No. 9685  
Environmental Assessment Report

Cc. Jo Oliver, Senior Town Planner, jo.oliver@mvc.tas.gov.au

# ENVIRONMENTAL ASSESSMENT REPORT

---

## Aqua Feed Mill

*16 Integrity Drive, Valley Central Industrial Precinct  
Westbury*

Ridley AgriProducts Pty Ltd

Board of the Environment Protection Authority

December 2017



<b>Environmental Assessment Report</b>	
Proponent	Ridley AgriProducts
Proposal	Aqua Feed Mill
Location	16 Integrity Drive, Valley Central Industrial Precinct, Westbury
NELMS no.	PCE No 9685
Permit application no.	PA18-0018 (Meander Valley Council)
Doc1 folder	EN-EM-EV-DE-252180
Doc1 no.	H763576
Class of Assessment	2B

<b>Assessment process milestones</b>	
22/03/2017	Notice of Intent submitted
9/05/2017	Guidelines issued
23/05/2017	Permit application submitted to Council
28/07/2017	Referral received by Board
16/09/2017	Start of public consultation period
16/10/2017	End of public consultation period
29/11/2017	Additional information submitted to Board

## Acronyms

AHD	Australian Height Datum
Air EPP	Environment Protection Policy (Air Quality) 2004
AQIA	Air Quality Impact Assessment
Board	Board of the Environment Protection Authority
BOM	Bureau of Meteorology
DPEMP	Development Proposal and Environmental Management Plan
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EIA	Environmental Impact Assessment
EMPC Act	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental Management and Pollution Control System
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
OU	Odour Units
RMPS	Resource Management and Planning System
SD	Sustainable Development

## Report summary

This report provides an environmental assessment of Ridley AgriProducts Pty Ltd (Ridley)'s proposed Aqua Feed Mill.

The proposal involves the construction and operation of an Aqua Feed Mill to manufacture extruded aqua feed. The mill will be capable of producing 50,000 tonnes per year or 12 tonnes (12,000 kilograms) per hour of finished feed. It will be located at 16 Integrity Drive<sup>1</sup>, in the Valley Central Industrial Precinct at Westbury.

This report has been prepared based on information provided by the proponent in the Development Proposal and Environmental Management Plan (DPEMP) and additional information. Relevant government agencies and the public have been consulted and their submissions and comments considered as part of this assessment.

On 2 November 2017, the Deputy Director under delegation, requested that the proponent submit additional information to address public and government agency (including DPIPW) comments on the DPEMP. The proponent submitted satisfactory additional information on 29 November 2017.

Further details of the assessment process are presented in section 1 of this report. Section 2 describes the statutory objectives and principles underpinning the assessment. Details of the proposal are provided in section 3. Section 4 reviews the need for the proposal and considers the proposal, site and design alternatives. Section 5 summarises the public and agency consultation process and the key issues raised in that process. The detailed evaluation of key issues is in section 6, and other issues are evaluated in section 7 and Appendix 1. The report conclusions are contained in section 8.

Appendix 2 contains details of comments made and issues raised in the consultation process. Appendix 3 contains environmental permit conditions for the proposal.

---

<sup>1</sup> It should be noted that since the submission and advertising of the application, a subdivision of the Land has been approved and the permit conditions reflect the details of this subdivision. Hence, the address in the DPEMP is not consistent with this report; however 'the Land' is the same.

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## 1 Approvals process

A Notice of Intent in relation to the proposal was received by the Board of the Environment Protection Authority (the Board) on 22 March 2017.

The proposal is defined as a 'level 2 activity' under clause 4(e), Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), as a produce processing works, being the conduct of works for the processing of vegetables, seed, grain, fruit or any other agricultural crop material by deep fat frying or roasting or boiling or drying through application of heat, being works with a capacity of 50 kilograms or more per hour. Section 25(1) of the EMPC Act required Council to refer the application to the Board of the Environment Protection Authority (the Board) for assessment under the Act.

The Board required that information to support the proposal be provided in the form of a Development Proposal and Environmental Management Plan (DPEMP) prepared in accordance with guidelines issued by the Board on 9 May 2017.

Several drafts of the DPEMP were submitted to EPA Tasmania for comment prior to its finalisation and acceptance on behalf of the Board. The final DPEMP was submitted to Council with the permit application.

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) in relation to the proposal was submitted to Meander Valley Council on 23 May 2017. The application was received by the Board on 28 July 2017.

The DPEMP was released for public inspection for a 28-day period commencing on 16 September 2017. Advertisements were placed in *The Examiner* and on the EPA website. The DPEMP was also referred at that time to relevant government agencies for comment. One public submission was received.

On 2 November 2017 the Deputy Director, under delegation, requested that the proponent submit additional information to address public and government agency (including DPIPWE) comments on the DPEMP. The proponent submitted satisfactory additional information on 29 November 2017.

## 2 SD objectives and EIA principles

The proposal must be considered by the Board in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and in the context of the objectives of the Environmental Management and Pollution Control System (EMPCS) (both sets of objectives are specified in Schedule 1 the EMPC Act). The functions of the Board are to administer and enforce the provisions of the Act, and in particular to use its best endeavours to further the RMPS and EMPCS objectives.

The Board must undertake the assessment of the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPC Act.

### 3 The proposal

Section 2 of the DPMP states the Aqua Feed Mill will manufacture extruded aqua feed. Aqua feed production involves the delivery and storage of raw materials, grinding, mixing and drying manufactured products into pelleted feed and packaging prior to dispatch.

The main characteristics of the proposal are summarised in Table 1. A detailed description of the proposal is provided in Section 2.0 of the DPMP.

**Table 1: Summary of the proposal's main characteristics**

<b>Activity</b>	
Production of a maximum of 50,000 tonnes per annum of aqua feed.	
<b>Location and planning context</b>	
<b>Location</b>	16 Integrity Drive, Valley Central Industrial Estate, Westbury (Certificate of Title 174186/1), as shown in Figure 1.
<b>Land zoning</b>	General Industrial
<b>Land tenure</b>	Private Freehold
<b>Existing site</b>	
<b>Land Use</b>	Agricultural and Industrial uses. Rezoned in 2008 to an Industrial Precinct.
<b>Topography</b>	The site is relatively flat with ground slopes less than 2°, rising from approximately 186 metres (AHD) in the south-west of the site to approximately 191 metres (AHD) in the north-east of the site. A shallow man-made drainage line crosses the middle portion of the site from north-west to south.
<b>Geology</b>	Regionally, the site lies close (<2.0 km) to a geological boundary comprising to the east Tertiary aged non-marine sequences (gravel, sand, silt, clay and regolith) and to the west predominantly igneous geology consisting of Jurassic aged dolerite and Tertiary aged basalt, all overlain by Quaternary aged sediments (sands, gravels and muds are mapped) adjacent to drainage lines.  The site is entirely underlain by Basalt, with alluvium observed adjacent to the nearby Meander River and Quamby Brook.
<b>Soils</b>	The Soil is generally described as being of the following nature: <ul style="list-style-type: none"> <li>• Top Soil layer - Up to 1m of brown, sandy/clayey topsoil, overlying</li> <li>• Under layer - High plasticity, clay with sand to sandy clay, mottled orange/brown, grey or olive, very stiff to hard.</li> </ul>
<b>Hydrology</b>	A number of water bodies (dams, drains and rivers) surround the site, including Quamby Brook located approximately 1.4km to the south-east of the site and the Meander River approximately 1.1km to the north.
<b>Fauna</b>	Other than the EPBC Act listed Green and Gold Frog, no other natural values are known to occur within the proposed Industrial precinct.
<b>Flora</b>	The site is dominated by exotic grasses due to previous agricultural land use. The shallow man-made drain that crosses the subject site contains scattered native sedge species. The remainder of the site contains little or no significant native vegetation.

<b>Local region</b>	
<b>Climate</b>	Westbury meteorological station (Valley View) demonstrates that winds are predominantly north-west – south-east orientated. Average rainfall at Westbury is 834 mm. Rainfall data shows the wettest months are May to October.
<b>Surrounding land zoning, tenure and uses</b>	General Industrial and Rural Resource. Other industrial developments on the estate include Delmade (machinery fabrication), Tasbuilt homes, Caltas Filling station, BOC-LNG Facility and Kolmak Steel Fabrication. Tas Alkaloids is located adjacent to the eastern boundary of the industrial estate (see Figure 6 of the DPMP).
<b>Species of conservation significance</b>	Green and Gold Frog ( <i>Litoria raniformis</i> )
<b>Proposed infrastructure</b>	
<b>Major equipment</b>	The key items of machinery are: <ul style="list-style-type: none"> <li>• Conveying equipment</li> <li>• Raw material handling and processing systems</li> <li>• Extrusion, drying and vacuum coating equipment</li> <li>• Packaging equipment</li> <li>• Weighbridge to weigh incoming and outgoing goods</li> <li>• 3MW Boiler – (14359 MJ/hour at full load, or approximately 325 kg/hour of natural gas)</li> <li>• Biofilter that will handle excess process air</li> <li>• Waste and stormwater treatment system</li> </ul>
<b>Other infrastructure</b>	Silos Truck Intake Process Building Raw Materials / Finished Goods Liquid Storage Admin & Amenities Workshop & Spare Parts
<b>Inputs</b>	
<b>Water</b>	Connection to current TasWater potable water supply
<b>Energy</b>	Connection to current electrical and gas supply as well as LPG gas
<b>Other raw materials</b>	Grains, protein, meals, fat (oil), vitamins and minerals
<b>Wastes and emissions</b>	
<b>Liquid</b>	Stormwater runoff from rooves and hardstand areas. Wastewater from biofilter, boiler blowdown process and wash bay area.
<b>Atmospheric</b>	Odour from organic material processing. Dust during construction.
<b>Solid</b>	General refuse including food scraps, paper and packaging. General inert wastes such as metal waste to be collected periodically.
<b>Controlled wastes</b>	Human waste directed to existing sewer system.

<b>Noise</b>	From construction and operation of the plant including vehicles and equipment.
<b>Greenhouse gases</b>	The total estimated annual greenhouse gas emission is 4,588 t CO <sub>2</sub> -e per year, with natural gas use making up the majority of the emissions.
<b>Construction, commissioning and operations</b>	
<b>Proposal timetable</b>	Ridley was initially aiming for commencement of site preparation works as early as possible in 2017. Table 4 of the DPEMP shows indicative timelines for each major component of construction and would apply from any commencement date.
<b>Operating hours (ongoing)</b>	The plant will operate up to 24 hours per day 5 days per week with the potential to operate 24 hours per day 7 days per week based on market demand.
<b>Other key characteristics</b>	
The lot on which the facility will be located has been subdivided since submission of the application and a certificate of title issued.	

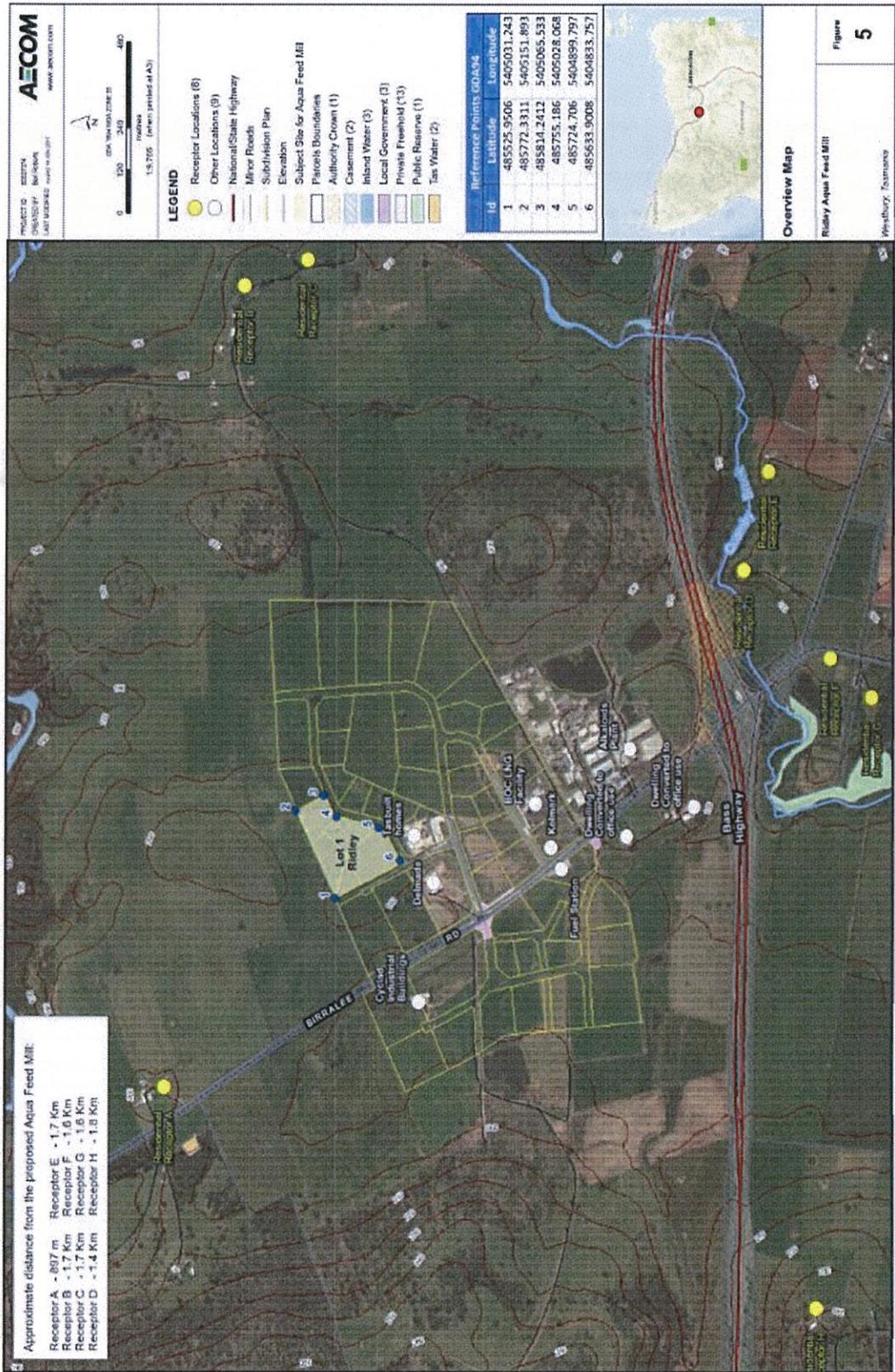


Figure 1: General location map (Figure 5 of the DPEMP)

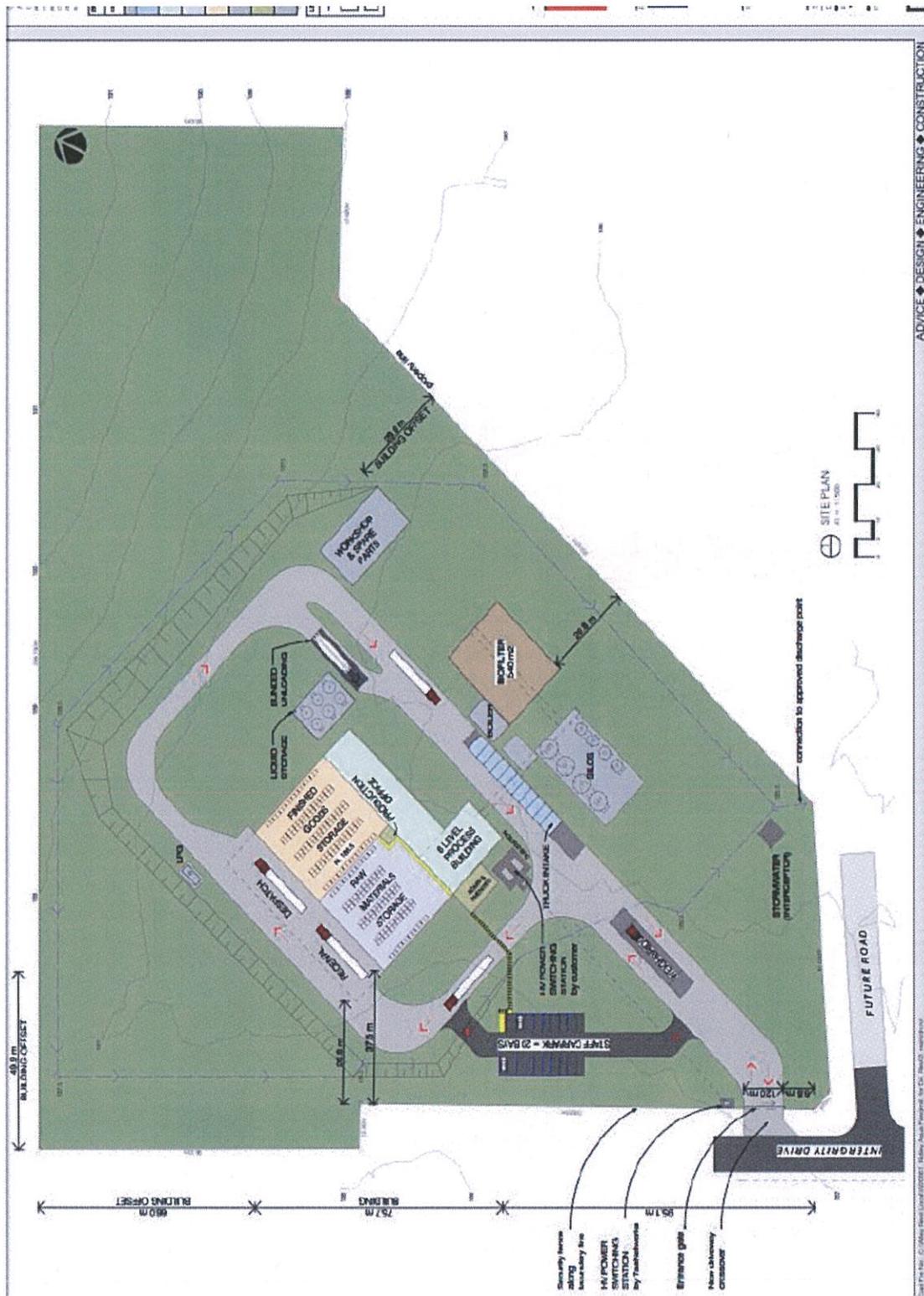


Figure 2: Site plan (Figure 3 of the DPMP).

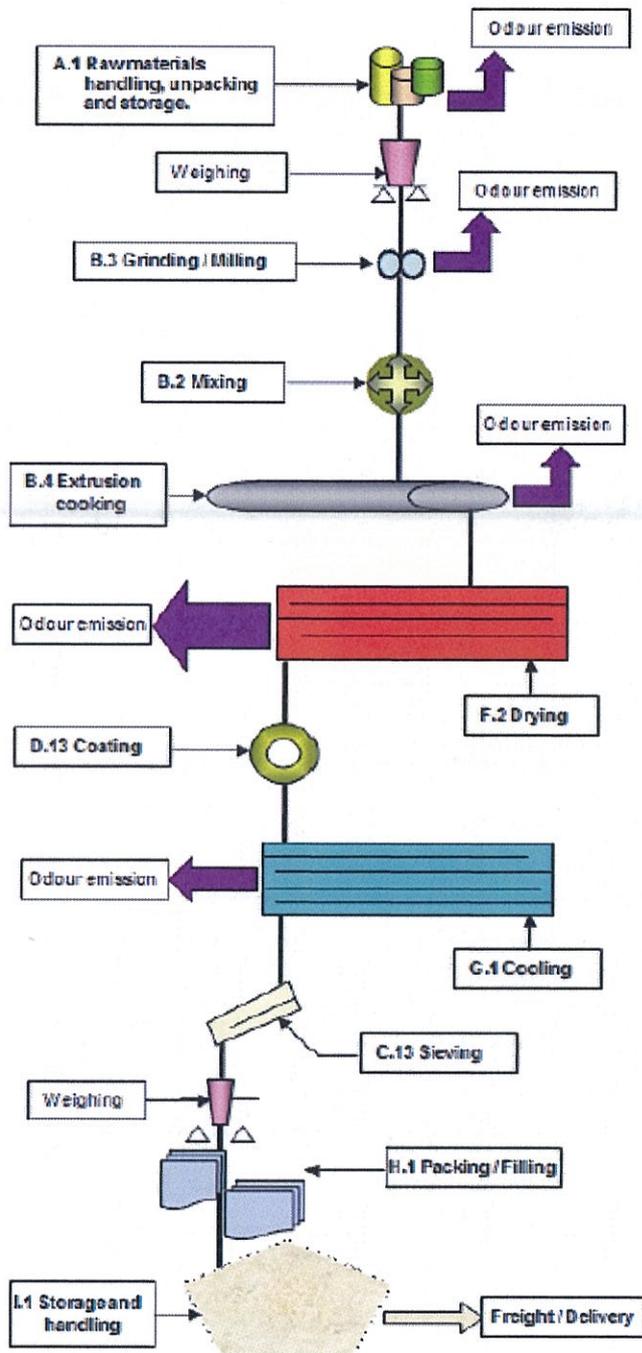


Figure 3: Process overview (Figure 4 of the DPEMP).

## 4 Need for proposal and alternatives

### Site Alternatives

Section 3 of the DPMP, states that as part of its detailed feasibility study, Ridley considered two alternative locations within Tasmania prior to the selection of the Westbury site:

#### 1. Wesley Vale Site - 329 Mill Road, Wesley Vale

The Wesley Vale Site considered by Ridley is a former particle board mill. The site has substantial existing structures with two large warehouses offering some potential for conversion but would have required considerable modification. The structures also contained asbestos and additionally, soil contamination was evident at the site.

This site provided good access to some utilities and services however; the lack of sewer connection and the need for a power supply upgrade reduced suitability. This combined with the need for undefined remediation of asbestos and soil and a site preparation phase which would take up to 14 months did not fit within the Ridley construction and commissioning timeframe.

#### 2. Integrity Drive, Westbury

Two parcels of land were considered at Integrity Drive, Westbury, neighbouring the currently proposed site at Lot 17 Integrity Drive. This site was considered as a potential option as it provides good access to all utilities from Birralee Road.

After further investigation it was deemed unsuitable due to the topography and presence of significant rocky outcrops. These would require additional construction and service connection costs when compared with the current proposed site.

The current site at Integrity Drive was selected due to its location in an area zoned as an industrial precinct and good transport links in proximity to the Bass Highway. Additionally, the site is relatively flat with a 2 degree slope which will reduce construction cost in terms of earth works when compared with other sites. Further, utilities have been provided up to the site boundary allowing for good connections to water, gas, electricity and sewer.

### Technology Alternatives

In developing the design for the proposed Aqua Feed Mill, the DPMP states Ridley considered several alternatives for the management of odour from the production process including incineration and chemical stripping.

Typical odour treatment methods are:

- Adsorption of odours e.g. activated charcoal;
- Thermal treatment of odours e.g. thermal oxidiser or flare;
- Wet scrubbers; and
- Biological filters.

Of the odour scrubbing technologies available, the DPMP concludes the two technologies that could reasonably be used at the Ridley facility are either a wet scrubber or a biofilter. The ultimate selection of the biofilter has been based on its lower capital and maintenance costs compared to the wet scrubber, the known performance of a similar scrubber at a Ridley Facility in Queensland, and the fact that the proposed facility is predicted to have minimal odour impact at receptors.

Modelling of stack emissions was undertaken as part of the Air Quality Impact Assessment (AQIA). The results of the modelling suggest the ground level concentrations would be lower than the results for the biofilter. The DPMP states:

The contours suggest the stacks main benefit would be for the industrial estate where the concentration within the estate would be in the order of 1.8-2.0 OU in comparison to the biofilter concentration of ~32 OU at the boundary. It should be noted that this difference is most pronounced close to the biofilter location itself and by the time the plume has reached the boundary of the industrial estate, the concentration difference has decreased to approximately 0.7 OU. At the nearest industrial receptors the difference between the odour performance of the biofilter and stack is expected to be negligible.

The report concludes, 'given the higher performance of the stack over the biofilter is only experienced close to the site and there is only marginal improvement beyond the boundary of the new industrial estate, the additional costs associated with the stack infrastructure were considered to be excessive relative to the odour improvement outcome.' The proponent also highlights the stack option would also involve higher energy usage and costs over the life of the facility and additional maintenance costs.

The proponent also highlights biofilters are considered ideal for treating large volumes of low-concentration odorants and are well suited to processing food waste. They comment that there is a significant amount of literature supporting biofilters for the removal of odours such as Hydrogen Sulphide, Dimethyl Sulphide, and Dimethyl Disulphide, gases containing sulphur, ammonia and malodorous gases which may be produced at the plant.

The management options considered for the proposed wastewater treatment include:

- Reuse in process – this has been adopted and built into the design such that all process wastes are collected in a wet slurry system for subsequent metering back into production.
- Potential for recycling of other wastewater streams – the nature of the remaining wastewater streams (boiler blow down, biofilter leachate and wash bay effluent) are such that recycling on or off-site are not feasible.

Given the anticipated small volume of 20-25 kL/day, the preferred option is for direct disposal to sewer via a Trade Waste Agreement with TasWater.

## 5 Public and agency consultation

A summary of the public representations and government agency/body submissions is contained in Appendix 1 of this report.

One representation was received. The main issues raised in the representation were:

- Air Quality
- Stormwater Management

The DPEMP was referred to a number of government agencies/bodies with an interest in the proposal during its development. Comments were received from the following:

- Meander Valley Council

The following Divisions/areas of the Department of Primary Industries, Parks, Water and Environment also provided comments on the DPEMP during its development:

- Air Specialist, EPA Tasmania;
- Noise Specialist, EPA Tasmania;
- Environmental Officer, Northern Regulation Section, EPA Tasmania;
- Policy and Conservation Advice Branch (PCAB), Natural and Cultural Heritage Division.

The Additional Information prepared by the proponent provides a response to the key issue of air quality raised by the public.

The proponent has also undertaken its own public consultation process involving engaging with landowners and stakeholders in the proposed facility as detailed in Table 2 below.

**Table 2: Summary of Stakeholder Consultation by Proponent (Table 5 of the DPEMP)**

Consultation Date	Stakeholder	Issues Discussed	Concerns Raised
01/02/2017	Delmade	General discussion on the Ridley proposal, layout of site and update on procurement of land	None
01/02/2017	TasAlkaloids	General discussion on the Ridley proposal and layout of site	None
01/02/2017	Meander Valley Council	General discussion on the Ridley proposal, timeframes and EPA/council approvals process.	None
04/04/2017	Meander Valley Council/ AECOM/ Co-ordinator General	Notice of Intent, DPEMP process	Classification of activity by EPA. Timeframes governed by EPA
08/06/2017	Delmade	General discussion on the Ridley proposal, updated layout of site and update on sub division of land.	None
08/06/2017	TasBuilt Homes	General discussion on the Ridley proposal, updated layout of site and manufacturing process	None, however noted that any concern raised would be discussed promptly with the Ridley Site Manager
08/06/2017	Receptor A	General discussion on the Ridley proposal, updated layout of site and manufacturing process	None
08/06/2017	Meander Valley Council	General discussion on the Ridley proposal, updated layout of site and update on sub division of land.	None

## 6 Evaluation of key issues

The key environmental issue relevant to the proposal identified for detailed evaluation in this report was Air Quality. This issue is discussed in the following subsection.

### 6.1 Air Quality

#### *Description*

Air emissions including pollutants, particulates and odour, have the potential to cause environmental nuisance and harm, particularly to sensitive uses including residences, if not appropriately mitigated and managed.

There are two main sources of air pollutants on the site. The first is the odour from the production processes and the second is the pollutants emitted from combustion of approximately 1300 m<sup>3</sup> natural gas per year in the boiler and dryer. Given the scale of emissions associated with combustion and the low expected background concentrations of these pollutants, these sources were not considered further by the Air Quality Impact Assessment (AQIA).

Odour emissions from the facility are all vented through the surface of the biofilter positioned to the south-east of the main process building. An air treatment process flow diagram outlining the different stages of the process where odour is emitted and captured at the facility is shown in Figure 18 of the DPEMP. Process air is collected at each of the production stages and vented through a biofilter prior to being emitted to the environment.

The enclosed nature of the processing equipment is expected to minimise fugitive odour emissions from within the building. Although the proposed activity is not designed as a negative air-pressure building, the airflow required by specific items of equipment assist the capture of unlikely fugitive odours into the process.

The main sources of emissions are as follows:

- Raw Materials Intake – air drawn off from around the area from which the raw material is dumped
- Hammer Mill – air is extracted directly from the hammer mill
- Flash-off – air is extracted directly above the Flash-off area
- Dryer – air is extracted directly from the dryer system
- Product Cooler – air is extracted directly from the cooler system.

Details of the individual process stages are discussed in the AQIA included as Appendix E of the DPEMP.

Emissions were assumed to be vented through a biofilter at the rates outlined in the AQIA and vented at a concentration of either 250 OU or 500 OU. The proposed biofilter is located to the south-eastern corner of the site as shown in Figure 19 of the DPEMP. The AQIA modelled flow characteristics and emission data for three scenarios:

- Scenario 1 – total maximum air flow rate of 95,000m<sup>3</sup>/hr, each 270m<sup>2</sup> biofilter bed has an airflow rate of 13.19 m<sup>3</sup>/s and a total odour emission rate of 6,597 OU m<sup>3</sup>/s assuming 500 OU. This equates to an odour emission rate of 24.43 OU m/s.
- Scenario 2 – anticipated standard operating conditions with an airflow rate of 70,000m<sup>3</sup>/hr is expected over the entire biofilter bed. Each 270m<sup>2</sup> biofilter bed has an airflow rate of 9.722

m<sup>3</sup>/s and a total odour emission rate of 4,861 OU m<sup>3</sup>/s assuming 500 OU. This equates to an odour emission rate of 18.00 OU m/s.

- Scenario 3 – anticipated standard operating conditions with an airflow rate of 70,000m<sup>3</sup>/hr is expected over the entire biofilter bed. Each 270m<sup>2</sup> biofilter bed has an airflow rate of 9.722 m<sup>3</sup>/s and a total odour emission rate of 2,431 OU m<sup>3</sup>/s assuming 250 OU. This equates to an odour emission rate of 9.00 OU m/s.

Receptors have been entered into the model using a mixture of arbitrary gridded receptors, boundary receptors located on the facility boundary and discrete receptors situated on the known location of a receptor of interest e.g. house of industrial facility.



Figure 4 Discrete receptor names and locations (Figure 6 of the AIQA)

Table 3 below presents the peak odour concentration at the boundary of the property of 90.5 OU for Scenario 1, 66.7 OU for Scenario 2 and 33.4 OU for Scenario 3. The 99.5 percentile 1 hour odour concentration at the facility boundary was 87.0 OU, 64.1 OU and 32.0 OU for Scenarios 1, 2 and 3 respectively. These values exceed the EPA odour assessment criteria of 2 OU at or beyond the boundary.

**Table 3: Peak odour concentration at the property boundary (Table 9 of the AQIA)**

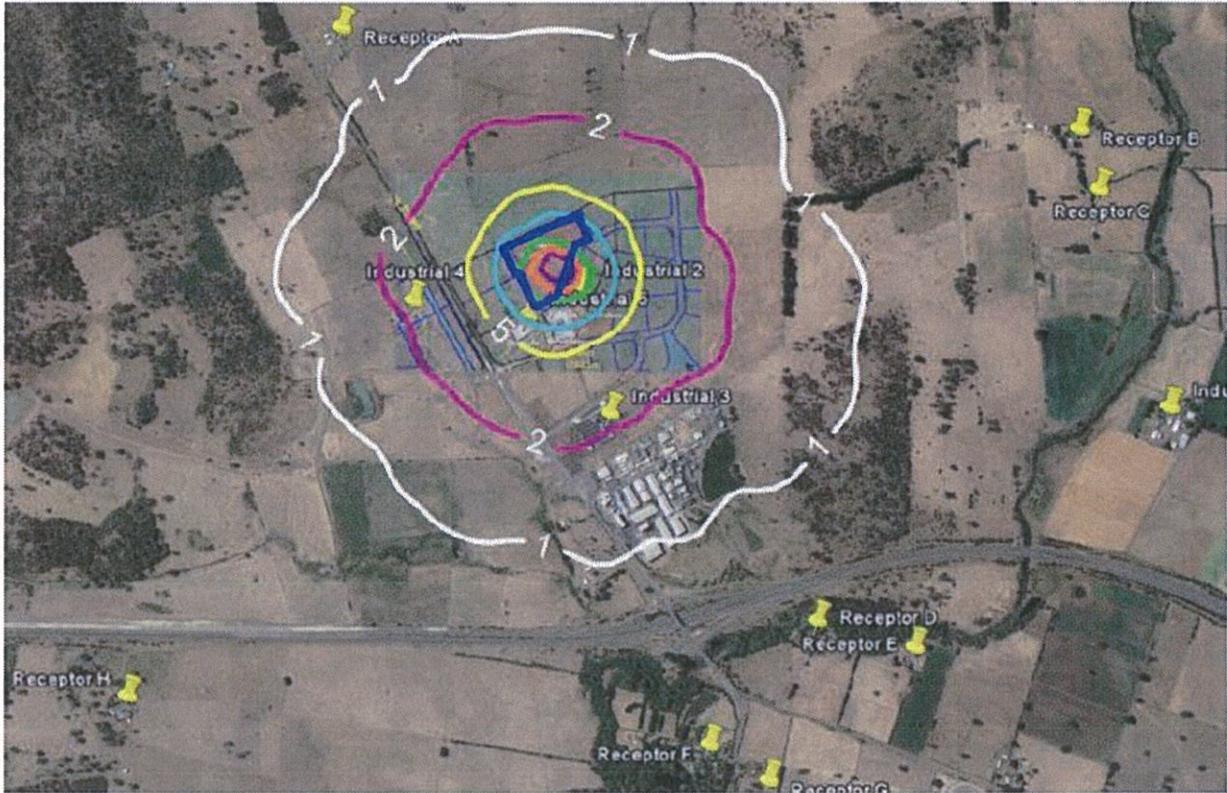
Scenario	Concentration Statistic	Receptor Location	Odour Concentration (OU)	Tas. EPA Criteria (OU)
Scenario 1	Maximum Concentration	Boundary	90.5	2
	99.5 <sup>th</sup> Percentile Concentration	Boundary	87.0	
Scenario 2	Maximum Concentration	Boundary	66.7	
	99.5 <sup>th</sup> Percentile Concentration	Boundary	64.1	
Scenario 3	Maximum Concentration	Boundary	33.4	
	99.5 <sup>th</sup> Percentile Concentration	Boundary	32.0	

According to the AQIA, one of the reasons for the possible high odour concentrations at the boundary is that the treated process air is emitted at ground level over a large area with no vertical momentum or thermal buoyancy to aid dispersion. Two stack scenarios were modelled for the AQIA. The decision to install only a biofilter is discussed in section 4 of the EAR.

Table 4 below presents the peak and 99.5th percentile 1 hour average odour concentrations for each of the discrete residential and industrial locations. All residential receptors are predicted to have a concentration below the 2 OU assessment criteria. Four of the five industrial receptors are expected to experience odour concentrations above the criteria. Concentration contours showing the distribution of the odour in the environment (Figures 7 to 12 of the AQIA). The maximum concentration and 99.5% percentile contours for scenario 2 (vented concentration of 500 OU) and scenario 3 (vented concentration of 250 OU) are shown in Figure 5 to Figure 7 below.

**Table 4: Odour concentrations at industrial and sensitive receptors surrounding the proposed facility (Table 10 of the AQIA).**

Discrete Receptor Name	Odour Concentration (OU)					
	Scenario 1		Scenario 2		Scenario 3	
	Max 1 hr	99.5% 1 hr	Max 1 hr	99.5% 1 hr	Max 1 hr	99.5% 1 hr
Receptor A	0.78	0.37	0.57	0.28	0.29	0.14
Receptor B	0.30	0.16	0.22	0.12	0.11	0.06
Receptor C	0.36	0.20	0.27	0.14	0.14	0.07
Receptor D	0.51	0.36	0.38	0.26	0.19	0.13
Receptor E	0.46	0.29	0.34	0.22	0.17	0.11
Receptor F	0.37	0.23	0.27	0.16	0.14	0.08
Receptor G	0.33	0.20	0.24	0.15	0.12	0.08
Receptor H	0.29	0.11	0.19	0.08	0.10	0.04
Industrial 1	0.42	0.25	0.31	0.19	0.16	0.10
Industrial 2	<b>20.65</b>	<b>15.59</b>	<b>15.51</b>	<b>11.49</b>	<b>7.76</b>	<b>5.75</b>
Industrial 3	<b>2.80</b>	<b>1.94</b>	<b>2.05</b>	1.44	1.03	0.72
Industrial 4	<b>2.53</b>	1.86	1.86	1.36	0.93	0.68
Industrial 5	<b>10.64</b>	<b>10.89</b>	<b>7.84</b>	<b>8.03</b>	<b>3.92</b>	<b>4.02</b>
<b>Bold text denote exceedance of the criteria</b>						



**Figure 5: Scenario 2 – Maximum Concentrations (Figure 9 of the AQIA)**

Note: the 2 OU assessment criteria value is shown in magenta. The turquoise isopleth represents 10 OU; the green isopleth represents 20 OU and the orange represents 30 OU.

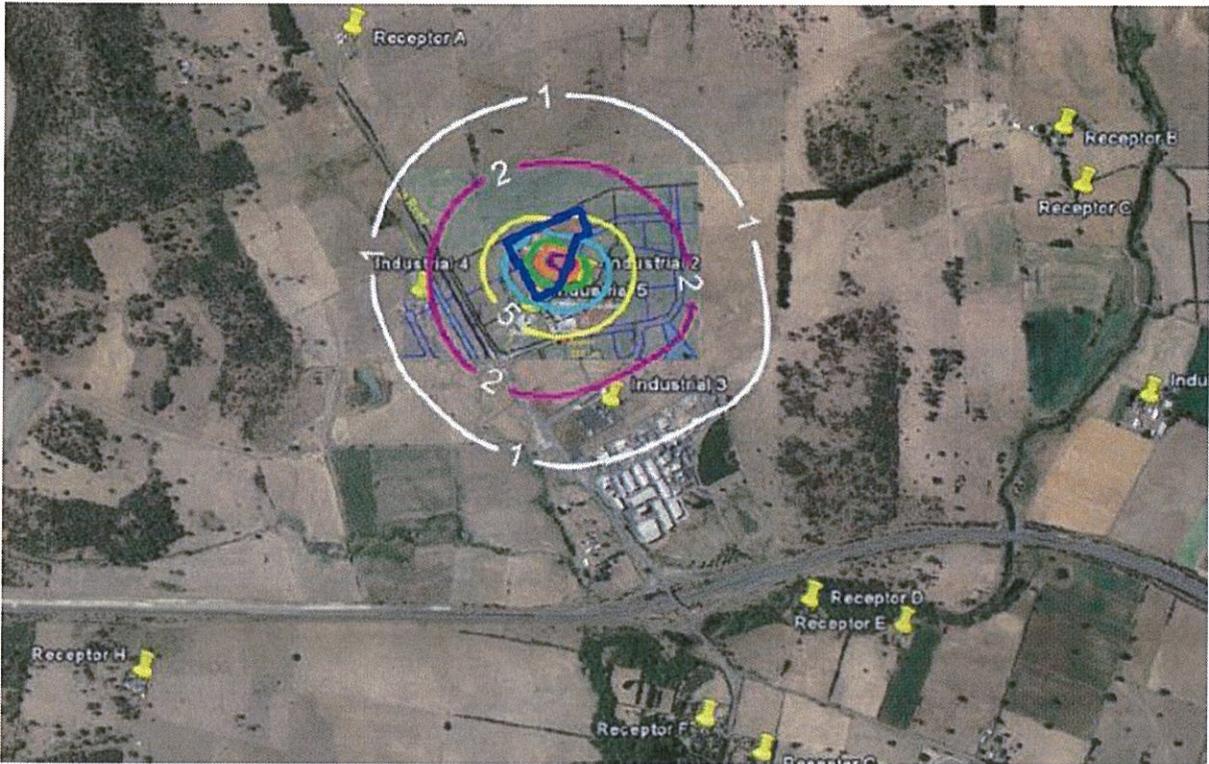


Figure 6: Scenario 2 – 99.5th Percentile Concentrations (Figure 10 of the AQIA)

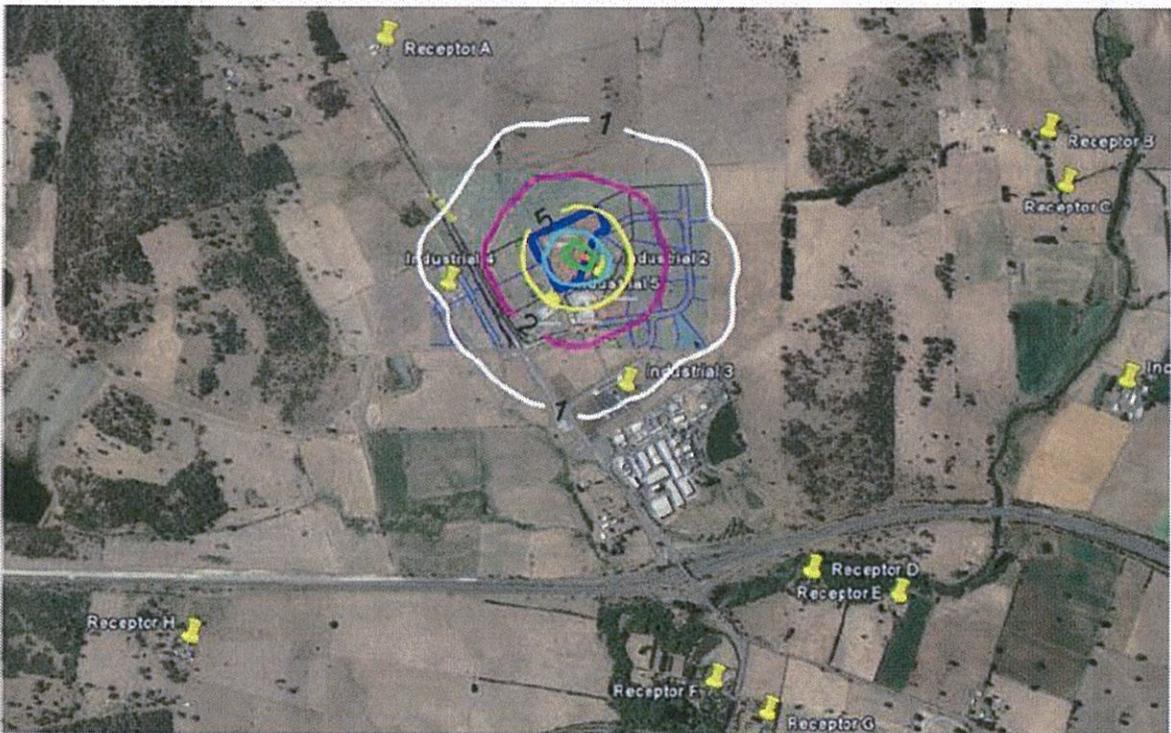
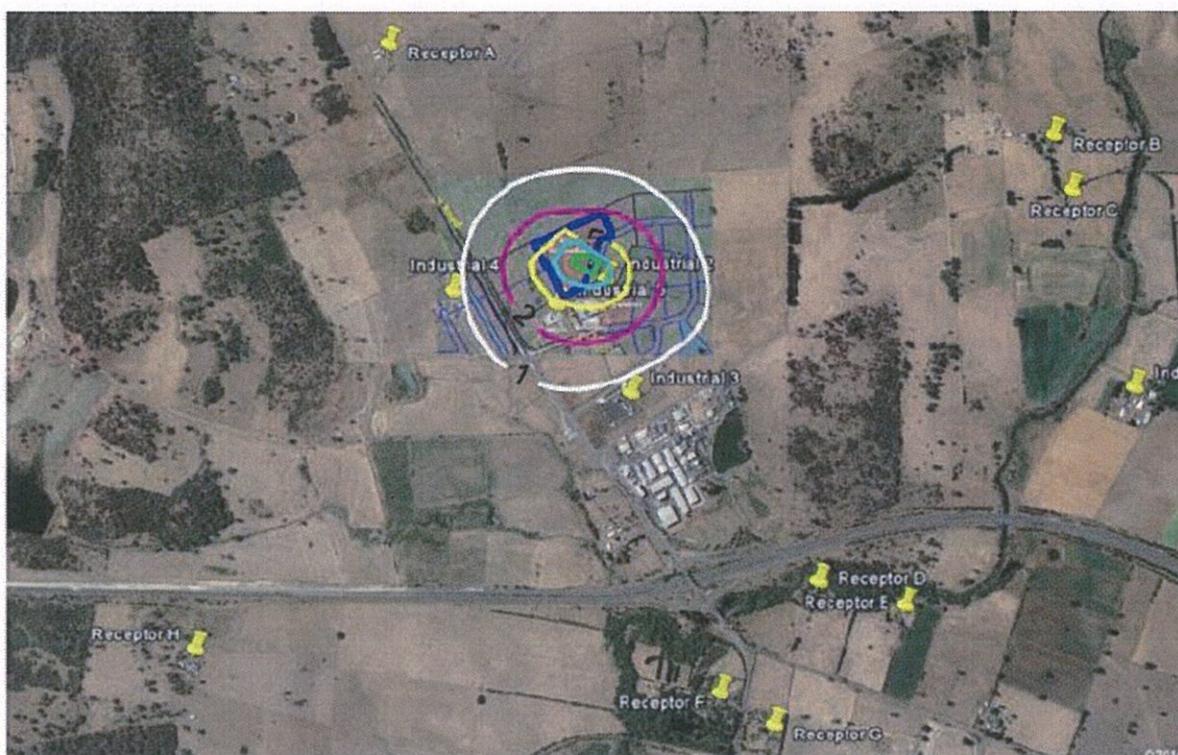


Figure 7: Scenario 3 – Maximum Concentrations (Figure 11 of the AQIA)



**Figure 8: Scenario 3 – 99.5th Percentile Concentrations (Figure 12 of the AQIA)**

The AQIA acknowledges concerns raised by EPA Tasmania about whether a biofilter can operate at a level lower than 500 OU reliably in the long term. As a result, analysis was undertaken on a facility operated by Ridley at its Narangba Queensland facility. This location has a biofilter designed to operate below 500 OU and has been tested quarterly since January 2015. Results obtained indicated the cell performance averaging 289 OU over the 2 plus year operational life of the biofilter. On this basis, the proponent considers emissions for scenario 3 acceptable and the results reliable from an emissions perspective.

The DPMP notes the odour assessment required by the Air EPP only takes into account the odour concentration and does not consider other factors that affect the perception of odour or its potential to elicit a negative response (that is, cause an odour complaint or affect amenity at a receptor). They argue, odour is a complex mixture of gases, its effect is based on perception of the odour, and other characteristics of the odour should be considered.

A further assessment of the mitigation factors that apply to odour emissions (frequency, duration and location) concluded the biofilter odour is unlikely to cause an environmental nuisance based on its neutral to slightly unpleasant hedonic tones at weak and distinct perceived intensities. They consider the biofilter odour would not elicit an adverse response from sensitive people until the concentration reached at least 4.6 OU, and more likely 9.6 OU, depending on the sensitivity of the receiving environment.

The dispersion modelling shows existing industrial receptors (receptors designated Industrial 1-5) modelled for the assessment all had predicted concentrations lower than the 9.6 OU concentration (but higher than the 4.6 OU value below which no adverse response is expected). The proponent therefore expects the operation of the activity will have a low likelihood of causing an adverse response at surrounding receptors.

The DPMP notes the hedonic tone of the odour from the biofilter is considered to have a neutral to slightly unpleasant tone. This means the odour was generally neither agreeable nor offensive to the

odour panel. This type of odour is common from a biofilter of the type proposed for the activity and the odour is described as a mild bark or fresh wood mulch odour.

The proponent expects the likely duration of odours above the criteria to be low. Residential receptors are not expected to experience any periods of emissions above the 2 OU concentration, whereas the industrial receptors modelled are expected to experience odours above the criteria for less than ~8% for all receptors with the exception of the closest industrial receptor that has a concentration > 2 OU for ~43% of the year. Coupled with the low expected frequency of odour change, the neutral hedonic tone and intensity of the odour, the duration is considered by the proponent to demonstrate that the odours generated will not elicit a negative reaction from the surrounding receptors.

The proponent also contemplated potential impacts from a location perspective, and identified that:

- Sensitive receptors (residents) are located at a substantial distance from the activity.
- There are existing Industrial receptors situated to the south of the proposed site. It is acknowledged that there is potential for the predicted odour concentration to exceed the 2 OU criterion at locations close to the site. However, the nature of the industries suggests the low level of odour that may occur on occasions will not cause an adverse reaction, with workers on these sites having a lower expectation of air quality than residences.
- There is a low population density around the activity, which suggests a correspondingly low risk of impacts on receptors.

## ***Management measures***

Commitments 1 and 2 of the DPMP are relevant to odour management:

1. Odour generated from the process units listed in the process flow chart in the AQ document will be collected and blown through a biofilter to reduce the nature and concentration of the emitted odour.
2. The biofilter will be maintained to a standard as per the Odour Management Plan.

The proponent believes a well-designed biofilter will work well from the time it is commissioned, removing the required level of odour from the inlet air stream.

An environmental complaints procedure will be established including a complaints register, response protocols and management responsibilities.

## ***Public and agency comment and responses***

A single representation was received which raised the following regarding air emissions:

- Impacts on the representor's employees and other businesses in the immediate area.
- That the DPMP does not fully address odour impacts to workers as they are not considered sensitive receptors.
- The reliability of meteorological data used for modelling due to location of the station to other buildings.
- The exceedance of the Air EPP assessment criteria, and the expectation that the proponent would meet criteria at the boundary.
- The lack of 100-percentile concentration modelling in the absence of local high-quality meteorological data.
- That Best Practice Environmental Management (BPEM) for odour needs to be implemented for the 100-percentile concentration.
- That the 2 OU criteria will be exceeded at the representor's boundary based on the Air Modelling report and that they believe it will be greater than predicted due to issues with the modelling.
- That approval of a proposal that does not meet assessment criteria will set a precedent for non-compliance of other proposals.
- That cumulative impacts and non-enforcement assessment criteria are likely to result in greater impacts on their employees.

According to EPA Tasmania's Air Specialist, the meteorology of Westbury area is characterised by slow winds and frequent inversion layers, which would affect air dispersion of emitted pollutants by trapping them close to the ground.

They note that in relation to the AQIA, the extent of odour impact has not been discussed in terms of distances. Comparing the odour dispersion modelling results provided in the Figures 7 – 10 the specialists estimate the scale of the predicted odour concentrations above 2 OU as circles of diameters approximately 700 m and 1200 m for Scenarios 2 and 1 respectively.

The Air Specialist consider Scenario 3 of the AQIA, where the emissions from the biofilter are 250 OU, to be non-conservative and representing ideal working conditions of the biofilter. They noted measured odour emissions, from a similar biofilter at the Narangba facility provided in the AQIA, are from 100 to 730 OU.

The Air Specialist argued, that during the odour study at the Narangba facility, an odour panel agreed the odour was neutral to slightly unpleasant, this may not be the perception shared by a person living

or working nearby who is exposed to the same odour. They also noted that the methodology used to derive the odour characteristics is not fully documented in the DPMP or OMP.

Increasing concentration of odour is considered likely to change perception of the hedonic tone toward 'unpleasantness' and therefore a potential nuisance. Nuisance may also result from the duration of exposure to the odour. Figure 22 of the DPMP confirms that (even for the non-conservative Scenario 3) one of the industrial receptors is expected to experience odours above the Air EPP 2 OU boundary design criteria for more than 40% of the year.

The Air Specialists concluded that there are limitations, which may affect the actuality of emissions and the proponent's claim: "the assessment of potential impacts has demonstrated that it is highly unlikely that there will be any unacceptable adverse impacts from the proposal". These limitations include poor air dispersion, the nature of the activity, the level of predicted odour emissions and the limitations of assessing environmental nuisance based on tonal and hedonic characteristics.

## **Evaluation**

The proposal is to be located within the Valley Central Industrial Estate (formerly the Birralee Road Industrial Precinct). The land is zoned as General Industrial under the *Meander Valley Interim Planning Scheme 2013* and the proposal is for 'manufacturing and processing', a use permitted under the Scheme.

While the use is consistent with the intent of the Industrial Estate, air quality was not considered in the Resource Management and Development Commission of Tasmania decision on the *Meander Valley Planning Scheme 1995 Amendment 1/2008* [2008]<sup>2</sup> which created the estate. The decision states:

'concerns about pollution are capable of being managed through permit conditions for individual developments and through ongoing regulation by the *Environmental Management and Pollution Control Act 1994*'.

Further to this, the decision notes:

'NEPMs have been created in relation to Ambient Air Quality, National Pollutant Inventory, Movement of Controlled Waste, Used Packaging Materials, Assessment of Site Contamination, Diesel Vehicle Emissions and Air Toxics. Industrial development and use may well be affected by NEPM standards but the relevant issues are capable of being regulated through the provisions of the *Environmental Management and Pollution Control Act 1994*. The draft amendment contains provisions that require the protection of environmental quality in accordance with EMPCA.'

Any application for a use and development on the Industrial Estate, which is referred to the Board, must be assessed and regulated according to the provisions of the EMPC Act. The assessment must be specific to the application and therefore the land to which the application relates. It must include assessment against the relevant statutory requirements, including the Air EPP made under section 96K of the EMPC Act.

In the Air EPP odour is specifically addressed under section 13. Section 13(1) which states:

If a regulatory authority is satisfied that an odour from an activity is causing or is likely to cause an environmental nuisance or environmental harm, the authority should require that the odour emission from the source not exceed the odour criteria specified in Schedule 3, at or beyond the boundary of the land on which the source is located.

Schedule 3 requires:

an atmospheric dispersion calculation to be performed to ensure that the predicted maximum ("worst case") ground level concentration does not exceed the concentration criteria specified...The atmospheric dispersion calculation should consider local terrain and meteorology, the effect of

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<sup>2</sup> TASRPDComm 33 (6 October 2008)

background concentrations, the contribution of adjacent sources and the need to preserve the capacity of the local environment to receive future emissions.

The schedule defines the odour criteria to be 2 odour units at or beyond the boundary of a facility.

Section 13 and Schedule 3 specifically relate to odour and form part of Part 4 of the Air EPP, which addresses point sources of air contaminants. According to the DPEMP, the biofilter will capture point sources of emissions for treatment, and therefore Part 4 applies. The biofilter was the only odour abatement technology considered viable by the DPEMP after consideration of alternatives such as wet scrubbers or a stack.

The Air EPP states under section 11(1):

(f) If it is not possible with the application of best practice environmental management to comply with design criteria determined in accordance with [Schedule 2 of the Air EPP or criteria determined by the Director] at the boundary of the land on which the point source of pollution is located, the regulatory authority may permit the emission of the pollutants if it is satisfied that the emission will not –

(i) put at risk the health of any person beyond the boundary of the land on which the point source of the pollution is located;

(ii) allow the pollutant(s) to unreasonably interfere with the enjoyment of the environment by any person living or working beyond the boundary of the land on which the point source of the pollutant(s) is located; or

(iii) otherwise cause serious or material environmental harm; or

(iv) be exceeded outside commissioning, start-up or shutdown periods provided the regulatory authority has specified the conditions under which the excess emissions from such events are permitted; and there is an ongoing commitment to a program of pollution reduction to reach compliance with (d) or (e) as soon as reasonably practical.

Based on the provisions of the Air EPP, 2 OU is the standard design criteria for proposed developments. The representor believed that the proposal should meet this criterion. However, the Air EPP also recognises (through the use of 'should' in section 13) that in some circumstances even with the installation of accepted modern technology and best practice environmental management, this criterion will not be met. The Air EPP then allows for the regulatory authority (the Board) to permit the emission of pollutants where it is satisfied that sections (f)(i) and either (f)(ii), (f)(iii) or (f)(iv) are not compromised. It should be noted that the predicted emission exceedances are not limited to commissioning, start-up or shutdown periods to which the Board can apply conditions. The proponent has also not made any commitment to emission reduction to allow future compliance. Therefore section (f)(iv) cannot be applied to this decision and the assessment must focus on (f)(i) and (f)(ii) or (f)(iii).

The proponent has sought to demonstrate that the biofilter is acceptable modern technology and allows for an odour capture system that is best practice environmental management. This is consistent with the expectations of the Air EPP.

The air modelling for the proposed activity demonstrates exceedances of 2 OU at the boundary of the Land based on the technology proposed. However, the model also demonstrates that odours above 2 OU units are unlikely beyond the boundary of the industrial estate based on scenario 3, with levels of 1 OU beyond the industrial estate for scenario 2. No impacts to residences are identified under any of the scenarios.

The representation raised concerns that workers were not sufficiently considered by the DPEMP, which focused on compliance with 2 OU at the nearest residences. However, the level of odour emissions at surrounding industrial sites has been modelled allowing the consideration of impacts to workers as required by the Air EPP. The Board ultimately determines whether the emissions are likely to compromise the environmental values of the Air EPP including interference with the enjoyment of the environment by any person working beyond the boundary of the land (see section 11(i)(f)(ii)). It should be noted that based on the standard operating conditions scenario, odour levels

at the representors site are likely to be below 2 OU under scenario 2 and below 1 OU for scenario 3.

The DPMP identifies that the Air EPP does not consider the complexity of odour beyond setting a numerical design or regulatory limit. While the proponent acknowledges that levels exceed the standard criteria, they present a case that the levels predicted at both industrial and residential receptors are such that the emissions will not compromise sections (f)(i) and (f)(ii) or (f)(iii).

In particular, the Air Quality Impact Assessment (AQIA) predicts biofilter odour would not elicit an adverse response from sensitive people until the concentration reached at least 4.6 OU, and more likely 9.6 OU, depending on the sensitivity of the receiving environment. With the dispersion modelling showing existing industrial receptors (receptors designated Industrial 1-5) had predicted concentrations lower than the 9.6 OU concentration (but higher than the 4.6 OU value below which no adverse response is expected) the proponent does not expect impacts to workers at these sites. It is noted these predictions are based on the less than conservative scenario 3. The more conservative scenarios 1 and 2 predict higher odour concentrations at the industrial receptors in the range from 11.49 to 15.50 OU for 99.5 percentiles and 15.51 to 20.65 OU for 100 (max) percentiles. No evidence is provided as to the likely effect on receptors at these concentrations.

While this argument is not consistent with the use of the Air EPP and its 2 OU design criterion, the following may allow acceptance of the criteria:

- absence of predicted odour impacts at residences, and
- the modelling for scenario 3 predicted levels of odour below that likely to cause an adverse reaction at industrial receptors (under worst case scenario conditions for standard operating conditions).

However, the predicted higher concentrations under scenarios 1 and 2 may not result in the same conclusion of no adverse response.

The proponent considers that while the emissions levels may be higher than the 2 OU, they are unlikely to cause a response from nearby receptors, that is, they don't expect their activity to cause environmental nuisance or harm beyond the boundary of the site. 'Environmental nuisance' as defined under the EMPC Act means:

- (a) the emission, discharge, depositing or disturbance of a pollutant that unreasonably interferes with, or is likely to unreasonably interfere with, a person's enjoyment of the environment; and
- (b) any emission, discharge, depositing or disturbance specified in an environment protection policy to be an environmental nuisance.

EPA Tasmania's Air Specialists consider hedonistic characteristics an inappropriate measure of the potential impact of odour emissions. An odour that is pleasant to one person may not be considered so to another. Concentration provides a constant level of measure that can be applied to measure potential impact and allow regulation. It should be noted, 2 OU is a measure of concentration at which a majority of people will detect an odour, not whether that odour is pleasant or unpleasant. Although it is expected that once an odour reaches a certain level it will be unpleasant to most people.

Other regulated activities emit odour at a level detectable at or beyond the boundary of the land during normal or abnormal operating conditions, some of which are located in urban areas. EPA Tasmania usually becomes involved when complaints are received, as they are an indication that environmental nuisance may be occurring and that a regulatory response is needed. This is consistent with the approach being proposed for this activity. The difference here is that this is a new activity with a known and predicted level of odour which may, from commencement, emit an odour at a level that could affect workers on the industrial estate.

While it is acknowledged 2 OU cannot be met at the boundary of The Land, consideration of the effects of odour emissions in the context of s.11 of the Air EPP has been undertaken by the Board in its assessment. The proposed aqua feed mill will produce relatively large volumes of odorous air

that requires collection and treatment. It is noted that biofilters are widely employed elsewhere in Australia, including Tasmania, to treat this type of odour stream. Furthermore, the proponent's Brisbane facility is known to be located within an industrial estate with little buffer to neighbours and has not been the cause of complaints due to odour emissions from the biofilter.

The Board considered that the proposed odour collection and treatment system represents best practice environmental management for this type of activity, and that the odour emissions would not put at risk the health of any person beyond the boundary of The Land.

To determine whether the odour emissions are likely to cause environmental nuisance more than just the numerical value of the predicted odour emission must be considered, including the type, intensity and duration of the odour. It is accepted, based on the evidence of the proponent's odour consultant, as well as EPA Tasmania's own experience, that the odour from a properly functioning biofilter is not normally considered to be offensive, nor a threat to physical human health.

While the proponent argues scenario 3 as being representative of the proposed aqua feed mill, scenario 2 is considered to be a more reasonable base case to consider. It is noted there will be variations in the odour emission levels and that the predicted levels of odour units at receptors will probably be both higher and lower than the modelled outcome of Scenario 2 on occasions. Furthermore, the meteorological data that was used in the modelling would have overestimated rather than underestimated odour levels.

Based on the modelling, it is considered that there should not be any impact from odour on sensitive receptors. It is also noted that odour emissions from the proposed aqua feed mill will not be the only odour source from within the general industrial estate and that it would not be unreasonable or uncommon in such a setting for a higher level of odour to be present than in residential areas.

Based on the evidence supplied and EPA Tasmania's expertise, it is considered the proposed aqua feed mill could be operated without causing an unreasonable level of odour (i.e. a statutory nuisance) for nearby industrial neighbours. Nonetheless, the proximity of the neighbours means that a very high standard of operation will be required with strict adherence to the conditions contained in Appendix 3. While the detailed range of monitoring and maintenance measures proposed in the Odour Management Plan are considered appropriate, the Plan requires a better analysis of contingencies and responses. It is acknowledged there will remain some risk of nuisance if the plant is not operated to a high standard, however, there are a number of regulatory tools available to the Director, EPA under EMPCA should this situation arise.

To ensure that the activity is managed in accordance with the proponent's expectation that no nuisance or harm will result from their operations, they will be required to comply with **condition A1**. This condition requires management measures to be implemented to prevent odours causing environmental nuisance beyond the boundary of the land. The presence of environmental nuisance will rely on detection by complaints and odour surveys (see below). To ensure complaints are received and managed **condition G6** requires the establishment of a complaints register. This register then supports regulation with condition A1. In addition, under **condition A3**, any odour complaint must be reported to the Director, EPA within 24 hours to allow suitable review and response.

To support compliance with condition A1, that is, to ensure the absence of environmental nuisance or harm, the activity must be undertaken in accordance with an Odour Management Plan under **condition A2**. This is consistent with commitment 2 of the DPMP. An OMP was submitted as additional information subsequent to the public consultation period, however further refinement of the plan is required. The plan must be approved prior to the commencement of commissioning. The Odour Management Plan provides details of the operating and monitoring instructions for the odour capture system to ensure it performs to prevent environmental nuisance or harm beyond the boundary of the site. The Plan also needs to include a clear Shutdown Procedure in the event of sustained odour impacts. Records of monitoring and maintenance must be made available to an authorised officer on request.

In addition, the proponent will be required to undertake regular odour surveys under **condition A4**. The OMP includes an annual Field Ambient Odour Assessment, consistent with an Odour survey. While the OMP proposes the surveys on a biannual and annual basis, a greater frequency is proposed for the first 12 months from commencement of commissioning to ensure the facility is operating in accordance with the proponent's expectations and the absence of environmental nuisance. Surveys will then be on a biannual basis. Surveys may also be required by the Director, including in response to complaints. This condition requires the odour survey to be undertaken in accordance with the OMP and any additional guidance provided by the Director. This allows EPA Tasmania's Air Specialists to ensure that the design of the surveys is appropriate.

**Condition A5** requires the submission of an odour survey report and details the minimum requirements of the report. It also requires an assessment against the predictions of the DPEMP and recommendations for any mitigation or management measures needed to ensure that the absence of environmental nuisance is maintained.

Should the activity not comply with condition A1, the EMPC Act provides a regulatory framework to require necessary actions to establish compliance. This comes with the risk of additional costs or delays to the proponent, should their assumptions of the absence of likely environmental nuisance or harm from odours not be accurate.

The representation questioned the reliability of the meteorological data used for air modelling and the need for 100<sup>th</sup> percentile modelling. The DPEMP acknowledges that the calm weather identified in the data may not be a true reflection of the Westbury site as the building located directly to the north of the station may be providing a shadow effect. However, the report also acknowledges the data's inclusion into the model is a conservative approach as calm and light wind conditions are expected to produce worst-case dispersion conditions from the biofilter. The AQIA also includes the calculation of concentrations for both the 100th (maximum) and 99.5th percentile statistics, due to the doubt over the quality of the meteorological data used for the Westbury region. An analysis of meteorological data is included in Section 5.3 and Appendix A of the AQIA (Appendix E of the DPEMP).

The representation also raised concerns regarding cumulative impacts. The decision on the planning scheme amendment places the focus of air assessment on individual applications and their specific emission sources. However, it is noted that Schedule 3 of the Air EPP states:

The atmospheric dispersion calculation should consider local terrain and meteorology, the effect of background concentrations, the contribution of adjacent sources and the need to preserve the capacity of the local environment to receive future emissions.

The AQIA for the activity report does not include an assessment of the contribution of adjacent sources or need for preservation of the capacity of the air shed to receive future emissions. The potential exists that future development of the Industrial Estate will be limited as other applications, undertaking an AQIA in accordance with Schedule 3, may be unable to demonstrate that the air shed capacity will not be compromised, based on current sources.

The DPEMP identifies emissions from the combustion of natural gas in the dryer and boiler to be small in scale. They were not considered further in the AQIA. The Air EPP expects nitrous oxide (NO<sub>x</sub>) emissions to be 350 mg/m<sup>3</sup>. The proponent is reminded in the information schedule that emissions from the boiler stack should meet this criterion. **Condition A6** allows the Director to require monitoring of in-stack concentrations of the gas-fired boiler in the event that concerns are raised regarding NO<sub>x</sub> or other point source emission levels. To support potential in-stack testing, **condition A7** requires the installation of appropriate testing facilities.

## Conclusions

The proponent will be required to comply with the following standard conditions:

- G1** Access to and awareness of conditions and associated documents
- G2** Incident response

- G3** No changes without approval
- G4** Change of responsibility
- G5** Change of ownership
- G6** Complaints register

The proponent will be required to comply with the following site-specific conditions:

- CN1** Construction Environmental Management Plan
- G7** Notification prior to commissioning
- A1** Odour Management
- A2** Odour Management Plan
- A3** Odour Complaints
- A4** Odour survey
- A5** Odour survey report
- A6** Gas-fired boiler emissions
- A7** Stack test facilities

## 7 Other issues

In addition to the key issues, the following environmental issues are considered relevant to the proposal and have been evaluated in Appendix 1.

1. Liquid Waste, Surface Water and Groundwater
2. Noise Emissions
3. Waste Management
4. Biodiversity and Natural Values
5. Environmentally Hazardous Materials
6. Decommissioning and Rehabilitation

## 8 Report conclusions

This assessment has been based upon the information provided by the proponent in the permit application, DPEMP, Additional Information and in correspondence and discussion between EPA Tasmania and the proponent and the proponent's representatives.

This assessment has incorporated specialist advice provided by EPA Division scientific specialists and regulatory staff, other Divisions of DPIPWE and other government agencies.

This assessment has taken into account issues raised in public submissions.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposal has been undertaken in accordance with the Environmental Impact Assessment Principles.

It is concluded that the proposal is capable of being managed in an environmentally acceptable manner such that it is unlikely that the RMPS and EMPCS objectives would be compromised, provided that the Permit Conditions - Environmental No. 9685 appended to this report are imposed and duly complied with.

## Report approval

**Environmental Assessment Report and conclusions, including permit conditions, adopted:**



Warren Jones  
**CHAIRPERSON**  
Board of the Environment Protection Authority

Meeting date: 18<sup>th</sup> December 2017

## 9 References

AECOM (2017); *Development Proposal and Environmental Management Plan* (dated 11 September 2017); Ridley Agriproducts Pty Ltd, Melbourne, Victoria.

Ridley (2017); *Westbury Odour Management Plan (HSE-WEST-001), Version 2, Health, Safety & Environment, Westbury* (dated 29 November 2017).

## 10 Appendices

- Appendix 1 Assessment of other issues
- Appendix 2 Summary of public and agency submissions
- Appendix 3 Permit Conditions – Environmental No. 9685

## Appendix 1 Assessment of other issues

### Issue 1: Liquid Waste, Surface Water Quality and Groundwater

#### Description of potential impacts

The release of wastewater or contaminated stormwater has the potential to cause environmental nuisance or harm if not appropriately mitigated or managed, particularly through the contamination of water bodies and groundwater.

The main sources of wastewater generated by the facility are from:

- The biofilter;
- The boiler blowdown process; and
- The wash bay area where cleaning of grinder screens takes place.

The majority of waste from processing will be captured by a wet slurry system which is a part of the extrusion process. This process will capture and manage the feed waste (wet and/or dry, mash and/or formed pellets) from pre conditioning and the extruder. All wet slurry will be re-introduced into the process at the pre conditioner in an accurately controlled manner.

No wastewater will be discharged to land or water.

Uncontaminated stormwater will be discharged into the natural drainage system on and around the site.

#### Management measures proposed in DPEMP

**Commitment 3:** Preparation of a Construction Environmental Management Plan, which will provide for management of stormwater quality impacts from erosion and sedimentation and dust management.

**Commitment 4:** Finalise a Trade Waste Agreement (TWA) with TasWater.

**Commitment 5:** The liquid ingredients unloading area will be bunded to contain spills and prevent stormwater contamination.

**Commitment 13:** The site stormwater system will have an isolation valve that can be closed, if a major spill occurs, so as to contain the spill on site.

**Commitment 14:** Stormwater from the wider property will be diverted into the natural drainage system surrounding the property via swales and an interceptor pit as per site design.

**Public and agency comment**

The representation raised concerns regarding stormwater design and management.

Meander Valley Council provided the following comments during the assessment process:

*'The planning scheme provisions for the precinct [Valley Central Industrial Estate] require specific stormwater responses protecting the function of the public stormwater system and water quality through water quality protection devices. In complying with the planning scheme, the proposal will comply with the State Policy on Water Quality Management and the State Stormwater Strategy. The application is required to include a drainage plan that demonstrates compliance with the stormwater provisions...'*

Subsequent comments from Council on receiving the representation state:

*'I advise that there is a requirement in the planning scheme provisions for this precinct that all development must connect to the reticulated stormwater system, with all stormwater from individual sites being treated by water quality devices appropriate to the nature of development, prior to discharge to the reticulated system.'*

*This development shows on the plans the interception of stormwater through an interceptor prior to discharge. The development will connect to the reticulated system either through the existing easement or directly to Integrity Drive. Detailed stormwater engineering designs are typically provided for the plumbing permit application whereby sizing of infrastructure ensures that there is no overtopping in peak storm events, however it is clear the proposal collects all stormwater from the site, directs through a water quality device and discharges to the reticulated system which is directed under Birralee Road to the water course on the western side of Birralee Road.*

*There is no risk of stormwater from this development reaching the [representors] site as expressed in the representation.'*

**Evaluation**

The proponent intends to discharge liquid waste to sewer via a Trade Waste Agreement with TasWater. The assessment of the application is based on this outcome. Operation will not be able to commence until an agreement has been reached. The Trade Waste Agreement will define the quality of effluent to be discharged and subsequently any relevant pre-treatment necessary to meet the requirements. Section 2.1.8 of the DPMP notes:

*'Discussions have been held with TasWater regarding a Trade Waste agreement. In the event that further evaluation of the Narangba wastewater suggests that exceedances may still occur, further onsite treatment will be implemented into the detailed plant design to satisfy Trade Waste requirements'*

**Condition WW1** requires wastewater to discharge to sewer, consistent with the proposal.

**Condition WW2** requires the discharge to sewer to be with approval from the operator. The information schedule identifies the need to gain a TWA as per the requirements of the *Water And Sewerage Industry Act 2008* and *Water And Sewerage Industry (General) Regulations 2009*.

It is noted that the Council report submitted as part of the Resource Management and Development Commission of Tasmania decision on the *Meander Valley Planning Scheme 1995 Amendment 1/2008 [2008] TAsRPDComm 33 (6 October 2008)* discusses sewerage capacity. The section entitled The Site states: *'Sewerage is not yet available but extension from the Westbury treatment plant (via new pump stations and rising main) is proposed. However limited capacity of the treatment plant precludes acceptance of large volumes of industrial waste water or high level wastes requiring advanced treatment'*.

EPA Tasmania is not aware of any upgrades to Westbury WWTP to manage capacity or suitable treatment. Should the proponent be unable to reach agreement with TasWater on liquid waste disposal, alternative disposal may require additional approvals under both planning and environmental legislation.

Based on comments from Meander Valley Council, stormwater management and regulation will be addressed by them under the provisions of the planning scheme and any permit conditions

imposed by Council. The planning scheme does not assess potential impacts during construction. The proponent will therefore be required to prepare and implement a Construction Environmental Management Plan, consistent with commitment 3 of the DPMP, under **condition CN1**.

Impacts to groundwater are expected to be limited based on the absence of discharge of wastewater to land or water and proposed stormwater management measures. No conditions in relation to groundwater are therefore proposed.

### Conclusion

The proponent will be required to comply with the following site-specific condition:

**CN1** Construction Environmental Management Plan

**WW1** Management of Contaminated Water

**WW2** Discharges to sewer

No conditions in relation to liquid waste (effluent) or groundwater are proposed.

Condition O13 in Schedule 3: Information reminds the proponent that they will need to enter into a Trade Waste Agreement with TasWater as per the *Water And Sewerage Industry Act 2008* and *Water And Sewerage Industry (General) Regulations 2009*.

## Issue 2: Noise Emissions

### Description of potential impacts

Noise emissions from the activity have the potential to cause environmental nuisance, particularly at sensitive receptors including residences, unless appropriately mitigated or managed.

The proposed hours of operation of the processing plant are 24 hours a day, five days a week increasing to seven days a week depending on market demand.

The proposed Mill is located on a site in the General Industrial Zone adjacent to Birrale Road, approximately 500 metres north-west of Bass Highway, Westbury. The site is currently surrounded by unoccupied land, with industrial zoned land located to the south.

The proposed site and nearest noise sensitive receivers (both Industrial and Residential) are presented in Figure 29 with noise sensitive receivers listed in Table 13 of the DPEMP.

Typical activities on the site will include;

- the delivery and storage of raw materials
- grinding feed in a multi-mill
- mixing feed
- drying into pelleted feed
- packaging activities
- dispatch of finished products to customers.

According to Section 2.1.10 of the DPEMP, the plant and equipment with noise emissions will include:

Equipment	Noise Level
Hammermill unit	Up to 100 dbA
Horizontal Mixer	Below 70 dbA
Extruder	Higher than 80 dbA
Dryer	90-100 dbA at ventilators with full speed

Assessment of noise and vibration impacts for construction and operation for the facility were undertaken as part of the DPEMP.

During construction, the predicted noise levels during the loudest stage of construction (site establishment) are predicted to comply with project noise limits at all residential and non-residential receptors. All other stages of construction are therefore expected to comply with all relevant noise levels. The report concludes, that since the nearest off-site receptors are greater than 100 metres from the proposed site, no significant risk of adverse vibration impacts are likely to surrounding receptors.

The results of noise modelling of the operational noise impacts indicate that under worst case weather conditions operational noise is likely to comply at all receptors except Receptor A (residence at 650 metres). Noise emissions at Receptor A are predicted to exceed the evening and night criteria by 1 and 5 dB (A) respectively under worst case weather conditions but only if roller doors on the north-western side of the facility are open. There will be no deliveries during the evening or night, the roller doors on the north-western side of the building will therefore be closed allowing compliance with the noise limits at Receptor A under all weather conditions.

<p><b>Management measures proposed in DPEMP</b></p> <p><b>Commitment 6:</b> Where possible, equipment with directional noise emissions will be orientated away from the nearest sensitive receivers that are located to the west of the site.</p> <p><b>Commitment 7:</b> Plant equipment work will be regularly maintained in line with fit for purpose site operations.</p> <p><b>Commitment 8:</b> Maintenance work on construction plants with the potential to generate noise impacts will be confined to standard daytime construction hours.</p> <p><b>Commitment 10:</b> To reduce noise emissions and for security purposes, the roller doors located on the north-western facade will be closed during the evening and night-time periods.</p>
<p><b>Public and agency comment</b></p> <p>EPA Tasmania's noise specialist acknowledged there is a faint possibility of night time noise but the expectation is that this will be controlled by basic management measures (closing doors). They also noted there are some assumptions that may have implications (e.g. providing a specified level of attenuation for certain noisy components) and suggested the inclusion of the requirement for a noise survey following full commissioning.</p>
<p><b>Evaluation</b></p> <p>The Council report submitted for the Resource Management and Development Commission of Tasmania decision on the <i>Meander Valley Planning Scheme 1995 Amendment 1/2008 [2008] TASPDComm 33 (6 October 2008)</i> states:</p> <p><i>The edge of the town of Westbury is located approximately 1 km south of the site and was considered sufficiently distant not to be affected by noise... There are two residences approximately 850m north of the site. Nevertheless, all activities on the site must comply with the Environmental Management and Pollution Control Act 1994 and potential impacts on sensitive uses would be considered.</i></p> <p>The Council submitted 'that the separation of the industrial estate from sensitive uses and Council's permit conditions relating to emissions...would prevent noise...adversely affecting persons outside the Industrial Zone.'</p> <p>The noise study undertaken for the DPEMP indicates that environmental nuisance is unlikely to occur at any noise sensitive premises. Noise levels at nearby industrial premises are also likely to comply with relevant noise levels. However, predicted noise levels are only 1 dBA below the assessment criteria at the residence 650 metres from the site for both day and night time. To ensure that the facility continues to meet the predicted levels and does not cause environmental nuisance at the nearest sensitive receptor, noise emission limits will be imposed. The levels of 35, 40 and 45 dBA will apply during night time, evening and day time respectively under <b>condition N1</b>. Under <b>condition G6</b> a complaints register will also be required to track and manage any complaints, including noise complaints.</p> <p>The compliance within noise emission limits, as detailed in the DPEMP, is based on a variety of assumptions. To confirm the activity's ability to comply with the noise emission limits, noise survey will be required within 3 months of the date of the commencement of operations under <b>condition N2</b>. Subsequent surveys may also be required and this is detailed in the condition. Details of noise survey method and reporting is provided in <b>condition N3</b>. As the date for completion of the survey is based on commencement of operation, <b>Condition G8</b> requires notification prior to commencement of operation.</p> <p>The predicted noise level for construction is 44 dBA at the nearest sensitive receptor, only 1 dBA below the standard limit of 45 dBA. To ensure that noise emissions from construction activities do not cause impacts to sensitive receptors, construction activities will be limited to the hours of 6 am to 6 pm Monday to Friday and 8 am to 6 pm on Saturdays, unless otherwise approved by the Director, under <b>condition CN2</b>. The CEMP required under <b>condition CN1</b> will also include management measures for minimising noise impacts during construction.</p>

<b>Conclusion</b>	
The proponent will be required to comply with the following standard condition:	
<b>G6</b>	Complaints register
The proponent will be required to comply with the following site-specific conditions:	
<b>CN1</b>	Construction Environmental Management Plan
<b>CN2</b>	Operating hours - Construction
<b>N1</b>	Noise emission limits
<b>N2</b>	Noise survey requirements
<b>N3</b>	Noise survey method and reporting requirements

<b>Issue 3: Waste Management</b>
<p><b>Description of potential impacts</b></p> <p>Inappropriate management of waste has the potential to cause environmental nuisance or harm through disposal to land or water. Section 6.5.2 of the DPEMP states, solid wastes generated directly from the process of feed production are minimal.</p> <p>The majority of waste from processing will be captured by a wet slurry system. The wet slurry system captures and manages the feed waste (wet and/or dry, mash and/or formed pellets) from pre-conditioning and the extruder, then reintroduces it into the process at the pre-conditioner in an accurately controlled manner.</p> <p>The fines feed waste (including dusts) from sieves, cyclones and dryer will be collected, weighed, recorded and conveyed automatically to designated macro batching bins for weighing and inclusion into diets.</p> <p>The solid waste streams generated are:</p> <ul style="list-style-type: none"> <li>• Used Intermediate Bulk Container (IBC)/totes or bag-in boxes from oils/liquids delivered to the site;</li> <li>• Bulk feed bags (6 kg to 1000 kg capacity);</li> <li>• Waste from dust collection and biofilter (media change-out); and</li> <li>• Normal office and staff wastes.</li> </ul> <p>The bag-in-boxes and bulk feed bags are the main waste streams. It is estimated that up to 2,000 feed bags of different sizes will be generated at the site per week.</p> <p>Waste streams from the dust collection systems that are not suitable to be reintroduced into the production process and biofilter media change-out are expected to be either relatively small or infrequent and non-hazardous. Biofilter media change-out is expected to be required every 3 years or as specified in the biofilter maintenance schedule. A complete replacement would generate a maximum of 1,000 m<sup>3</sup> of solid waste. These wastes will be disposed of to landfill.</p>
<p><b>Management measures proposed in DPEMP</b></p> <p>The DPEMP states the waste streams will be managed in accordance with the <i>Environmental Management and Pollution Control (Waste Management) Regulations 2010</i>. The intent is to reuse and recycle wherever possible.</p> <p>Bag-in-boxes and bulk feed bags which are the main waste stream and IBC will either be fully recycled or returned to the supplier or to a third party reconditioner.</p> <p>Small amounts of waste from dust collection and general office and staff wastes will be disposed of to landfill via traditional municipal or industrial waste collections.</p> <p>Wastes will be stored in covered areas within the process building to avoid contamination of stormwater runoff.</p> <p><b>Commitment 9</b> of the DPEMP is relevant to waste management: <i>Reuse of Intermediate Bulk Containers and recycling of other raw material bags.</i></p>
<p><b>Public and agency comment</b></p> <p>None</p>
<p><b>Evaluation</b></p> <p>Based on the information provided, solid waste generation will be minimal and the proponent is committed to management of waste in accordance with the waste hierarchy. Commitment 9 of the DPEMP is supported. Any controlled wastes will be disposed of in accordance with requirements under the <i>Waste Management Regulations</i>. No additional conditions are proposed.</p>

**Conclusion**

No conditions in relation to solid waste management will be imposed. Schedule 3: Information provides information on the Waste Management Hierarchy.

## Issue 4: Biodiversity and Natural Values

### Description of potential impacts

Inappropriate location of development can impact on threatened species and communities. The introduction and spread of weeds and diseases to the surrounding environment has the potential to contaminate waterways or impact on the habitats of threatened species and communities, unless appropriately mitigated or managed.

According to section 6.7 of the DPEMP, the site of the proposed Aqua Feed Mill is predominantly flat and is crossed by a shallow drainage line running from south-east to north-west. The site has previously been used for agricultural and has generally been degraded by exotic pasture species.

The biodiversity and nature conservation values of the broader industrial precinct subdivision were assessed as a part of the approvals process for the rezoning and subdivision of the site. The assessments, including the EPBC referral prepared by the Meander Valley Council, report on NRM values, and Green and Gold Frog Habitat assessment are referenced in the DPEMP.

The DPEMP concludes natural flora and fauna values of the proposed Aqua Feed Mill site have been degraded by previous agricultural land uses with the site now characterised by exotic pasture species and weeds. Only the Commonwealth listed Green and Gold Frog has been identified as potentially occurring within the locality. Based on the Green and Gold frog habitat assessment conducted in May 2008, the drainage line that crosses the site of the proposed Aqua Feed Mill contains no habitat for the species. It was therefore concluded that the potential impact of the proposal on the Green and Gold frog is likely to be negligible.

### Management measures proposed in DPEMP

Section 6.7.4 of the DPEMP states opportunities to incorporate native vegetation into any landscaping on site will be investigated.

Once the facility is constructed, vermin prevention measures and control procedures will be implemented. A qualified/certified external service provider will be engaged to manage pest control. A monthly report on pest control will be prepared and reviewed to allow consideration of changes to the service program.

The risk of infection of the Amphibian Chytrid Fungus to the Green and Gold Frog *L. raniformis* will be managed by:

- Ensuring that all machinery and equipment used during construction of the proposed Ridley Aqua Feed Mill will be managed to control the spread of the Amphibian Chytrid Fungus, by adhering to the *Tasmanian Wash-down Guidelines for Weed and Disease Control: Machinery, Vehicles and Equipment, Edition 1*.

These Guidelines include instructions on:

- When to wash down
- Equipment for wash down and wash down procedures
- Specifically, the following instructions should be adhered to:
  - All equipment, vehicles and footwear should be dry and clean before entering the site to prevent spread of the Fungus via contaminated soils
  - The disposal of water and damp or muddy soils at the proposed development site should be minimised or undertaken as far away as possible from waterways, ponds and/or wetlands

**Commitment 15** of the DPEMP states:

Vermin control and weed management procedures will be implemented that will include *preventative measures in line with Ridley policies, procedures and relevant certifications*.

### Public and agency comment

Comments provided by Meander Valley Council at the time of referral of the NOI state:  
*'[Flora and fauna] matters were investigated and resolved for the amendment [to the planning scheme to establish the Industrial Precinct]. The nature of the environment has not changed since this was conducted...the only potential species of significance identified was habitat for the Green and Gold Frog in the watercourse to the west of Birralee Road, which has been addressed and approved through a Threatened Species permit'.*

The Resource Management and Development Commission of Tasmania decision on the *Meander Valley Planning Scheme 1995 Amendment 1/2008 [2008] TASRPDComm 33 (6 October 2008)* states:

Investigations into the presence of the Green and Gold Frog had found limited areas of habitat in the proposed zone and noted that drainage lines on the western part of the site would provide linkages for movement of the animals.

As a result the following sub-clause was included in the amendment to the planning scheme to allow the establishment of the Industrial precinct.

#### 3.5.4(7) Environmental Quality

(e) Provision shall be made for the appropriate treatment of the identified drainage lines and associated buffer area to protect the environmental qualities of the watercourses as habitat."

According to this decision, the permit included recommended hygiene measures to be followed to minimise potential spread of the disease 'frog chytrid fungus'.

Comments provided by PCAB during DPMP development were:

#### **Flora**

*There are no records, within five kilometres, of threatened flora listed under the Threatened Species Protection Act 1995 (TSPA) and/or the Environment Protection and Biodiversity Conservation Act 1999 (EPBCA). Given that the area to be used for the proposed development is already highly disturbed, it is anticipated that the proposed activity is unlikely to impact on listed flora species, no further action is required.*

#### **Fauna**

*Given the proposed development is on highly disturbed land, PCAB has no concerns regarding the impact of the development on threatened fauna on site; no further action is required.*

#### **Threatened Native Vegetation**

*There are no threatened native vegetation communities on site; no further action is required. However, if during the assessment process it becomes apparent that there may be impacts on listed natural values off site (e.g. through wastewater disposal) these impacts should be considered in the DPMP and PCAB contacted for further advice.*

### Evaluation

The potential for impacts to any threatened species or community is considered low. The provisions of the planning scheme were modified to ensure drainage lines on the Industrial Estate are managed to prevent impacts to Green and Gold Frogs. The drainage line located on the proposed mill site had been determined not to have suitable habitat for this species. As such, no specific conditions in relation to flora or fauna management are proposed.

The Planning Commission and Council have recognised the existence of Green and Gold frogs in the surrounding environment and the need to protect them through imposition of appropriate hygiene measures. Such measures will also limit the introduction and spread of weeds in the surrounding agricultural land. The proponent will therefore be required, under **condition FF1**, to ensure all machinery is washed-down in accordance with the *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*, by the Department of Primary Industries, Parks, Water and Environment, dated March 2015.

Pest and vermin management measures, reflected in Commitment 15, are supported. Pest and vermin management is considered a food safety issue for management under environmental

health legislation. Council regulates environmental health services. No conditions are to be imposed in relation to this matter.

**Conclusion**

The proponent will be required to comply with the following standard condition:

FF1 Washdown Guidelines

<b>Issue 5: Environmentally Hazardous Materials</b>
<p><b>Description of potential impacts</b></p> <p>Inappropriate storage, handling and disposal of environmentally hazardous materials can lead to environmental harm through contamination of land or water.</p> <p>The chemicals, dangerous goods and hazardous substances to be used and stored at the site are presented in Table 29 of section 6.6 of the DPEMP, together with the quantities and Dangerous Goods Categories.</p> <p>None of the materials being used for the production of aqua feed are classified as Dangerous Goods. The location of the storages for all materials is shown in Figure 3 of the DPEMP. The only Dangerous Good used and stored on the site is LPG used as fuel for the fork lifts.</p>
<p><b>Management measures proposed in DPEMP</b></p> <p>The storage facility for LPG will be designed in accordance with relevant Australian Standards and emergency protocols defined.</p> <p>Liquid storage and handling areas will be designed with bunds to Australian Standards and able to accommodate 120% capacity of the largest tank volume plus incident rainfall.</p> <p>Tanks will be fitted with level alerts.</p> <p>Internal stormwater system will be able to be fully isolated in the event of a spill.</p> <p><b>Commitments 11 and 12</b> of the DPEMP are relevant to hazardous materials management:</p> <ul style="list-style-type: none"> <li>Contingency plans will be developed to address potential incidents such as a major liquid (e.g. fish oil) spill, bulk liquid storage tank failure or over filling, and a fire.</li> <li>The site will have a number of spill kits located in areas with higher potential for spills and leaks as per site based risk assessments.</li> </ul>
<p><b>Public and agency comment</b></p> <p>None</p>
<p><b>Evaluation</b></p> <p>Environmentally hazardous materials will be stored at the site. Storage and handling must meet the requirements of Dangerous Goods legislation. Information on these legal requirements is provided in Schedule 3: Information. To ensure hazardous materials are stored and handled to prevent environmental impacts, the proponent will be required to implement and comply with <b>conditions H1 and H2</b>. To ensure any spill is managed to prevent discharge that may cause environmental nuisance or harm spill kits will be required under <b>condition H3</b>. This is consistent with Commitment 12 of the DPEMP. The commitment to contingency plans is also supported and will contribute to effective management of environmentally hazardous materials.</p>
<p><b>Conclusion</b></p> <p>The proponent will be required to comply with the following standard conditions:</p> <p><b>H1</b> Storage and handling of hazardous materials</p> <p><b>H2</b> Hazardous materials (&lt;250 litres)</p> <p><b>H3</b> Spill kits</p>

<b>Issue 6: Decommissioning and Rehabilitation</b>
<p><b>Description of potential impacts</b></p> <p>Inappropriate decommissioning and rehabilitation after the cessation of an activity can lead to environmental nuisance or impact including impacts to waterways from sedimentation and contamination.</p> <p>The proposed Aqua Feed Mill has an expected life of at least 20 years. Once the timing of decommissioning has been established, a rehabilitation management plan would be developed.</p> <p>In the event that the plant closed, Ridley would decommission the facility in a responsible manner and in accordance with regulatory requirements. This would include relocation of plant, equipment and unused raw materials to other facilities or sale on the open market. It is likely that the overall warehouse structure would be suited to a wide variety of other industrial uses once clear of plant and equipment.</p>
<p><b>Management measures proposed in DPEMP</b></p> <p><b>Commitment 27</b> of the DPEMP states:  <i>Ridley would decommission the facility in a responsible manner and in accordance with regulatory requirements. This would include relocation of plant, equipment and unused raw materials to other facilities or sale on the open market.</i></p>
<p><b>Public and agency comment</b></p> <p>None</p>
<p><b>Evaluation</b></p> <p>To ensure temporary suspension of the activity does not cause environmental nuisance or harm, <b>condition DC1</b> will be imposed. Environmental management of decommissioning and rehabilitation will be implemented through the requirement under <b>condition DC3</b> to develop a decommissioning and rehabilitation plan (DRP) 3 years post-commencement and then updated as required. In the event of cessation of the activity, notification under <b>condition DC2</b> is required. The DRP will then be implemented as per the requirements of <b>condition DC4</b>. As the DRP is required 3 years after the commencement of operations. <b>Condition G8</b> will require notification of the commencement of operations.</p>
<p><b>Conclusion</b></p> <p>The proponent will be required to comply with the following standard conditions:</p> <ul style="list-style-type: none"> <li><b>G8</b> Notification prior to commencement</li> <li><b>DC1</b> Temporary suspension of activity</li> <li><b>DC2</b> Notification of cessation</li> <li><b>DC3</b> Decommissioning and Rehabilitation Plan</li> <li><b>DC4</b> Implementation of the DRP</li> </ul>

## Appendix 2 Summary of public and agency submissions

In the following table, DPEMP means the Development Proposal and Environmental Management Plan for Ridley AgriProducts Pty Ltd (Ridley), prepared by AECOM Australia Pty Ltd dated 11 September 2017.

Representation No./Agency	DPEMP section no.	Comments and issues
1	6.1	Concerned about impacts on its employees and other businesses in the immediate area.
1		Consider the DPEMP does not fully address odour impacts to workers as they are not considered sensitive receptors.
1		Questions reliability of meteorological data used for modelling due to location of the station to other buildings.
1		Identifies the exceedance of the Air EPP assessment criteria. Expect proponent to meet criteria at the boundary.
1		Questions the absence of 100-percentile concentration modelling in the absence of local high-quality meteorological data.
1		BPEM for odour needs to be implemented for the 100-percentile concentration.
1		2 OU will be exceeded at their boundary based on Air Modelling report and they believe will be greater than predicted due to issues with the modelling.
1		Approval of proposal that does not meet assessment criteria will set a precedent for non-compliance of other proposals.
1		Cumulative impacts and non-enforcement of meeting assessment criteria are likely to result in greater impacts on their employees.
1	6.2	Concerned stormwater will enter agricultural land and the representors land, increasing the potential for flooding at the WWTP and increase risk of erosion, degradation on natural drainage channels and increase contaminants (sediments) entering their site.
1		Expect implementation of appropriate stormwater design infrastructure to mitigate risks.
1		Stormwater discharge point should be directed to Council infrastructure along Integrity Drive and Roxford Avenue.

**Appendix 3 Permit Conditions – Environmental No. 9685**





## DEFINITIONS

Unless the contrary appears, words and expressions used in this Permit Part B have the meaning given to them in **Schedule 1** of this Permit and in the EMPCA. If there is any inconsistency between a definition in the EMPCA and a definition in this Permit Part B, the EMPCA prevails to the extent of the inconsistency.

## ENVIRONMENTAL CONDITIONS

The person responsible for the activity must comply with the conditions contained in **Schedule 2** of this Permit Part B.

## INFORMATION

Attention is drawn to **Schedule 3**, which contains important additional information.



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*Attachments*

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### Schedule 1: Definitions

In this Permit Part B:-

**Activity** means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

**Authorized Officer** means an authorized officer under section 20 of EMPCA.

**Commissioning** means the testing of major items of equipment and is taken to be completed when the item(s) are being used or operated in the course of normal commercial operations.

**Construction** means activities associated with the construction phase of the activity, including but not limited to, activities associated with the clearance of vegetation, site works to create a level site, rock breaking, installation of fences and other infrastructure whether on land or in water.

**Control Location (Noise)** means a location chosen to represent the general ambient sound without contribution from noise sources at the activity.

**Director** means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

**DPEMP** means the the Development Proposal and Environmental Management Plan for Ridley AgriProducts Pty Ltd (Ridley), prepared by AECOM Australia Pty Ltd and dated 11 September 2017.

**DRP** means Decommissioning and Rehabilitation Plan.

**EMPCA** means the *Environmental Management and Pollution Control Act 1994*.

**Environmental Harm** and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

**Environmental Nuisance** and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

**Environmentally Hazardous Material** means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

**Noise Sensitive Premises** means residences and residential zones (whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

**Nominated Exhaust Points** means the gas-fired boiler stack.

**Person Responsible** is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

**Stack Test** means the taking of measurements and the collection of samples for analysis from within a chimney, stack or flue.

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**Tasmanian Noise Measurement Procedures Manual** means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

**The Land** means the land on which the activity to which this document relates may be carried out, and includes: buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land. The Land falls within the area defined by 16 Integrity Drive, Westbury forming part of Certificate of Title 174186/1 and as further delineated at Attachment 1.

**Washdown Guidelines** means the document titled *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*, by the Department of Primary Industries, Parks, Water and Environment, dated March 2015, and any amendment to or substitution of this document.



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## Schedule 2: Conditions

### Maximum Quantities

#### **Q1 Regulatory limits**

- 1 The activity must not exceed the following limits :
  - 1.1 12,000 kilograms per hour of processing capacity

### General

#### **G1 Access to and awareness of conditions and associated documents**

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

#### **G2 Incident response**

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

#### **G3 No changes without approval**

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or approved in writing by the Director:
  - 1.1 a change to a process used in the course of carrying out the activity; or
  - 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
  - 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

#### **G4 Change of responsibility**

If the person responsible for the activity intends to cease to be responsible for the activity, that person must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible for the activity, before such cessation.

#### **G5 Change of ownership**

If the owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

#### **G6 Complaints register**

- 1 A public complaints register must be maintained and made available for inspection by an Authorized Officer upon request. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:



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- 1.1 the date and time at which the complaint was received;
  - 1.2 contact details for the complainant (where provided);
  - 1.3 the subject-matter of the complaint;
  - 1.4 any investigations undertaken with regard to the complaint; and
  - 1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.
- 2 Complaint records must be maintained for a period of at least 3 years.

**G7 Notification prior to commissioning**

At least 14 days prior to the commencement of dry and wet testing of the plant, the person responsible for the activity must notify the Director of the date on which commissioning is expected to commence.

**G8 Notification prior to commencement**

The Director must be notified in writing of the commencement of operations at least 14 days before that occurs.

**Atmospheric**

**A1 Odour management**

The person responsible must institute such odour management measures as are necessary to prevent odours causing environmental nuisance beyond the boundary of The Land.

**A2 Odour Management Plan**

- 1 Prior to the commencement of commissioning, or by a date otherwise specified in writing by the Director, an Odour Management Plan must be submitted to the Director for approval. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition to his or her satisfaction.
- 2 The plan must be prepared in accordance with any reasonable guidelines provided by the Director.
- 3 Without limitation, the plan must include details of the following:
  - 3.1 Identification of all odours sources associated with the proposal during all phases;
  - 3.2 Characterisation of odour sources and assessment of potential to result in environmental nuisance;
  - 3.3 Hierarchy of control;
  - 3.4 Details of all odour controls with sufficient technical detail;
  - 3.5 Planned verification of plant performance during commissioning;
  - 3.6 Contingency plans for emergency or upset conditions;
  - 3.7 Contingency plans for complaints, including a Shutdown Procedure;
  - 3.8 Monitoring procedures and triggers for response;
  - 3.9 Record keeping and reporting;
  - 3.10 Staff responsibilities;
  - 3.11 Staff competence and training;
  - 3.12 Appended procedural documents including (but not limited to) complaints, emergency response, check sheets, equipment spares etc;
  - 3.13 a table containing all of the major commitments made in the plan;
  - 3.14 an implementation timetable for key aspects of the plan; and
  - 3.15 a reporting program to regularly advise the Director of the results of the plan.



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- 4 The person responsible must implement and act in accordance with the approved plan.
- 5 Records of monitoring and maintenance undertaken in accordance with the Odour Management Plan must be made available to an authorized officer upon request.
- 6 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved plan or approves a new plan in substitution for the plan originally approved, the person responsible must implement and act in accordance with the varied plan or the new plan, as the case may be.

### **A3 Odour complaints**

In the event that an odour complaint is received in relation to the activity, the complaint must be reported to the Director within 24 hours.

### **A4 Odour surveys**

- 1 Unless otherwise approved in writing by the Director, a survey of odour emissions from the activity must be completed:
  - 1.1 quarterly for 12 months from the date of commencement of commissioning and thereafter biannually.
  - 1.2 within six (6) months of any change to the activity which is likely to substantially alter the character or increase odour emissions; and
  - 1.3 at such other times as may reasonably be required by the Director by notice in writing.
- 2 The Odour survey must be undertaken in accordance with the 'Field Ambient Odour Assessment' procedure detailed in the Odour Management Plan and any reasonable guidance provided by the Director.
- 3 The number and location of measurement location points (MLPs) must be approved in writing by the Director prior to conducting a survey of odour emissions.

### **A5 Odour survey report**

- 1 Odour survey results must be submitted to the Director within 30 days of the completion of the odour survey in the form of a written odour survey report.
- 2 Unless otherwise approved in writing by the Director, the report must:
  - 2.1 include a comparison of odour emission rates calculated from the odour survey and the odour emission rates used as an input to the atmospheric dispersion modelling included in the DPEMP; and
  - 2.2 discuss any difference between the measured odour emissions and the odour modelling results in the DPEMP; and
  - 2.3 conclude if odorous gases from the activity are likely to cause environmental nuisance beyond the boundary of The Land; and
  - 2.4 provide details of any mitigation or management measures to be implemented to address any odour emission issues that are causing, or are likely to cause, environmental harm; and
  - 2.5 provide a schedule for the implementation of any proposed mitigation or management measures.

### **A6 Gas-fired boiler emissions**

At any time reasonably required by the Director by notice in writing, monitoring of in-stack concentrations of the gas-fired boiler must be undertaken, in accordance with methodology approved by the Director.

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**A7 Stack testing facilities**

- 1 The following stack testing facilities must be available at all nominated exhaust points when undertaking stack testing required by these conditions:
  - 1.1 sampling positions must be in accordance with Australian Standard AS 4323.1 (*Stationary source emissions - selection of sampling positions*), or as approved in writing by the Director;
  - 1.2 safe sampling platforms must be located to allow access to the sampling positions and safe access to these sampling platforms must be provided; and
  - 1.3 all necessary services required for the test method prescribed must be provided.

**Construction****CN1 Construction Environmental Management Plan**

- 1 At least 30 days prior to the commencement of construction activities, or by a date otherwise specified in writing by the Director, a Construction Environmental Management Plan ('Construction EMP') must be submitted to the Director.
- 2 The Construction EMP must contain a detailed description of the proposed timing and sequence of the major construction activities and of the proposed management measures to be implemented to avoid or minimise the environmental impacts during the construction phase. The Construction EMP must include, but not necessarily be limited to, management measures in relation to the following:
  - 2.1 prevention of impacts upon surface water and waterways;
  - 2.2 erosion and sediment control;
  - 2.3 noise control;
  - 2.4 dust control;
  - 2.5 management of environmentally hazardous materials;
  - 2.6 cultural (Aboriginal and non-aboriginal) heritage considerations;
  - 2.7 flora and fauna management;
  - 2.8 weed, pest and disease management;
  - 2.9 quality control arrangements including supervision by appropriately qualified and experienced persons, detailed construction specifications for key items of environmental management infrastructure, documented site procedures, quality control testing and the keeping of appropriate records; and
  - 2.10 acid sulphate soil management (if identified in pre construction testing).
- 3 Unless otherwise specified in writing by the Director, construction activities must be carried out in accordance with an approved Construction EMP.

**CN2 Operating hours - Construction**

- 1 Unless otherwise approved in writing by the Director:
  - 1.1 Construction activities must not be undertaken outside 0600 hours to 1800 hours Monday to Friday; and 0800 hours to 1800 hours Saturdays
  - 1.2 Notwithstanding the above paragraph, the construction activities must not be carried out on Sundays or Public Holidays that are observed State-wide (Easter Tuesday excepted).



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## **Decommissioning And Rehabilitation**

### **DC1 Temporary suspension of activity**

- 1 Within 30 days of becoming aware of any event or decision which is likely to give rise to the temporary suspension of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to suspend or has suspended.
- 2 During temporary suspension of the activity:
  - 2.1 The Land must be managed and monitored by the person responsible for the activity to ensure that emissions from The Land do not cause serious environmental harm, material environmental harm or environmental nuisance; and
  - 2.2 If required by the Director a Care and Maintenance Plan for the activity must be submitted, by a date specified in writing by the Director, for approval. The person responsible must implement the approved Care and Maintenance Plan, as may be amended from time to time with written approval of the Director.
- 3 Unless otherwise approved in writing by the Director, if the activity on The Land has substantially ceased for 2 years or more, rehabilitation of The Land must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

### **DC2 Notification of cessation**

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

### **DC3 Decommissioning and Rehabilitation Plan**

- 1 A draft Decommissioning and Rehabilitation Plan (DRP) must be submitted for approval to the Director by 3 years after commencement of operations.
- 2 Unless otherwise approved in writing by the Director, a revised DRP must be submitted to the Director for approval:
  - 2.1 when changes to the conduct of the activity are to occur that will result in significant changes to decommissioning and rehabilitation obligations; and
  - 2.2 within 30 days of the Director being notified of the likely cessation of operations; and
  - 2.3 where required by notice in writing, by a date specified by the Director.
- 3 The DRP must be prepared in accordance with guidelines issued by the Director. If no guidelines have been issued by the Director the measures described in this plan must include, but should not necessarily be limited to:
  - 3.1 completion of a site history, site contamination assessment and contamination remediation plan (including consideration of groundwater);
  - 3.2 removal of all equipment, structures and waste materials unless they are considered by the Director to be beneficial to a future use of The Land;
  - 3.3 grading and levelling/recontouring and revegetating (or other approved method of soil stabilisation) of the surface of the disturbed area;
  - 3.4 management of drainage on The Land so as to reduce erosion and prevent release of a pollutant from The Land;
  - 3.5 maintenance of the rehabilitated area for a period of not less than three years from the date of cessation of operations;



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- 3.6 an itemised estimate of the costs of carrying out the works listed in the DRP and a statement of how these costs will be provided for; and
- 3.7 any other detail requested in writing by the Director.

#### **DC4 Implementation of the DRP**

Following permanent cessation of the activity, the decommissioning of the activity and the rehabilitation of The Land must be carried out in accordance with the most recent Decommissioning and Rehabilitation Plan (DRP) approved by the Director, as may be amended from time to time with written approval of the Director.

#### **Flora And Fauna**

##### **FF1 Washdown Guidelines**

Prior to entering the land, machinery must be washed in accordance with the Washdown Guidelines, or any subsequent revisions of that document.

#### **Hazardous Substances**

##### **H1 Storage and handling of hazardous materials**

- 1 Unless otherwise approved in writing by the Director, all environmentally hazardous materials, including all chemicals, fuels, and oils, stored on The Land in volumes exceeding 250 litres must be stored and handled in accordance with the following:
  - 1.1 Any storage facility must be contained within a spill collection bund with a net capacity of whichever is the greater of the following:
    - 1.1.1 at least 110% of the combined volume of any interconnected vessels within that bund; or
    - 1.1.2 at least 110% of the volume of the largest storage vessel; or
    - 1.1.3 at least 25% of the total volume of all vessels stored in that spill collection bund; or
    - 1.1.4 the capacity of the largest tank plus the output of any firewater system over a twenty minute period.
  - 1.2 All activities that involve a significant risk of spillages, including the loading and unloading of bulk materials, must take place in a bunded containment area or on a transport vehicle loading apron.
  - 1.3 Bunded containment areas and transport vehicle loading aprons must:
    - 1.3.1 be made of materials that are impervious to any environmentally hazardous material stored within the bund;
    - 1.3.2 be graded or drained to a sump to allow recovery of liquids;
    - 1.3.3 be chemically resistant to the chemicals stored or transferred;
    - 1.3.4 be designed and managed such that any leakage or spillage is contained within the bunded area (including where such leakage emanates vertically higher than the bund wall);
    - 1.3.5 be designed and managed such that the transfer of materials is adequately controlled by valves, pumps and meters and other equipment wherever practical. The equipment must be adequately protected (for example, with bollards) and contained in an area designed to permit recovery of any released chemicals;
    - 1.3.6 be designed such that chemicals which may react dangerously if they come into contact have measures in place to prevent mixing; and



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- 1.3.7** be managed such that the capacity of the bund is maintained at all times (for example, by regular inspections and removal of obstructions).

## **H2 Hazardous materials (< 250 litres)**

- 1 Unless otherwise approved in writing by the Director, each environmentally hazardous material, including chemicals, fuels and oils, stored on The Land in discrete volumes not exceeding 250 litres, but not including discrete volumes of 25 litres or less, must be stored within bunded containment areas or spill trays which are designed and maintained to contain at least 110% of the volume of the largest container.
- 2 Bunded containment areas and spill trays must be made of materials that are impervious to any environmentally hazardous materials stored within the bund or spill tray.

## **H3 Spill kits**

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

## Noise Control

### **N1 Noise emission limits**

- 1 Noise emissions from the activity when measured at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:
  - 1.1 45 dB(A) between 0700 hours and 1800 hours (Day time); and
  - 1.2 40 dB(A) between 1800 hours and 2200 hours (Evening time); and
  - 1.3 35 dB(A) between 2200 hours and 0700 hours (Night time).
- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

### **N2 Noise survey requirements**

- 1 Unless otherwise approved by the Director, a noise survey must be carried out:
  - 1.1 within 3 months from the commencement of operation; and
  - 1.2 within six (6) months of any change to the activity which is likely to substantially alter the character or increase the volume of noise emitted from The Land; and
  - 1.3 at such other times as may reasonably be required by the Director by notice in writing.

### **N3 Noise survey method and reporting requirements**

- 1 Noise surveys must be undertaken in accordance with a survey method approved in writing by the Director, as may be amended from time to time with written approval of the Director.
- 2 Without limitation, the survey method must address the following:



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- 2.1 measurements must be carried out at day, evening and night times (where applicable) at each location; and
- 2.2 measurement locations, and the number thereof, must be specified, with one location established as a control location (noise).
- 3 Measurements and data recorded during the survey must include:
  - 3.1 operational status of noise producing equipment and throughput of the activity;
  - 3.2 subjective descriptions of the sound at each location;
  - 3.3 details of meteorological conditions relevant to the propagation of noise;
  - 3.4 the equivalent continuous ( $L_{eq}$ ) and  $L_1$ ,  $L_{10}$ ,  $L_{50}$ ,  $L_{90}$  and  $L_{99}$  A-weighted sound pressure levels measured over a period of 10 minutes or an alternative time interval approved by the Director;
  - 3.5 one-third octave spectra over suitably representative periods of not less than 1 minute; and
  - 3.6 narrow-band spectra over suitably representative periods of not less than 1 minute.
- 4 A noise survey report must be forwarded to the Director within 30 days from the date on which the noise survey is completed.
- 5 The noise survey report must include the following:
  - 5.1 the results and interpretation of the measurements required by these conditions;
  - 5.2 a map of the area surrounding the activity with the boundary of The Land, measurement locations, and noise sensitive premises clearly marked on the map;
  - 5.3 any other information that will assist with interpreting the results and whether the activity is in compliance with these conditions and EMPCA; and
  - 5.4 recommendations of appropriate mitigation measures to manage any noise problems identified by the noise survey.

### Wastewater Management

#### **WW1 Management of Contaminated Wastewater**

- 1 Unless otherwise approved in writing by the Director, the following wastewater streams generated on The Land that are not recycled or reused for beneficial purposes must be directed to sewer:
  - 1.1 All process wastewater;
  - 1.2 All contaminated and potentially contaminated wastewater, such as wash down water; and
  - 1.3 Any stormwater identified as having reasonable potential for contamination.

#### **WW2 Discharges to sewer**

Wastewater, including treated wastewater, must be discharged to sewer with approval of the operator of the sewerage system.



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### Schedule 3: Information

#### Legal Obligations

##### **LO1 EMPCA**

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

##### **LO2 Storage and handling of dangerous goods, explosives and dangerous substances**

1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:

1.1 *Work Health and Safety Act 2012* and subordinate regulations;

1.2 *Explosives Act 2012* and subordinate regulations; and

1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

##### **LO3 Trade Waste Agreement**

The person responsible must enter into a trade-waste agreement with the relevant sewerage authority as per the *Water And Sewerage Industry Act 2008* and *Water And Sewerage Industry (General) Regulations 2009* prior to the commencement of operations.

##### **LO4 Gas-fired boiler NOx emissions**

Atmospheric emissions and in-stack concentrations of the gas-fired boiler nominated exhaust point should be controlled to meet requirements of the *Environment Protection Policy (Air Quality) 2004*. Specifically, Schedule 1, Table 2: NOx - 350 mg/m<sup>3</sup>.

#### Other Information

##### **OI1 Waste management hierarchy**

1 Wastes should be managed in accordance with the following hierarchy of waste management:

1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;

1.2 waste should be re-used or recycled to the maximum extent that is practicable; and

1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

##### **OI2 Notification of incidents under section 32 of EMPCA**

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning 1800 005 171 (a 24-hour emergency telephone number).

##### **OI3 Solid matter in wastewater**

1 Solid matter should be prevented by all reasonable means from entering the wastewater stream. Without limiting the generality of the term, reasonable means includes:

CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

- 1.1 effective screening at all points of wastewater ingress to the wastewater treatment system to prevent the entry of gross solids;
- 1.2 implementation of comprehensive operating procedures, and the appropriate training and supervision of employees, contractors and sub-contractors; and
- 1.3 good housekeeping including the provision of adequate containers to avoid loss to the floor and the control of spillage by sweeping, shovelling, impoundment, or the entrapment of wastes in tanks or vessels for further treatment before disposal.



CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

Meander Valley Council Ordinary Agenda - 16 January 2018

**C&DS 1**

**18 DEC 2017**  
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# Attachment 1: The Land



CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

Meander Valley Council Ordinary Agenda - 16 January 2018 **C&DS 1**

**From:** TasWater - Development  
**Sent:** 14 Aug 2017 07:13:25 +0000  
**To:** Planning @ Meander Valley Council  
**Subject:** TasWater Submission to Planning Authority Notice, TWDA 2017/01206-MVC,  
for Council permit PA\18\0018  
**Attachments:** TWDA 2017-01206-MVC.pdf

Dear Sir/Madam

Please find attached TasWater's Water and Sewerage Servicing Advice.

If you have any queries, please contact me.

Thank you

Phil Papps  
Senior Assessment Officer



D (03) 6237 8246  
F 1300 862 066  
A GPO Box 1393, Hobart TAS 7001  
169 Main Road, Moonah, TAS 7009  
E [phil.papps@taswater.com.au](mailto:phil.papps@taswater.com.au)  
W <http://www.taswater.com.au/>

Have I been helpful? Please provide feedback by clicking [here](#).

## Submission to Planning Authority Notice

Council Planning Permit No.	PA\18\0018	Council notice date	31/07/2017	
<b>TasWater details</b>				
TasWater Reference No.	TWDA 2017/01206-MVC	Date of response	08/08/2017	
TasWater Contact	Phil Papps Darren Green (Trade Waste)	Phone No.	6237 8246 6345 6341	
<b>Response issued to</b>				
Council name	MEANDER VALLEY COUNCIL			
Contact details	planning@mvc.tas.gov.au			
<b>Development details</b>				
Address	LOT 17 INTEGRITY DRIVE, WESTBURY	Property ID (PID)	3245791	
Description of development	Manufacturing and processing			
<b>Schedule of drawings/documents</b>				
Prepared by	Drawing/document No.	Revision No.	Date of Issue	
Wiley	Site Plan / 00A001	4	17/05/2017	
<b>Conditions</b>				
Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:				
<b>TRADE WASTE</b>				
<ol style="list-style-type: none"> <li>1. The developer must install appropriately sized and suitable pre-treatment devices required to ensure that trade waste discharge is compliant with the Standards for acceptance of liquid trade waste that are outlined in Schedule 3 of the <i>Water and Sewerage industry (General) Regulations 2009</i>.</li> <li>2. Prior to the commencement of operation the developer/property owner must contact TasWater to negotiate and execute a Trade Waste Agreement for provision of trade waste services.</li> <li>3. The Developer/property owner must comply with all TasWater conditions prescribed in the Trade Waste Agreement.</li> </ol>				
<b>CONNECTIONS, METERING &amp; BACKFLOW</b>				
<ol style="list-style-type: none"> <li>4. A suitably sized metered water property connection must be provided to service the domestic and fire demands generated by the proposed development in accordance with TasWater metering and backflow protection standards.</li> </ol>				
<b>Advice:</b> <i>The boundary conditions to the property are:</i>				
Location	Elevation	Pressure during peak	Pressure at 2/3 peak plus 10 l/s fire	Pressure at 2/3 peak plus 20 l/s fire
Lot 17 Integrity Drive <i>(assume DN150 on Integrity Drive)</i>	190 m AHD	230 m AHD 390 kPa	228 m AHD 370 kPa	221 m AHD 300 kPa
<p><i>Note that the TasWater modelling assumes continuous demand over a 24 hour period. This may require balancing storage on site to manage daily fluctuations and unexpected external non-availability.</i></p>				

5. A suitably sized sewer property connection must be provided to service the proposed development in accordance with TasWater standards.
6. The developer must provide an Engineering Report acceptable to TasWater covering:
  - a. assessment of spare capacity at the Westbury Sewerage Treatment Plant (STP);
  - b. the impact of the proposed development on the Westbury Sewerage Treatment Plant (STP) on Meander Valley Road, Westbury;
  - c. Assessment as to whether the STP is adequate to receive the development's hydraulic and biological loads post pretreatment at the property under the Trade Waste Agreement;
  - d. Documentation of augmentation works, if any, required at the STP to accommodate the load capacity generated by the development
7. If applicable the developer must engage an experienced registered professional engineer to prepare engineering design plans for STP augmentation works as agreed with TasWater.
8. If applicable, the developer must construct augmentation works necessary to meet the requirements of the development. In the event that TasWater requires augmentation works exceeding those required by the development, then TasWater will reimburse the developer for the marginal cost difference of the additional capacity.

**Advice:** Known limitations at the STP include wet weather hydraulic capacity, total Suspended Solids (TSS), Total Coliforms (TC) or Ammonia (NH4). In the event that works external (ie infrastructure upgrade works outside the property boundary) are necessary, TasWater will consider on-property measures, such as attenuation/buffering which would form part of the Trade Waste Agreement.

#### **ASSET CREATION & INFRASTRUCTURE WORKS**

9. In the event that TasWater's existing water and/or sewerage infrastructure requires to be altered or extended the following conditions will apply:
  - a. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.
  - b. Prior to applying for a Permit to Construct the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and/or sewerage to TasWater's satisfaction.
  - c. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
  - d. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
  - e. Prior to the issue of a Certificate for Certifiable Work (Building and/or Plumbing) / Consent to Register a Legal Document / Certificate of Water and sewerage Compliance (Building and/or Plumbing) all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
  - f. After testing/disinfection, to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
  - g. At practical completion of the water and sewerage works and prior to applying to TasWater for a

Certificate of Water and Sewerage Compliance (Building and/or Plumbing), the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:

- i. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
  - ii. A request for a joint on-site inspection with TasWater’s authorised representative must be made;
  - iii. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
  - iv. As constructed drawings must be prepared by a suitably qualified person to TasWater’s satisfaction and forwarded to TasWater.
- h. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer’s cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer’s cost. Upon completion, of the defects liability period the developer must request TasWater to issue a “Certificate of Final Acceptance”. The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.

**EASEMENTS**

10. In the event that TasWater’s existing water and/or sewerage infrastructure requires to be altered or extended pipeline easements, to TasWater’s satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater’s standard pipeline easement conditions.

**DEVELOPMENT ASSESSMENT FEES**

11. The applicant or landowner as the case may be, must pay a development assessment fee to TasWater, as approved by the Economic Regulator and the fee of \$660.84 will be indexed, until the date it is paid to TasWater. The payment is required within 30 days of the issue of an invoice by TasWater.

**Advice**

**General**

For information on TasWater development standards, please visit <http://www.taswater.com.au/Development/Development-Standards>

For application forms please visit <http://www.taswater.com.au/Development/Forms>

*The developer is responsible for arranging to locate existing TasWater infrastructure and clearly showing it on any drawings. Existing TasWater infrastructure may be located by TasWater (call 136 992) on site at the developer’s cost, alternatively a surveyor and/or a private contractor may be engaged at the developers cost to locate the infrastructure.*

**Trade Waste**

*Prior to any Building and/or Plumbing work being undertaken, the applicant will need to make an application to TasWater for a Certificate for Certifiable Work (Building and/or Plumbing). The Certificate for Certifiable Work (Building and/or Plumbing) must accompany all documentation submitted to Council. Documentation must include a floor and site plan with:*

- Location of all pre-treatment devices
- Schematic drawings and specification (including the size and type) of any proposed pre-treatment device and drainage design; and
- Location of an accessible flow meter and sampling point in accordance with the TasWater Trade Waste Flow Meter and Sampling Specifications for sampling discharge.

If the nature of the business changes or the business is sold, TasWater is required to be informed in order to review the pre-treatment assessment.

#### Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

#### Authorised by



**Jason Taylor**  
Development Assessment Manager

#### TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au



# TASMANIAN ALKALOIDS PTY. LTD.

Incorporated in Tasmania ACN 009 502 283 ABN 98 009 502 283

160 Birralelee Road, P.O. Box 130 Westbury, Tasmania 7303, Australia

Telephone (Australia) (03) 6393 5202, (International) +61 3 6393 5202 - Facsimile (Australia) (03) 6393 1575, (International) +61 3 6393 1575

9<sup>th</sup> October 2017

The General Manager  
Meander Valley Council  
PO Box 102  
WESTBURY TAS 7303

Index No. 20189			
Doc No.			
RCVD	10 OCT 2017	MVC	
Action Officer NW		Dept.	CDS
EO		OD	✓

Attention: Martin Gill

Planning Application No: PA\18\0018,  
Proponent: Ridley AgriProducts Pty. Ltd.  
Address: 18 Integrity Drive, WESTBURY (CT:166084/17)  
Proposal: Level 2 Activity - Manufacturing & Processing (Aqua Feed Production Facility) - Height, Vehicle Movements and Car Parking

Dear Sir,

In accordance with s.57(5) of the *Land Use Planning and Approvals Act 1993* (LUPAA), Tasmanian Alkaloids (TasAlk) wishes to submit a representation relating to the MVC planning application PA\18\0018 and associated Development Proposal and Environmental Management Plan (DP&PEMP).

TasAlk has been operating at its current location at 160 Birralelee Road Westbury for over 40 years and has enjoyed significant success within the alkaloids raw material industry through growing and processing Tasmanian grown poppies and supplying worldwide demand for narcotic raw materials. During this period TasAlk has made significant contributions to the Tasmanian economy and takes great pride in its reputation as operating sustainably and in accordance with regulatory requirements.

TasAlk supports local industry in many ways, both directly and indirectly, and in regards to the PA\18\0018, has no commercial or philosophical reasons why Ridley AgriProducts should not have the right to develop and operate in the Valley Central Industrial Precinct. However, in consideration of this, we believe that all business should be sustainable, operate in accordance with regulatory requirements and consider the wellbeing of adjacent workers and/or residents that may be impacted from the business's operations.

TasAlk has undertaken a review of the "Use and Development of an Aqua Feed Mill" DP&EMP and has considered the identified potential impacts and their proposed management in reference to specific parts of the *Environmental Management and Pollution Control Act 1994* (EMPCA), the *Environment Protection Policy (Air Quality)*

2004, the *State Stormwater Strategy 2010* and the *Urban Drainage Act 2013*. TasAlk has subsequently identified a number areas of concern and/or issues that should be considered as part of the approval process and should be addressed to ensure the impact upon TasAlk, the wellbeing of its employees and the impact on other business operations within the immediate area of the proposal, are minimised such that any effect is considered negligible to those that are potentially impacted.

The identified areas of concern and/or issues relate to air quality (odour) and stormwater management. These are described below.

### **Section 6.1 Air Quality**

Throughout this section there is reference to workers at industrial sites having a lower expectation of air quality; that odours are expected and tolerated to a higher degree, the likelihood of odour complaints is much lower and that due to a lower population density there is a low risk of odour sensitivity. TasAlk employs 176 men and women from diverse socio-economic and educational backgrounds. They appreciate and enjoy working at TasAlk and in the rural/semi-industrial environment at our property.

**We believe it is inappropriate to suggest that our employees are less susceptible or have a lower risk of sensitivity to odours than other sensitive receptors especially in respect of the current ambient air quality.**

**Odour modelling described within the DP&EMP and in detail in the Air Quality Impact Assessment (AQIA) clearly demonstrates that the EPA odour assessment criteria is exceeded at the property boundary. Additionally, the quality of the meteorological data used to undertake the odour modelling should be considered as unreliable as there is no data validation and the measurements are affected by the siting of the station adjacent to buildings within 5m to the North and fencing within 3m to the West.**

Section 3 of the EPP (Air Quality) states in cases where local high-quality meteorological data is not available then the 100-percentile concentration modelled at or beyond the boundary of a boundary applies. **Consequently, the DP&EMP modelling should consider and implement best practice environmental management of odours for the 100-percentile concentration.**

Schedule 3 also states “that odour from a source is causing or is likely to cause an environmental nuisance or material environmental harm, an atmospheric dispersion calculation should be performed to ensure that the predicted maximum (“worst case”) ground level concentration does not exceed the concentration criteria”.

In consideration of the above, Table 10 in the AQIA shows that under a range of different scenarios, the EPA odour assessment criteria (unknown mixture of 2 OU), is exceeded at or beyond the boundary of the property, with the peak odour concentration of 90.5 OU for Scenario 1. In Figure 7 of this report, Scenario 1 shows Maximum (i.e. 100 percentile) Concentrations of 2 OU will be observed beyond the boundary of TasAlk.

**In consideration that the odour modelling is affected by the quality of the meteorological data and where the prevailing winds at the proposed location are from the North and Northwest, it is likely that odours will travel further and be of higher concentration at greater distance than indicated in the DP&EMP and therefore there is a greater likelihood of environmental nuisance.**

The EPP (Air Quality) Section 13 (1) states “when an odour from an activity is causing or is likely to cause an environmental nuisance or environmental harm; the authority should require that the odour emission from the source not exceed the odour criteria specified in Schedule 3, at or beyond the boundary of the land on which the source is located”.

**Based on the DP&EMP odour modelling indicating that odour concentrations at the property will exceed EPA assessment criteria, the likelihood that odours will travel further than the modelling suggest, and that odours are likely to cause an environmental nuisance, we iterate that the proponent should meet the odour assessment criteria at the boundary of the proposed facility based on the “worst case” and at the 100 percentile concentration criteria.**

In accordance with EPP Air Quality, Section 11 (f) (ii) that states “that the emission will not allow the pollutant(s) to unreasonably interfere with the enjoyment of the environment by any person living or working beyond the boundary of the land on which the point source of the pollutant(s) is located” we suggest that the onus is upon the proponent that compliance with this requirement should also be met.

**We believe that our employees and their enjoyment of the environment will be impacted by odours generated from this facility and that environmental nuisance is a potential outcome and consequently a significant concern for TasAlk.**

Furthermore, there are concerns that the acceptance and approval of development proposals that do not comply with the EPP (Air Quality) odour assessment criteria will set an unwanted precedence for new proponents to also not comply. **This is particularly concerning when considering the cumulative effects of odours from various developments and the impact these cumulative emissions would have on our employees.**

### ***Section 6.2 Liquid Waste and Surface Water Quality***

DP&EMP Section 6.2.2 Assessment of Effects – Stormwater indicates the overall intent of the stormwater management strategy is to divert clean runoff into the natural drainage systems surrounding the site. Stormwater runoff from the site will be discharged into a stormwater swale drain that will run along the plant boundaries, diverting stormwater that enters the site around the operational area and conveying clean stormwater from non-processing site areas to a discharge point on the lower-lying southern boundary. The discharge point will be located south of the site and discharge into an existing drainage easement located along the neighbouring Tasbuilt Homes eastern site boundary.

Section 2.1.1 of the DP&EMP describes the proposed overall facility footprint to be expected to be approximately 28,800 m<sup>2</sup>. Site surfaces surrounding the production area will include concrete roadways, hardstand areas and concrete process areas including bunds with the remaining vacant area covered with grass and gravel.

The *State Stormwater Strategy 2010* indicates that all new developments that create 500 m<sup>2</sup> or more of additional impervious surface, should incorporate best practice stormwater management and recommends during the operational phase that new developments should be designed to minimise downstream flooding or flow regimes.

The *Urban Drainage Act 2013*, Section 23 (1) states “a property owner must ensure that stormwater is not discharged from a private stormwater system so that it causes or is likely to cause a nuisance to a neighbouring property or its residents.”

**TasAlk is concerned that stormwater emanating from the proposed development will enter private agricultural land to the east and flow into drainage channels that discharge onto TasAlk land along the North-eastern boundary. The extra stormwater flow will increase the risk of flooding around the TasAlk Wastewater Treatment Plant (WWTP), increase the risk of erosion and degradation on natural drainage channels and increase the contaminant (e.g. sediment) carrying capacity of stormwater that enters TasAlk.**

TasAlk requests that stormwater runoff calculations and flood estimation be conducted and pending the outcome implement appropriate stormwater design infrastructure to mitigate these risks. Additionally, the proposed stormwater discharge point should be directed towards Council infrastructure along Integrity Drive and Roxford Avenue and away from areas that would increase stormwater impacts on TasAlk.

In summary, TasAlk supports new developments that comply with local regulations. Concern is raised about the proponent’s emissions of odour above acceptance criteria and the impacts of stormwater runoff will have on TasAlk and its employees. A request is therefore made that appropriate mitigation is implemented to comply and reduce any impacts on the land beyond the development site.

If you have any queries regarding our submission, please feel free to contact the undersigned on (03) 6393 5202.

Yours faithfully,  
Tasmanian Alkaloids Pty Ltd



Doug Blackaby  
Chief Executive Officer

## **C&DS 2 DELORAINE AND DISTRICTS RECREATION PRECINCT FEASIBILITY STUDY REPORT**

### **1) Introduction**

The purpose of this report is for Council to receive the Deloraine & Districts Recreation Precinct Feasibility Study (DDRPFS) Background and Summary Reports (January 2018) prepared by recreation planning consultancy Inspiring Place, to note the recommendations from the DDRPFS Working Group and to undertake a formal period of stakeholder and community consultation and feedback.

### **2) Background**

At the Ordinary Council meeting of 13 December 2016, Council determined;

***That Council will work with Deloraine & Districts Community Bank Branch to prepare a brief and commission a feasibility study for the development of a recreation precinct at the Deloraine Community Complex site.***

The following objectives were part of the consultant brief:

- Develop a clear understanding of future recreation needs for the Deloraine & districts area
- Determine the benefits of consolidating (spatially) the recreation infrastructure in Deloraine
- Define the role of a Deloraine & districts recreation precinct in relation to Westbury, Hadspen, and Prospect Vale Park recreation infrastructure
- Determine what a reasonable level of capital investment would be in the context of projected population growth in Deloraine and districts
- Determine the potential to host regional or State events
- Determine the potential to partner with the Deloraine Primary School to provide infrastructure
- Determine if there is a need for additional land surrounding the current Deloraine Community Complex site and which may form part of an expanded recreation precinct

The consultant has subsequently prepared the Deloraine and Districts Recreation Precinct (DDRP) Feasibility Study Background and also Summary Reports (attached documents). These documents include:

- Concept drawings and costings
- Consultation findings
- Detailed business case with financials

### **Working Group**

A working group, titled the Deloraine and Districts Recreation Precinct (DDRP) Working Group, was established to review and guide the direction of the DDRPFS.

The DDRP Working Group includes the following members or their nominated proxies:

### **Independent Facilitator**

- Alana Fazackerley (Client Manager, North – Communities, Sport and Recreation-Department of Premier and Cabinet)

### **Community Members**

- Lindy Norton / Darren Rumble (Deloraine Community Bank - Bendigo Bank)
- Laura Richardson
- Shaun Donohue
- Cory Youd
- Douglas Tangney

### **MVC Members**

- Project Leader – Lynette While (Director - Development & Community Services)
- Project Supervisor – Daniel Smedley (Recreation Co-ordinator)
- Project Supervisor – Kris Eade (Property Management Officer)

Council's Projects Officer Infrastructure, Lauren Houston, provided support through the procurement process.

### **Consultants**

The consultants were appointed via a tender process. The consultant team is led by Inspiring Place (landscape architecture, recreation and environmental planning) who worked as a consortium with Montemare Consulting (sport, leisure and tourism feasibility and business case development), dwp suters (design world-wide partnerships/architects) and Turner and Townsend (quantity surveyors).

The Working Group has met 14 times during the course of the last 11 months and also participated in community consultation meetings conducted by the consultants as part of the research phase of the study.

### **3) Strategic/Annual Plan Conformance**

Further the objectives of the Council's Community Strategic Plan 2014 to 2024:

- Future Direction (3): Vibrant and engaged communities
- Future Direction (4): A healthy and safe community
- Future Direction (5): Innovative leadership and community governance
- Future Direction (6): Planned Infrastructure Services

### **4) Policy Implications**

Not applicable

### **5) Statutory Requirements**

Local Government Act 1993 section 20(2). In performing its function, a council is to consult, involve and be accountable to the community.

### **6) Risk Management**

The process of preparing a feasibility study and business case assists to inform Council in considering the assessment of user demand and financial risks associated with the development and ownership of facilities.

### **7) Consultation with State Government & Other Authorities**

The State Government has a representative officer from Communities, Sport and Recreation in the Department of Premier and Cabinet, Alana Fazackerley, who is the independent chairperson of the DDRPFS Working Group.

The Department of Education was invited to participate in the project. The Acting Director Facility Services advised that an opportunity to comment on draft master plans or concepts would be welcome.

### **8) Community Consultation**

The DDRPFS has involved a significant element of community and stakeholder consultation which is detailed in the consultant reports.

Broadly, it included public workshops, focus groups, primary and high school student workshops, surveys and conversations.

The DDRPFS Working Group which has worked closely with the consultants during the study period includes five members of the community that were appointed by the key stakeholders of the Deloraine and Districts sport, recreation and service clubs. The Working Group presented recommendations to the December 2017 Council Workshop and have also subsequently written to the Mayor and Councillors stating the Working Group recommendations (attached document).

This report also proposes a further consultation process to invite community and stakeholder feedback and commitment to the recommendations.

## **9) Financial Impact**

The project cost is a shared undertaking of Council (up to \$50,000) with Meander Valley Financial Services / Deloraine and Districts Community Bank – Bendigo Bank (up to \$50,000) and the State government (\$30,000) excluding GST.

The consultancy costs of the DDRPFS is being finalised but at the time of writing is a total of \$98,020 (ex GST).

The undertaking of a formal period of further consultation may incur further consultant costs.

The preparation of four illustrative sketches to assist in visualisation of the proposed concept have also been commissioned and is included in the consultancy cost provided.

The financial considerations associated with implementation of the Working Group recommendations and options contained in the consultant reports are addressed in Officers comments.

New infrastructure projects proposed in the report will be considered in future capital works programs. This will include assessment of the whole of life costs and revenue funding requirements.

## **10) Alternative Options**

Council can elect to receive the report and not proceed to a formal community and stakeholder consultation.

## **11) Officers Comments**

The key drivers in the DDRPFS are community and sporting groups seeking improved facilities and increased opportunities for community participation in recreation and sport. The consultant team sought to identify current demands and to test projections for both short term and future demand.

The study findings and the Working Group recommendations have not been tested with the stakeholders who were engaged in the consultations for the Study or the community more broadly. If Council determine to go back to the stakeholders and community it will provide a greater degree of transparency and engagement with them and by receiving their feedback will ensure the most considered options for the way forward.

The following program is proposed for consultation with the stakeholders and community. Stakeholders comprise the sporting clubs, service organisations and schools that have participated in the project.

Consultation programs to include:

- MVC Facebook post and Press Release advising that the report has been received and the Working Group recommendations.
- Letter/email to stakeholders advising as above, seeking feedback and inviting to stakeholder consultation meeting.
- MVC website news item advising as above and inviting community to participate in the consultation meeting.
- Stakeholder and community presentation and consultation meeting to be conducted at Deloraine Community Complex.

It is recommended that Council receives the report and proceeds to stakeholder and community consultation. Following the conclusion of the consultation period it is recommended that Council workshops the consultation feedback, Working Group recommendations and any other relevant material.

**AUTHORS:** Daniel Smedley  
RECREATION CO-ORDINATOR

Lynette While  
DIRECTOR DEVELOPMENT & COMMUNITY SERVICES

Martin Gill  
GENERAL MANAGER

## **12) Recommendation**

***It is recommended that Council:***

- 1. receive the Deloraine & Districts Recreation Precinct Feasibility Study Background and Summary Reports.***
- 2. notes the letter and recommendations contained within; from the DDRPFS Working Group.***
- 3. undertakes a formal period of stakeholder and community consultation and feedback to be completed prior to 13 March 2018.***

**DECISION:**

Thursday 14 November 2017

To the Mayor and Councillors  
26 Lyall Street  
Westbury 7303

To the Mayor and Councillors

Thank you for the opportunity to present to the Council Workshop on Tuesday 5 December on the Deloraine and Districts Recreation Precinct Feasibility Study Report.

The Deloraine and District Recreation Precinct Working Group (Working Group) acknowledge the support of Council, with the Tasmanian Government and the Deloraine & District Community Bank Branch, to prepare the feasibility study.

The Working Group note the many reports commissioned by the Meander Valley Council that support improvement of sport and recreational community facilities in Deloraine and the alignment of the proposed precinct with both the Tasmanian Government's *Communities, Sport and Recreation Strategic Plan 2017* and the Meander Valley Council's *Meander Valley Community Strategic Plan 2014-2024*; in particular *Health and wellbeing managed and developed, Infrastructure, facilities and programs encourage participation, Infrastructure services are affordable and meet the community needs into the future.*

The Feasibility Report commenced in April of this year and now finalised, is an ongoing important component to initiate improvement works. Key drivers for work improvements include a strong sport, recreation and community culture with high participation levels across Deloraine and districts. However, infrastructure is ageing, with some failing to meet accepted standards particularly with regard to Australian Rules Football, Football/Soccer, Netball, Squash and Racquetball, Little Athletics, Basketball and opportunities for both the Deloraine High School and the Deloraine Primary School. Specific concerns affecting these groups were illustrated at the Council workshop with photographs.

The Working Group have worked closely with the consultants, Inspiring Place, for this project to consider options across multiple sites and with regard to feasibility and investment by all levels of government. With these matters and the key drivers considered, the Working Group prefer Scenario 3, Phase 1. A copy of this is attached for your easy reference, page 4.

The Working Group is committed to progress improvement to the recreation and sport facilities and opportunities in Deloraine. This will benefit the Deloraine and District communities.

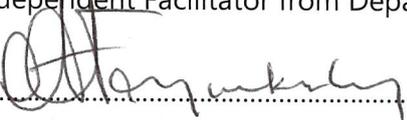
The Working Group makes the following formal recommendations to Council:

1. Council receives the Deloraine and Districts Recreation Precinct Feasibility Study Report.
2. Council endorses the Working Group's preference for Scenario 3 of the Deloraine and Districts Recreation Precinct Feasibility Study Report.
3. Council support the Working Group to develop a business case (from the report) to lobby State and Federal Governments toward achievement of Scenario 3, Phase 1.
4. Council commence investigation and negotiation of the purchase of land adjacent to the Deloraine Community Complex.
5. Council continues the current level of support for the design of two outdoor netball courts. These designs will inform future discussions with Council.
6. Council allocates funding for the installation of pathways and linkages to the Deloraine Community Complex from the neighbouring schools and town centre in the 2018/19 budget.

We look forward to Council's consideration of these important recommendations. Should you have any questions or require additional information, please contact the Project Manager, Lynette While, Council's Director of Community and Development Services.

Signed by:

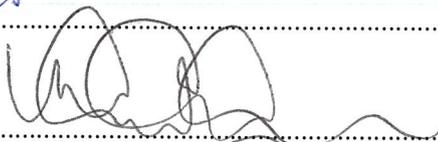
Independent Facilitator from Department Premier and Cabinet

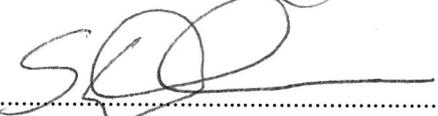
 ..... Alana Fazackerley

Community Representatives

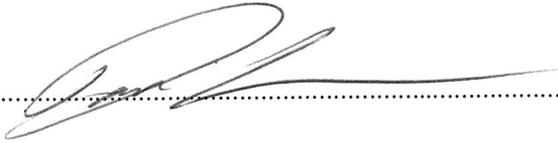
 ..... Cory Youd

 ..... Douglas Tangney

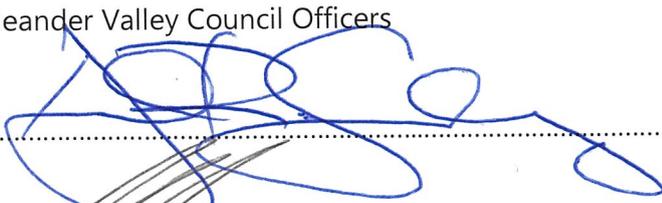
 ..... Laura Richardson

 ..... Shaun Donohue

Deloraine and Districts Community Bank Branch of Bendigo Bank Representative

..... Lindy Norton or Darren Rumble

Meander Valley Council Officers

..... Daniel Smedley

..... Kris Eade

..... Lynette While

The Preferred Option: SCENARIO 3, PHASE 1

Scenario 3		
Development Phase	Components	CAPEX
Phase 1 (0-5 Years)	<ul style="list-style-type: none"> <li>Indoor Sports Courts (Squash only)</li> <li>Main outdoor Multi-Sport Field and Perimeter Access</li> <li>Club/Meeting/Function Space</li> <li>Front/Back of House</li> <li>Amenities</li> <li>Carparking &amp; Access</li> <li>Outdoor Entry Plaza/Landscape Amenity</li> </ul> \$1M Allowance (includes better site access for schools & outdoor netball/multi-use court)	\$13.2
Phase 2 (5-10 Years)	<ul style="list-style-type: none"> <li>Indoor Sports Courts (Multi-purpose Sports Courts Only) Access</li> <li>Game Support</li> <li>Health and Wellness</li> <li>Outdoor Precinct/Landscape Allowance (\$1.5M)</li> </ul>	\$12.2 *
Phase 3 (+10 years)	<ul style="list-style-type: none"> <li>Secondary Outdoor Sports Field</li> <li>Outdoor Precinct/Landscape Allowance(\$0.5m)</li> </ul>	\$1.4*

\* excludes escalation allowance costs





**SUMMARY REPORT**

# Deloraine and Districts Recreation Precinct Feasibility Study





Many of the photographs within the report have been sourced from facebook sites of the Deloraine sporting clubs and recreation groups. Front cover photos sourced from the Deloraine Football Club and Deloraine Devils Netball Club. Above photograph shows use of the Deloraine Community Complex for the annual Tasmanian Craft Fair.



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## **PREFACE: WHY PREPARE A FEASIBILITY STUDY FOR A DELORAINE AND DISTRICTS RECREATION PRECINCT?**

### **THE KEY DRIVERS OF THE PROBLEM**

The Meander Valley municipality is well known for its strong community spirit and involvement across many sporting, recreation and community based activities. This spirit is an essential component to the way of life for those that enjoy living, working or visiting the area.

The time has come to significantly renew the municipality's sporting, recreational and community assets if they are going to service the needs of the community. The existing assets are now aged and no longer meeting the current needs or expectations of the community.

Some examples of this are:

- the Deloraine Football Club clubrooms and oval are subject to devastating flooding events that disrupt access and use of the facilities;
- the Deloraine Squash Club have sub-standard courts that are located under the Meander Valley Performing Arts Centre that do not meet accessibility standards, are unsafe and become unusable after flooding damage;
- the Deloraine Community Complex has significant design limitations which mean facilities do not meet current design and access standards, some spaces are inadequate for current use and are under-utilised;
- the poor quality and design of facilities, when combined with a highly price-sensitive market is impacting on the operational efficiency of the Deloraine Community Complex;
- there are no outdoor netball courts and limited capacity to cater for growth in participation;
- there is insufficient capacity to cater for future growth in existing sporting and recreational activities or to accommodate new sporting activities;
- there is a lack of safe and adequate paths linking the sporting facilities, schools and community;
- the Meander Valley Performing Arts Centre requires refurbishment to retain its value for the community;
- there is a general lack of community park, play and recreation facilities;
- the skate ramp is small, poorly located and no longer suitable for encouraging use; and
- many of the existing sporting facilities cannot cater adequately for the substantial growth of women's sport or junior sports.

### **INITIATING A RESPONSE**

In recognising these issues, the community and Council initiated several studies that have all pointed towards the need for upgrading and improving sporting, recreation and community facilities within a proposed Deloraine and Districts Recreation Precinct.

This project has taken the initial investigations further by:

- undertaking extensive consultations with key stakeholders and community to identify needs, issues and opportunities;
- identifying the needs and functional requirements for facilities;
- preparing initial cost estimates;
- preparing and assessing various site plan options;
- selecting the preferred site plan for the Deloraine and Districts Recreation Precinct based around the Deloraine Community Complex in close proximity to the Deloraine Primary School and Deloraine High School;
- undertaking a rigorous business feasibility assessment; and
- assessing staged development options for the precinct in the short to long term.



### THE CHALLENGE

Meander Valley has a population just under 20,000 people, which is largely static in growth. The bulk of the local population is within the eastern part of the municipality with the ability to access a diverse range of quality sporting, recreation and community facilities within the City of Launceston. Consequently, the immediate catchment is primarily Deloraine and its outlying districts has a population 10,000 . Some sports and recreational activities being undertaken at Deloraine also attract users from outside the municipality.

The standards and development costs for new quality sporting and recreation facilities have increased significantly. Meanwhile user's expectations for quality facilities have also increased and the local community is price sensitive to rising costs of involvement in sport and recreation.

The greatest challenge is that the overall capital investment costs for the desired Deloraine and Districts Recreation Precinct are beyond the financial capacity of the Council and community. Like most other major sporting and recreation facility investments throughout Australia, the Council and community will need financial support from the State and Commonwealth Government to make it happen.

The Feasibility Study develops an aspirational plan for the Deloraine Recreation Precinct based on community needs and outlines the feasibility of implementing the Deloraine and Districts Recreation Precinct on a staged basis, as funding support is attained.

### THE BENEFITS

The benefit of creating a Deloraine and Districts Recreation Precinct is that it addresses the inherent problems and issues identified with the existing sport and recreation facilities. These benefits include:

- consistency with the vision and policies of the Commonwealth Government, State Government and Meander Valley Council for improving the health and wellbeing of the community;
- consolidating sporting, recreational and community facilities within a precinct that will be more accessible, multi-use and flexible for changing needs;

- integrating sporting, recreational and community facilities to better cater for the interests of a wider cross section of the community;
- providing the capacity and flexibility to cater for growth in existing and new activities;
- developing safe and better paths to the local schools, town centre and residential areas;
- reducing ongoing maintenance costs for Council and clubs with relocating and upgrading aged and poor quality sporting and recreational facilities;
- increasing the capacity for the facilities to host sporting, recreational and community events that deliver social and economic benefits back into the regional and local community (e.g. Regional Youth Basketball Championships);
- the opportunity for new revenue from upgraded facilities, greater multiple use, function space and meeting rooms;
- allowing Clubs and community groups to focus on their activities and programs rather than on building maintenance, insurances and security; and
- creating the opportunity for commercial investment as partners in facilities and services.

The feasibility study shows that the need for major investment is required and that once the facilities are constructed, the whole of life operating costs can be managed on a more sustainable basis.

To do nothing is not a valid option for the future. The replacement and maintenance costs will climb as the existing assets further deteriorate. The health and wellbeing of the community will decline as aging and poor quality facilities no longer meet the needs of clubs and groups.

The investment in new and upgraded sporting, recreation and community facilities will help build social capital within the community.

## 1. BACKGROUND

Participation in sport and recreation results in a wide range of social, economic and environmental benefits for individuals and the broader communities in which they live. When people are physically active they are healthier, happier and more socially active. It allows people of all ages to participate in activities that contribute to the growth of body, mind and spirit. Sport and recreation can help enhance community identity and promote community integration – accessibility to sporting facilities influences where people choose to live, work and play.

The Meander Valley municipality is well known for its strong community spirit, evidenced through the organisation and participation in both sporting, recreational and cultural activities. The Deloraine Community Complex and Meander Valley Performing Arts Centre provide hubs for this activity in Deloraine. The Deloraine Primary School and Deloraine High School are located close to the Deloraine Community Complex. Outside of these two hubs are locations that cater for other sporting and recreational use including the former Deloraine racecourse area, Meander River foreshore, agricultural show/pony club and Bowls Club.

A range of past studies have referred to the potential role of the Deloraine Community Complex to be developed for sport, recreation and community use. These studies included the *Meander Valley Strategic Sport and Recreation Plan 2012-2015*, the *Deloraine and Westbury Sport and Recreation Rationalisation Study 2012* and the *Deloraine Outline Development Plan 2016*. The Plans referred to the benefits of consolidating sporting

activities in the one location, sharing facilities, integration with the local schools and locating new facilities outside of the flood-prone area to the Deloraine Community Complex site.

The concept for a Deloraine Community Complex Recreation Precinct was further reviewed and developed by the Meander Valley Regional Recreation Precinct Working Group (MVRPPWG). The Working Group developed a concept plan and initiated discussions with the Deloraine and Districts Community Bank Branch of the Bendigo Bank and the Australian Sports Foundation.

The consultant team consisting of Inspiring Place, Montemare Consulting and DWP Sutera were engaged by Meander Valley Council to undertake the feasibility study for the Deloraine and Districts Recreation Precinct.

A Deloraine and Districts Recreation Precinct Working Group (DDRPWG) was established to oversee the preparation of the Deloraine and Districts Recreation Precinct Feasibility Study (1).

1. *The DDRPWG consisted of representatives from Communities, Sport and Recreation, Meander Valley Council, MVRPPWG, community representatives and the Deloraine and Districts Community Bank Branch of the Bendigo Bank*
2. [http://www.premier.tas.gov.au/releases/a\\_healthy\\_tasmania](http://www.premier.tas.gov.au/releases/a_healthy_tasmania)
3. 3218.0 - *Regional Population Growth, Australia, 2014-15*



Aerial photo of the Deloraine Community Complex and Deloraine Primary School sites

## 2. CONTEXT

### 2.1 HEALTHY VISION

The State Government has announced a goal to make Tasmania the healthiest population in Australia by 2025(2). It recognizes that:

- 21.7 per cent of Tasmanians smoke, compared to 18 per cent nationally;
- 69.4 per cent of Tasmanians are physically inactive, compared to 67.5 per cent nationally;
- 65.6 per cent of Tasmanians are now overweight or obese, compared with 63.9 per cent five years ago; and
- 39.4 per cent of Tasmanians have high cholesterol – compared to 32.8 per cent nationally.

Importantly it recognizes that a healthier Tasmania must also start with promoting a healthy lifestyle and preventing chronic disease. The need to improve the health of our community is well recognised by the State Government to the point that its top policy priority is to make Tasmania the healthiest population in Australia by 2025.

### 2.2 DEMOGRAPHICS

The estimated resident population for Meander Valley has been slowly increasing from 17,351 persons in 2001, 18,062 persons in 2006, 18,561 persons in 2011 and estimated at 19,282 persons in 2016. This represents an increase of 11% over 15 years. However, the annual rate of population growth has been declining over the last decade from a peak of 2.5% in 2003-2004 to less than 0.1% since 2012.

Some areas within Meander Valley have experienced stronger population growth in recent years, particularly in Prospect Vale-Blackstone area and Hadspen-Carrick (3). This area also has convenient access to a range of well-developed sporting, recreation and community facilities within the City of Launceston.

Meander Valley has:

- higher profile in the age groups 10-14 years and 15-19 years than Tasmania or Australia - these age groups span primary schoolers, secondary schoolers and those undertaking tertiary education or work experience – typically attracting a higher level of

participation in sporting and recreation activities;

- a lower profile for the age groups 20-24 years and 25-35 years - these age groups can be associated with those undertaking tertiary education, seeking employment and being parents/homebuilders - time is often a major constraint but typically there can be a higher level of participation in sporting and recreation activities in these age groups;
- a higher profile for all the age groups from 50-59 years, 60-69 years, 70-84 years and above 85 years - whilst past perceptions may have been that participation in sport and recreation rapidly declines with age, the 'baby boomers' have largely altered this pattern with active participation extending into the 60's and 70's age groups.

### 2.3 SPORT AND RECREATION TRENDS

There are several important trends in sport and recreation provision that warrant consideration in planning all future sport, recreation and leisure facilities, programs and services provision. These changes have encompassed:

- changing age and cultural make-up of the Australian community participation levels;
- decrease in the participation of some traditional sports and an increase in the popularity of informal recreation activities such as walking and bike riding;
- building and site designs;
- the siting of facilities;
- the development of a strong relationship between



Sourced from the Deloraine Basketball Association facebook site.

## 2. CONTEXT

indoor and outdoor areas;

- elements of commercial provision; and
- programming.

For the future planning of the Deloraine and Districts Recreation Precinct these trends are likely to mean:

- development of facilities, which, while having a capacity to cater for various levels of competition, will need to have a multi-purpose use capacity;
- a venue which will need to have the flexibility to offer a greater diversity of programs and/or changes the programs on offer as needs change so that more people are attracted to become engaged;
- an opportunity to develop a greater focus on activities that promote healthy living and community wellbeing in addition to core sporting team programs;
- an opportunity to develop a greater focus on activities that build social capital in the community including recreational walking, school children using shared trails;
- significant benefits from the use of skilled management and programming; and
- an opportunity to consider commercial or government investment and involvement in providing sporting, recreation and community opportunities.



Top image - Concept of Cockburn Regional Centre (WA).

Bottom image - Concept of Manning Community Hub in the City of South Perth (WA).

### 2.4 POTENTIAL BENEFITS OF CONSOLIDATION

The potential benefits from consolidation within a recreation precinct include:

- efficiencies and savings including land use, expenses, management and administration;
- reduced maintenance costs by having fewer venues to care for and repair;
- the ability to have shared resources, across multiple facilities and functions, including equipment, first aid, technology and even volunteers;
- Clubs to focus on their activities and programs rather than on building maintenance, operation, building insurances and security;
- the ability to cross promote and gain the benefits of cross pollination of participants through the exposure of various activities to the attending audience;
- bringing infrastructure and programs to one location gives the site a significant profile within the community resulting in greater awareness of programs and services which are on offer;
- the hosting of far more effective regional events and programs.
- having a variety of participants and programs activated within the one precinct creates a more vibrant atmosphere and environment; and
- the delivery and monitoring of a wide range of programs within one site enables greater ability to vary programs and introduce new programs over time, and provides the ability to respond to trends and participation rates through the capacity to re-purpose the use of the programmed space.

Case studies were undertaken for:

- recent interstate community hub developments in Cockburn (Western Australia), Boroondara (Victoria) and Manning (Western Australia); and
- smaller scale sporting and recreation developments at Kingston, Penguin/Dial Range and Wynyard in Tasmania.

The case studies demonstrate that bringing infrastructure and programs to one location gives the site a significant profile within the community resulting in greater awareness of programs and services which are on offer.

### 3. COMMUNITY INSIGHT

Consultations were held with a wide range of stakeholders including sporting clubs, recreation groups, government agencies, service clubs, event managers, local schools and the community.

Surveys were sent out to all current sporting, recreation and community users of the Deloraine Community Complex, Meander Valley Performing Arts Centre and other sporting and recreation venues in Deloraine.

A local community forum was well attended and a community 'walk and talk' was held at the Deloraine Community Complex. A meeting was also arranged for any interested sporting clubs and groups based outside of Deloraine and Districts area.

Considerable information and input about community needs, issues and ideas was gathered through the consultation process and was considered in the identification of possible options for the Deloraine and Districts Recreation Precinct.

#### 3.1 GENERAL VIEWS ABOUT THE DELORAINE AND DISTRICTS RECREATION PRECINCT

- Sport, recreation and community activities are very important to the way of life enjoyed by residents in Meander Valley.
- Deloraine services a wide sub-regional catchment area and is the logical centre to consolidate sporting and recreation facilities for the municipality (4). It is located midway between Devonport and Launceston.

- Clubs/groups appreciate the range of existing Council owned/managed sporting, recreation and community assets being available with affordable costs to meet current needs.
- Many sporting, recreation and community facilities are tired and will no longer meet user expectations or needs.
- Recognition of the importance of events and competitions for the Tasmanian, regional and local community. These include the Deloraine Craft Fair (four-day event), Drama Festival, Street Car Show and the Deloraine Showground Market.
- Future of the Deloraine Racecourse area needs direction given the issues with poor access, flooding, condition of heritage listed sites and buildings. There was interest from the Deloraine District Pony Club to relocate to the area to have access to a cross country course and hold state-wide competitions (5). The Club is interested in looking at alternative venues and considers the Racecourse site would be well suited to future needs for equestrian events including dressage.
- Many of the current users of the Meander Valley Performing Arts Centre value the opportunity to use the facility and consider some improvements would help grow their use and activities.
- The ageing community will be looking for facilities that can cater for their needs.
- Many of the clubs and groups are cost sensitive with perceived limited capacity to increase membership and use costs. Most clubs and groups are seeking to set fees at a level that are reasonable for the community to pay. Increasing costs make this difficult.



*The Kingston High School indoor sports stadium and the State Gymnastics Centre were added to the Kingborough Sports Centre (Tas)*

### 3. COMMUNITY INSIGHT

- Most clubs and groups face difficulty with finding sufficient volunteers. Membership and involvement is affected by young people finding work or attending college/university out of the local area.
- Limited pathways for many sports and this requires locals to access Launceston and Devonport for higher standards of competition. Clubs have a realistic understanding of the hierarchy of regional sporting and recreation facilities that require the need to travel to be involved in regional based competitions e.g. netball, soccer, football.
- There are ongoing management, maintenance and replacement costs involved with investment in new sporting, recreation and community facilities.
- Staging of works and improvements will be required over time.
- The stadium at the Deloraine Community Complex is well used (85% occupancy) from after school to 10.30pm in the evenings.
- The Deloraine Community Complex site has the potential to extend and accommodate future demand for many sporting, recreation and community facilities – both indoor and outdoor.
- Establishing better shared trail linkages with the local schools and town is essential. There are low levels of school children using bikes to reach schools – in part due to lack of trails, perception of routes/crossings being unsafe and local topography (although bikes were used more often back in the 1970's).
- Support for the integration with public transport would be beneficial for the Clubs if school buses from Launceston and Devonport provided a stopping point at the DCC.

#### 3.2 GENERAL VIEWS ABOUT THE DELORAINE COMMUNITY COMPLEX SITE:

- Consolidating sport, recreation and community facilities around the Deloraine Community Complex makes good sense. However it must also cater for wider community use including free or low cost facilities, trails, meeting spaces, internet/wifi, play, fitness and café facilities.
- The Deloraine Community Complex suffers from past design flaws that affect users and spectators. The facility does not provide all abilities access and is not well designed to cater for multi-use. There are design limitations with courts, club storage, indoor courts, kiosk and kitchen facilities. The auditorium has low occupancy and is considered by many to be unattractive and unsuitable for functions.
- 4. *Review of membership data from Clubs indicated that the catchment was far wider than Deloraine. For example 40% of the basketball members were from Deloraine, 37% from outlying small towns and rural areas in the municipality, 14% from Launceston/Prospect Vale/Tamar Valley, 6% from Devonport/Latrobe/Railton and 2% from northern midlands. Over 50% of the junior soccer players, junior football players and squash members live outside of Deloraine.*



Futsal and dance are two indoor sports showing rapid growth across Australia. AFL womens football is also expected to grow significantly in coming years.



### 3. COMMUNITY INSIGHT

#### 3.3 CRITICAL ISSUES FOR CLUBS AND GROUPS

The survey sent out to key clubs and groups asked the respondents to indicate which issues (from a list) were critical for them in the next 5 years.

The highest ranked issues were lack of volunteers to help administer and run the club and group and the poor standard of facilities used and the inability to provide quality sporting and recreation opportunities. These two issues were common to clubs and groups at all venues – the Deloraine Community Complex, Meander Valley Performing Arts Centre and the other venues.

Most clubs and groups at the Deloraine Community Complex also listed the following issues as being critical:

- increased demands resulting from major growth expected in the sport or recreational activity;
- limited funding assistance from government or Council; and
- limited resources to upgrade/maintain club or group facilities.
- most clubs and groups at the Meander Valley Performing Arts Centre also listed limited junior development programs as being critical.

5. *The Club lost access to the cross-country course near the Deloraine Showgrounds with rises in water levels on the Meander River. The current facilities (e.g. toilets, showers, sleeping area) can no longer handle large numbers at the events.*



Photographs sourced from facebook pages for the Deloraine Junior Basketball Club Inc, Deloraine Football Club and Deloraine Devils Netball Club.

### 3. COMMUNITY INSIGHT

#### 3.4 CLUB/GROUPS ISSUES AND NEEDS

A summary of the issues and needs expressed by the sporting clubs and recreation groups is shown below.

Club	Key Existing Issues	Key Needs	Preferred Location
<b>Deloraine Devils Netball Club/ Meander Valley Netball Association</b>	Limited facilities designed for netball and to cater for future needs. Lack of outdoor courts and facilities.	Indoor courts designed for netball use, outdoor netball courts, lighting, seating, changerooms, gym, meeting rooms as part of the extended DCC	DCC
<b>Deloraine Badminton Association Inc</b>	Poor design and fit-out of the existing facilities which require improvements	Improved seating, more secure storage, better lighting, better heating and control of cold drafts, larger kiosk	DCC
<b>Deloraine Amateur Basketball Association, and Deloraine Junior Basketball Club Inc</b>	Lack of courts to meet demand, lack of suitable seating, insufficient room around the courts, not able to use show court without portable bench	Two extra courts, provision for run-off at each court, flood prevention, larger kiosk, portable bench and seating for show court, new scoring clocks and outside court, umpires room, function facilities	DCC
<b>GKR Karate</b>	Poor heating	Better heating at the MVPAC	MVPAC
<b>Deloraine Dramatic Society</b>	Limited space and need to upgrade existing facilities	Upgrade costume space, upgrade seating raking in upstairs area, upgrade stage floor at the Little Theatre	MVPAC
<b>Deloraine Table Tennis League</b>	Improve lighting, flooring and storage to allow easy access and use and potential for tournaments.	Upgrade space to better cater for table tennis needs including a purpose built table to avoid setting up time prior to use	MVPAC
<b>Deloraine Community Band</b>	Inadequate space and storage facilities, lack of a suitable performing venue	Bigger performing venue, better design for future needs of buildings and spaces for theatre and music	MVPAC unless better venue
<b>Western Tiers Film Society</b>	Poor heating, lack of social space	Improved heating and development of the MVPAC foyer	MVPAC
<b>Deloraine Squash Club</b>	Poor quality facilities, no longer meet accessibility standards, subject to flooding, inadequate space	New courts in precinct location or major upgrade of existing facilities	DCC
<b>Deloraine Football Club</b>	Oval and clubrooms subject to being located with a high flooding zone with regular damage/impact, old club and amenity facilities without capacity to meet expected growth and increased female participation, lack of twin oval to cater for junior football needs, lack of suitable function space, gym and storage	Need relocation with new oval and club facilities, developing site association with netball and provision of a gymnasium	DCC
<b>Deloraine Junior Football Club</b>	As above for the Deloraine Football Club	As above including better ground conditions, changerooms for girls teams, better lighting for training, better clubrooms	DCC
<b>Deloraine Junior Soccer Club</b>	No soccer specific facilities, poorly maintained sportsground, lack of space to cater for all ages, lack of night lights, no toilet or change facilities, inadequate storage space	Grassed full size soccer pitch, lighting, access to storage, toilet and changeroom facilities	DCC or upgraded school ground close by
<b>Deloraine Little Athletics Club Inc</b>	Poor playing surfaces, no changerooms, lack of accessible toilet, storage facilities at capacity, limited kiosk capacity	400m track, long jump runways, pit and lockable cover, storage shed for equipment	DCC or upgraded school ground close by
<b>Deloraine District Pony Club</b>	Loss of access to cross country course due to flooding, inadequate toilets, limited capacity or suitability for camps, high costs for use of site	Access to cross country course to allow state wide competitions, better club facilities, opportunity to use the former Deloraine Racecourse area	Deloraine Racecourse

### 3. COMMUNITY INSIGHT

#### 3.5 FUNCTIONAL SPACE REQUIREMENTS FOR DELORAINE COMMUNITY COMPLEX

A detailed analysis of the functional space requirements was determined following the consultation with clubs and groups. A summary is provided below.

	Functional Space	Area m2		Functional Space	Area m2	
<b>Indoor Sports Hall</b>	Multi-Use Indoor Sports Courts	1708	<b>Front of House</b>	Entry Foyer/Reception/Function/Memorabilia Display/Sponsor Acknowledgement	50	
	Squash Courts	252		Café/Kiosk seating area	50	
	Community Courts Spectator Seating (Min 250-300 pax)	225		Retail	50	
	Showcourt Spectator Seating	100		Social Spaces/Kids Lounge/Play area	100	
	Storerooms	400		Centre Admin/Sports Club Admin/Staff Room & Amenities	50	
	First Aid	15		<b>Back of House</b>	Plant Rooms, Delivery/Loading Dock Area, Lifts/Circulation, Facility Maintenance/ Presentation Area, Storage	230
	Court Office/Show Court Office	25			Provision for circulation	95
<b>Programmes</b>	Mixed Martial Arts/Dance Studio (multi-use with squash)	0	<b>Outdoor Sports Facilities</b>	AFL/Cricket	26100	
	Storerooms for MMA/Dance Studio	60		Spectator Seating - Car	10650	
	High Performance/Functional Training Gym	250		Spectator Seating - Seating/ Standing	0	
	Office/Storeroom for HP Gym	20		Rectangular Field (multi-use)	8970	
	Multi-Use Programmes - Health/ Fitness/Wellness - Aerobics / Zumba	200		Outdoor Multi-Sport Courts (Modified)	1008	
	Storeroom	20		Club House/Social/Function facilities, Sport Training Gym, Outdoor BBQ/Social/Plaza Spaces, FOH and BOD and outdoor BBQ/Social/Plaza space - all included in indoor sports hall and site works	0	
	Office	20		Storage/Grounds Shed	<b>200</b>	
	Storage - Admin	10	<b>Total Functional Space Requirements</b>		<b>51,879</b>	
<b>Toilets/Change Amenities</b>	Indoor Home/Visitor Players Change/Toilets/Massage	80				
	Outdoor Player Change/Toilets/Massage	160				
	Referees Toilets/Changerooms	60				
	Programmes/Club/Function Area Toilets	60				
	Public Toilets accessible	30				
	Staff Amenities	20				
<b>Club Social/ Function Areas</b>	Club/Social Facilities/Mezzanine Viewing/Corporate & Coaching areas	400				
	Board Room/Meeting Rooms	60				
	Outdoor Plaza/Social Spaces (covered in site works)	0				
	Commercial Kitchen/Bar/Café	150				

## 4. CONCEPT SITE PLAN OPTIONS

### 4.1 CONCEPT SITE PLANS

Three options were developed by the consultant team for the Deloraine and Districts Recreation Precinct. These options were:

- **Option 1** - Consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with the purchase of the adjoining private land parcel;
- **Option 2** - Consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with purchase of the adjoining private land and upgrading of the Deloraine Primary School sportsground;
- **Option 3** - Consolidate sporting, recreation and community facilities at both the Deloraine Community Complex and Deloraine Racecourse Site.

It was recognized that the options were aspirational in reflecting the needs and views expressed by the sporting and recreation clubs and community.

The potential advantages and disadvantages for each of the options were identified and presented to the Working Group and Meander Valley Councillors.

### 4.2 PREFERRED CONCEPT SITE PLAN

The preferred option was determined by the Working Group.

Plan 4.5 shows the preferred precinct concept plan and Figure 1 shows a conceptual floor layout of the Deloraine Community Complex for this option.

#### Potential Advantages

- Achieves the concept of a single sporting and recreation precinct for the town – a more attractive asset that will also encourage community access and use.
- Opportunity to better integrate passive and active/formal recreation, and combine public art and landscape architecture to present an attractive leisure destination within the town. (i.e. not just a stadium next to a paddock)
- Purchase of the private land parcel would provide capacity for future development/growth of the precinct and improve long term security of the precinct
- Consistent with the Deloraine Outline Development Plan and outcomes from local community consultations



*Meander Valley Performing Arts Centre which accommodates Deloraine Squash Club, GKR Karate, Deloraine Dramatic Society, Deloraine Table Tennis League, Deloraine Community Band, Western Tiers Film Society and a local rollerblading group.*



*Photograph supplied by Meander Valley Council*

## 4. CONCEPT SITE PLAN OPTIONS

- Opportunity to integrate functions and achieve better multi-use outcomes from the investment in access, car parking, amenities, function space, sportsgrounds etc.
- Overcomes the exposure to flood risk for sporting uses at the Deloraine Racecourse and the squash courts at the Performing Arts Complex
- Major upgrade of the existing building and opportunity to address its current design and functional limitations
- Existing site has capacity to accommodate future growth in sporting and recreation activities – football facilities, function centre, two additional multi-use courts including show court, spectator seating, storerooms, multi-functional room, gym, offices, change rooms/amenities etc.
- Capacity to host sporting events e.g. basketball with 4 courts
- Good synergy between various uses e.g. netball (indoor and outdoor) with football, basketball and netball, little athletics and football (400m track), schools and sporting facilities, sport and community
- Opportunity to address the opportunity for bus drop-off and turning at the Deloraine Community Complex
- Would not interfere with the Tasmanian Craft Fair and would provide additional opportunities to grow the fair at the site (e.g. use of oval and sportsgrounds, additional parking, improved traffic flows)
- Increased parking would also be beneficial for the Rotary Pavilion hosting community events
- New community park facilities (e.g. trails, fitness circuit, nature play, picnic/barbeque, outdoor gym, outdoor basketball 3:3 court)
- Good location for a future skatepark within the precinct
- Potential to sell some land for residential use (as recommended in the Deloraine Outline Development Plan)



Photographs of the Deloraine Football Clubrooms which is subject to flooding by the Meander River. Small skate ramp located behind the Meander Valley Performing Arts Centre. Deloraine Showground site used by the Deloraine District Pony Club.



## 4. CONCEPT SITE PLAN OPTIONS



- |  |  |   |
|--|--|---|
| <ul style="list-style-type: none"> <li>① New AFL Oval; 180x145 (includes 5m run off)</li> <li>② Install gates to restrict through traffic outside of events and games days</li> <li>③ Renovate Deloraine Community Complex building; refer to architect's 'plan preferred option 2' for concept plan and arrangement of facilities. Ensure building has glass frontage for function room and changeroom facilities are positioned central to main oval</li> <li>④ Gravel road to perimeter of ovals, including provision for spectator car parking</li> <li>⑤ Paved spectator standing / seating area</li> <li>⑥ Paved entry plaza to new building; plaza extends to existing Rotary Pavilion to create a pedestrianised area / events space</li> <li>⑦ Retain as open space, but option to reconfigure car park to Rotary Building in long term</li> <li>⑧ Existing car park</li> <li>⑨ New car park ~ 200 cars. Entry off existing car park, with access road running to the north of Rotary Pavilion</li> <li>⑩ Bus lay by</li> </ul> | <ul style="list-style-type: none"> <li>⑪ Gravel road leading off car park; gated entry, with access only permitted on game / function days. Link gravel road through to East Barrack Street. Maintain option for use of road link to East Barrack Street to cater for major events and home games</li> <li>⑫ Community park, including nature play area, BBQ and outdoor gym circuit</li> <li>⑬ Little athletics facilities, including long jump, triple jump, discus, sandpits etc, adjacent to main oval</li> <li>⑭ Gravel car park</li> <li>⑮ 2 x outdoor netball courts</li> <li>⑯ 1 x 3:3 outdoor basketball court</li> <li>⑰ Reconfigure existing drain line</li> <li>⑱ Create shared use trail network, which links wider community including Primary and High schools to the site. Potential for use as a bike circuit around sportsground.</li> <li>⑲ Upgrade existing undeveloped oval on school property to multi-use sportsground. Preferred multi-use sportsground site in partnership with Primary School</li> </ul> | <ul style="list-style-type: none"> <li>⑳ Investigate potential to sell off Council and Crown owned land for residential subdivision</li> <li>㉑ Potential skatepark location</li> <li>㉒ Consolidate parking and main entry from the north</li> <li>㉓ Potential for overflow parking and expansion of sport, recreation and community use in longer term</li> <li>㉔ Potential to relocate off leash dog area into balance land</li> </ul> |
|--|--|---|

### Plan 4.5 Deloraine and Districts Recreation Precinct Preferred Option

Prepared for DRP Working Group / MV Council November 2017 1:4000 @ A4

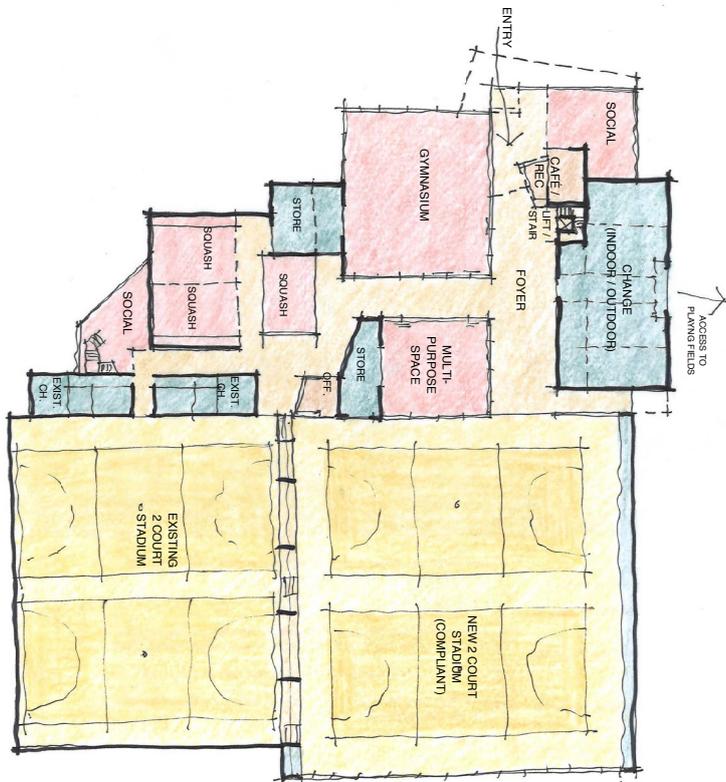
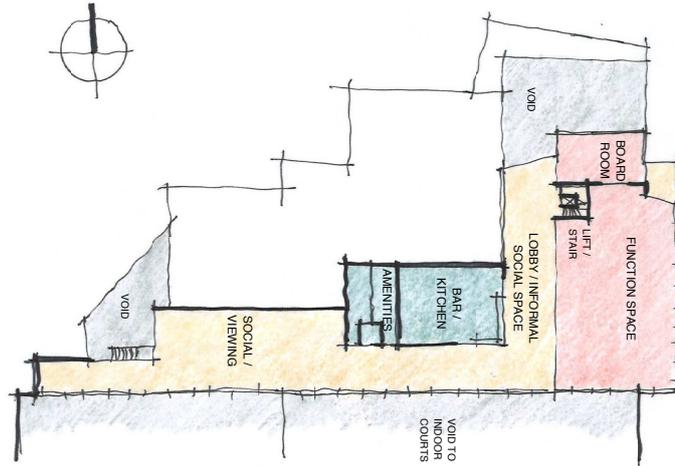


# 4. CONCEPT SITE PLAN OPTIONS

AJME-17-2409

DEBORAH COMMUNITY COMPLEX

FACILITY LAYOUT  
OPTION 2 - PREFERRED OPTION



ISSUE: SK-002/C  
SCALE: -1:500 @ A3  
DRAWN: MM  
DATE: 18.08.2017



## 4. CONCEPT SITE PLAN OPTIONS



- ① Potential junior football oval 135x110m (includes 5m run off). Possibility to fit 2 x ovals within left over space
- ② Potential multi-purpose junior rectangular sports fields 90x45m. Possibility to include 3 x sports fields within left over space

### Map 4.7 Deloraine and Districts Recreation Precinct Potential Capacity for Future Recreation Development

Prepared for DRP Working Group / MV Council November 2017 1:4000 @ A4



4. CONCEPT SITE PLAN OPTIONS



## 5. BUSINESS FEASIBILITY PLAN

Extensive community and stakeholder consultations indicated a strong desire for consolidating sporting activities at the Deloraine Community Complex site, sharing facilities, integration with the local schools and locating new facilities outside of the flood-prone area.

This is consistent with the findings of the *Meander Valley Strategic Sport and Recreation Plan 2012-2015*, the *Deloraine and Westbury Sport and Recreation Rationalisation Study 2012*, the *Deloraine Outline Development Plan 2016* and the concept ideas developed by the Meander Valley Regional Recreation Precinct Working Group.

Three concept site plan options were identified and assessed for the Deloraine and Districts Recreation Precinct at the Deloraine Community Complex site, with one option including a split model with the use of the Deloraine Racecourse site.

The preferred option of the DDRPWG was to consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with purchase of the adjoining private land and upgrading of the Deloraine Primary School sportsground.

The preferred option represents the aspirational plan for the Deloraine and Districts Recreation Precinct based on the expectations of the sporting clubs, recreation groups and community.

Montemare Consulting prepared a Facility Brief and Turner and Townsend Quantity Surveyors reviewed the indicative cost estimates for the preferred option.

The feasibility assessment reviews the needs and demand, applies business modelling and identifies the financial implications for the Deloraine and Districts Recreation Precinct.

Financial operating results have been determined, based on assumptions for the three scenarios for governance and management, staffing levels, participant target numbers, pricing targets, revenue targets, expense targets and global impacts.

The three scenarios that were taken to business feasibility were:

- Scenario 1 - represents the full scope of the Preferred Option delivered in one development phase.
- Scenario 2 – prioritises Indoor Sports, Community Health and Wellness.
- Scenario 3 – prioritises Outdoor Sports and Club Facilities.

The staging of development for Scenario 2 and Scenario 3 are shown below.

### SCENARIO 1

Full development of the Preferred Option would be \$26.8M

### STAGING FOR SCENARIO 2

(\* excludes escalation allowance costs)

Development Phase	Components	CapEx
<b>Phase 1 (0-5 Years)</b>	Indoor Sports Courts (Multi-purpose Sports Court, Squash Courts) Game Support Health & Wellness Front/Back of House Amenities Carparking & Access Outdoor Entry Plaza/Landscape Amenity \$1M Allowance (includes better site access for schools & outdoor netball/multi-use court)	\$17.4M
<b>Phase 2 (5-10 Years)</b>	Main Outdoor Multi-Sport Field & Perimeter Access Club/Meeting/Function Space Outdoor Precinct/Landscape Allowance (\$1.5M)	\$8.9M*
<b>Phase 3 (+10 years)</b>	Secondary Outdoor Sports Field Outdoor Precinct/Landscape Allowance(\$0.5m)	\$1.4M*

## 5. BUSINESS FEASIBILITY PLAN

### STAGING FOR SCENARIO 3

(\* excludes escalation allowance costs)

Development Phase	Components	CapEx
<b>Phase 1 (0-5 Years)</b>	Indoor Sports Courts (Squash only) Main outdoor Multi-Sport Field and Perimeter Access Club/Meeting/Function Space Front/Back of House Amenities Carparking & Access Outdoor Entry Plaza/Landscape Amenity \$1M Allowance (includes better site access for schools & outdoor netball/multi-use court)	\$13.2M
<b>Phase 2 (5-10 Years)</b>	Indoor Sports Courts (Multi-purpose Sports Courts Only) Access Game Support Health and Wellness Outdoor Precinct/Landscape Allowance (\$1.5M)	\$12.2M*
<b>Phase 3 (+10 years)</b>	Secondary Outdoor Sports Field Outdoor Precinct/Landscape Allowance(\$0.5m)	\$1.4M*



## 5. BUSINESS FEASIBILITY PLAN

### WHOLE OF LIFE COSTS TABLE

The purpose of identifying whole of life costs is to enable Council – the future asset owner of the proposed precinct to understand the full extent of financial obligation in operating and maintaining the venue. It will also enable full cost financial analysis to be completed to compare both options over the life of the asset.

The whole of life costs are shown in the following Table.

Cost Area	Inputs	Allowance	Scenario 1 \$'Million pa	Scenario 2 \$'Million pa	Scenario 3 \$'Million pa
<b>CapEx</b>	CapEx Estimate (exc land acquisition costs)	Construction only	\$20M	\$15.5M (Phase 1 only)	\$11.7M (Phase 1 only)
	Total CapEx Costs	Total Development Costs	\$26.8M	\$17.4M (Phase 1 only)	\$13.2M (Phase 1 only)
<b>Operating</b>	Operating Cost - Indoor	10 Year Base Case Avg. pa	(\$0.035)	(\$0.068)	(\$0.145)
	Operating Cost - Outdoor	Estimate	(\$0.07)	**	(\$0.07)
	Maintenance/Major Refurbishment	2% of CapEx pa**	(\$0.4)	(\$0.3)	(\$0.23)
	Total Operating Cost		<b>(\$0.505)</b>	<b>(\$0.368)</b>	<b>(\$0.445)</b>
<b>Accounting</b>	Depreciation	50 Year straightline	(\$0.536)	(\$0.348)	(\$0.264)
	Capital Funding Cost/ Divestment Costs/ (Income)	EXCL ***	-	-	-
		<b>Sub-Total</b>	<b>\$1.041</b>	<b>\$0.716</b>	<b>\$0.709</b>

A review of the benefits and risks in the following Table indicates:

- Scenario 1 - Offers the greatest level of participation benefits to the community in the short term (i.e. 10 Years) and best operating financial performance results, however, has higher overall whole of life costs and level of risk with respect to funding attraction and land acquisition factors.
- Scenario 2 – Offers the next greatest level of participation benefit to the community and operating financial performance results in the short term, however, has higher overall whole of life costs, but has lower levels of risk, when compared to scenario one, mainly due to delayed need to acquire land to enable the development scenario to proceed.
- Scenario 3 – Offers the least participation benefit to the community, has the least favourable operating financial performance results in the short term, however, has a lower overall whole of life costs cost, and lower level of risk, mainly due to likelihood of attracting the capital funding levels required.

Notes:

CapEx excludes cost of land acquisition. This has not been included as it is not known at this stage.

Scenario 3 – Operating performance assumed as per existing, based on last 3 year average.

\*Maintenance/Major Refurbishment allowance has been set equivalent to standard industry asset depreciation rates of 50 years and excludes the existing building.

\*\* It should be noted this option excludes cost of outdoor facility provision, which are still borne by Council, through existing provision.

\*\*\* Capital Funding and divestment strategy to be determined.

## 5. BUSINESS FEASIBILITY PLAN

Key Considerations	Scenario 1	Scenario 2	Scenario 3
<b>Priority Community Needs</b>	<p>Meets the growth needs of indoor sport and immediate needs of outdoor sports.</p> <p>Maximises opportunities for a broad range of leisure, health and wellness, community &amp; cultural activities.</p> <p>Maximise multi-use, flexibility and adaptability to meet changing sport, recreation and community needs (and mitigate financial risks).</p>	<p>Meets the growth needs of existing indoor sport (e.g. basketball, netball, badminton) and provides opportunity for new and emerging sports, more commercially orientated programmes and services and events.</p> <p>Enables the immediate re-location of Squash from existing existing aging, sub-standard and at-risk facilities (ie. flood plain risks).</p> <p>Enables the conversion of existing underutilised asset (due to poor design) to meet the contemporary needs of the community for indoor leisure, health &amp; wellness, community &amp; cultural activities.</p>	<p>Enables the immediate re-location of AFL from existing aging, sub-standard and at-risk facilities (i.e. flood plain risks). Provides appropriate quality facilities for AFL – men and women’s participants.</p> <p>Provides access to facilities for many other outdoor sports currently not played or represented in the area, including Cricket, Soccer, Rugby/touch and Athletics, due to lack of facilities.</p>
<b>Technical Feasibility</b>	Meets construction staging requirements.	Meets construction staging requirements.	Meets construction staging requirements.
<b>Operating and Whole of Life (WOL) Financial Impacts</b>	<p>Maximises levels of participation and operating financial performance.</p> <p>Likely to result in best performing operating results, however higher WOL costs over first 10 Years operations.</p>	<p>Prioritises establishment of programmes and services to meet high growth sports and activities, maximise participant numbers, levels of participation and revenue yields.</p> <p>Likely to result in improved operating results, compared to Scenario 3 and existing situation, and slightly higher WOL costs, than scenario 3 over first 10 Years operations.</p>	<p>Reduces capacity to deliver new indoor programmes or services, therefore offers limited opportunity to increase levels of participation and revenue yields.</p> <p>This is likely to see financial operating performance aligned to status quo, and WOL costs only marginally better than Scenario 2.</p>
<b>Capital Funding Feasibility</b>	Preliminary capital cost estimated at \$26.8 M	Preliminary capital cost estimated at \$17.4 M	Preliminary capital cost estimated at \$13.2 M
<b>Enabling Factors</b>	Requires immediate acquisition of additional land.	Delays requirement for land acquisition.	Requires immediate acquisition of additional land.
<b>Key Risk Considerations</b>	<p>Key risks include:</p> <ul style="list-style-type: none"> <li>• Likelihood of attracting required capital funding</li> <li>• Ability to acquire land in short timeframes and at appropriate cost</li> <li>• Ongoing Operational Risks – achieving usage and financial targets.</li> </ul>	<p>Key risks include:</p> <ul style="list-style-type: none"> <li>• Likelihood of attracting required capital funding, phase one</li> <li>• Ability to attract funding to deliver future phases</li> <li>• Ability to acquire land to deliver future phases</li> <li>• Ongoing Operational Risks – achieving usage and financial targets.</li> </ul>	<p>Key risks include:</p> <ul style="list-style-type: none"> <li>• Likelihood of attracting required capital funding to deliver future phases phase</li> <li>• Ability to acquire land in short timeframes and at appropriate cost</li> <li>• Level of ongoing operational subsidy, particularly if future phases not delivered</li> </ul>

## 6. IMPLEMENTATION

**1. The Deloraine and Districts Recreation Precinct Working Group (DDRPWG) and Meander Valley Council (MVC) adopt, (in principle) the Deloraine and Districts Recreation Precinct Feasibility Study, as a tool for guiding the future development of the precinct.**

### INITIATING ACTIONS AND RESPONSIBILITIES:

- DDRPWG to review and adopt the Feasibility Study in principle and forward its recommendations to the Meander Valley Council.
- The Feasibility Study presented to a workshop of Meander Valley Councillors.
- MVC consider the in principle adoption of the Deloraine and Districts Recreation Precinct Feasibility Study.
- Undertake further stakeholder and local community consultation to develop a broad agreement for the implementation of the Deloraine and Districts Recreation Precinct.
- MVC, DDRPWG and key stakeholders use the study as a guide for seeking funding, development and management of the recommended works.
- MVC to commence negotiations for the purchase of private land adjoining the Deloraine Community Complex.
- Initiate discussions with Crown Land Services regarding future development of the Deloraine and



*Junior soccer would benefit from shared use of a sportsground within the Precinct with access to changerooms, storage and amenities.*

Districts Recreation Precinct site.

**2. Seek funding support and grants to support implementation of the Deloraine and Districts Recreation Precinct on a staged basis.**

### INITIATING ACTIONS AND RESPONSIBILITIES:

- MVC to seek written support from key stakeholders and interest groups for the implementation of the Deloraine and Districts Recreation Precinct.
- MVC to identify its funding capacity for the project over the short (1-2 years), medium (5 years) and longer term (10 years).
- MVC lobby the State Government parliamentarians for special funding assistance in the lead-up to the State elections in 2018, especially those members representing the Braddon electorate.
- MVC to target the Commonwealth Government for funding assistance for the implementation of project stages through:

the National Stronger Regions Fund initiative which aims to boost social and economic development in Australia's regions by funding priority infrastructure projects in local communities (<http://investment.infrastructure.gov.au/funding/NSRF>),

the Building Better Regions Fund which aims to fund projects outside of the major capital cities;

the Stronger Communities Program which aims to fund small capital projects that deliver social benefit (support of Federal Member of Parliament required for the project), and

individual sporting clubs and community recreation groups to consider opportunities for fund raising support from the Australian Sports Foundation involving opportunities such as tax deduction for donations, deductible gift recipient and Fundraising4Sport-F4S;

- MVC, individual sporting clubs and community recreation groups to review the guidelines for Sport and Recreation Major Grants or Sport and Recreation Minor Grants administered by Communities, Sport and Recreation for projects consistent with the vision and implementation of the Deloraine and Districts Recreation Precinct ([http://www.dpac.tas.gov.au/divisions/csr/sportrec/funding\\_opportunities/major\\_grants](http://www.dpac.tas.gov.au/divisions/csr/sportrec/funding_opportunities/major_grants)).
- Individual sporting clubs and community recreation groups to work with their State peak bodies to seek funding under the State Grants Program administered

## 6. IMPLEMENTATION

by Communities, Sport and Recreation.

### 3. Providing funding is available for the project, MVC to take a lead role in facilitating the staged implementation of the Deloraine and Districts Recreation Precinct.

#### INITIATING ACTIONS AND RESPONSIBILITIES:

- MVC to agree on a staged implementation process to match sourced funding.
- MVC to engage suitably qualified professionals to undertake design, construction documentation and cost estimates for the Phase 1.
- MVC to seek development approval for the proposed Phase 1 works.
- MVC to seek tenders for approved works.
- MVC or appointed Project Manager to oversee the works.
- MVC to continue seeking funding support for the implementation of other stages of the project.



*Deloraine Little Athletics would benefit from shared use of a sportsground within the Precinct with access to changerooms, storage and amenities. The main oval would allow for the running of 400m events. A new jumps/snad pits area would need to be developed adjacent to the sportsgrounds.*





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# Deloraine and Districts Recreation Precinct

FEASIBILITY BACKGROUND REPORT



MONTEMARE  
CONSULTING



inspiring place





# DELORAIN AND DISTRICTS RECREATION PRECINCT FEASIBILITY REPORT

prepared for  
Deloraine Recreation Precinct Working Group

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in association with Montemare Consulting and DWP Suturs

Date	Version
28.06.17	Draft Insights Report to Working Group
04.08.17	Concept Options Presentation to Working Group
22.09.17	Draft Business Case Presentation to Working Group
16.10.17	Draft Feasibility Report to Working Group
15.11.17	Revised Feasibility Report to Working Group
08.01.18	Final Report



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# **WHY PREPARE A FEASIBILITY STUDY FOR A DELORAINE AND DISTRICTS RECREATION PRECINCT?**

## **The Key Drivers of the Problem**

The Meander Valley municipality is well known for its strong community spirit and involvement across many sporting, recreation and community based activities. This spirit is an essential component to the way of life for those that enjoy living, working or visiting the area.

The time has come to significantly renew the municipality's sporting, recreational and community assets if they are going to service the needs of the community. The existing assets are now aged and no longer meeting the current needs or expectations of the community.

Some examples of this are:

the Deloraine Football Club clubrooms and oval are subject to devastating flooding events that disrupt access and use of the facilities;

the Deloraine Squash Club have sub-standard courts that are located under the Meander Valley Performing Arts Centre that do not meet accessibility standards, are unsafe and become unusable after flooding damage;

the Deloraine Community Complex has significant design limitations which mean facilities do not meet current design and access standards, some spaces are inadequate for current use and are under-utilised;

the poor quality and design of facilities, when combined with a highly price-sensitive market is impacting on the operational efficiency of the Deloraine Community Complex;

there are no outdoor netball courts and limited capacity to cater for growth in participation;

there is insufficient capacity to cater for future growth in existing sporting and recreational activities or to accommodate new sporting activities;

there is a lack of safe and adequate paths linking the sporting facilities, schools and community;

the Meander Valley Performing Arts Centre requires refurbishment to retain its value for the community;

there is a general lack of community park, play and recreation facilities;

the skate ramp is small, poorly located and no longer suitable for encouraging use; and

many of the existing sporting facilities cannot cater adequately for the substantial growth of women's sport or junior sports.

### **Initiating a Response**

In recognising these issues, the community and Council initiated several studies that have all pointed towards the need for upgrading and improving sporting, recreation and community facilities within a proposed Deloraine and Districts Recreation Precinct.

This project has taken the initial investigations further by:

undertaking extensive consultations with key stakeholders and community to identify needs, issues and opportunities;

identifying the needs and functional requirements for facilities;

preparing initial cost estimates;

preparing and assessing various site plan options;

selecting the preferred site plan for the Deloraine and Districts Recreation Precinct based around the Deloraine Community Complex in close proximity to the Deloraine Primary School and Deloraine High School;

undertaking a rigorous business feasibility assessment; and

assessing staged development options for the precinct in the short to long term.

## **The Challenge**

Meander Valley has a population just under 20,000 people, which is largely static in growth. The bulk of the local population is within the eastern part of the municipality with the ability to access a diverse range of quality sporting, recreation and community facilities within the City of Launceston. Consequently, the immediate catchment is primarily Deloraine and its outlying districts has a population 10,000<sup>1</sup>. Some sports and recreational activities being undertaken at Deloraine also attract users from outside the municipality<sup>2</sup>.

The standards and development costs for new quality sporting and recreation facilities have increased significantly. Meanwhile user's expectations for quality facilities have also increased and the local community is price sensitive to rising costs of involvement in sport and recreation.

The greatest challenge is that the overall capital investment costs for the desired Deloraine and Districts Recreation Precinct are beyond the financial capacity of the Council and community. Like most other major sporting and recreation facility investments throughout Australia, the Council and community will need financial support from the State and Commonwealth Government to make it happen.

The Feasibility Study develops an aspirational plan for the Deloraine Recreation Precinct based on community needs and outlines the feasibility of implementing the Deloraine and Districts Recreation Precinct on a staged basis, as funding support is attained.

## **The Benefits**

The benefit of creating a Deloraine and Districts Recreation Precinct is that it addresses the inherent problems and issues identified with the existing sport and recreation facilities. These benefits include:

consistency with the vision and policies of the Commonwealth Government, State Government and Meander Valley Council for improving the health and wellbeing of the community;

---

<sup>1</sup> Deloraine and Westbury Regional Districts used by ABS

<sup>2</sup> For example, 40% of the Deloraine Amateur Basketball Club members were from Deloraine, 37% from outlying districts in Meander Valley, 14% from Launceston/Prospect Vale/Tamar Valley, 6% from Devonport/Latrobe/Railton and 2% from northern midlands.

consolidating sporting, recreational and community facilities within a precinct that will be more accessible, multi-use and flexible for changing needs;

integrating sporting, recreational and community facilities to better cater for the interests of a wider cross section of the community;

providing the capacity and flexibility to cater for growth in existing and new activities;

developing safe and better paths to the local schools, town centre and residential areas;

reducing ongoing maintenance costs for Council and clubs with relocating and upgrading aged and poor quality sporting and recreational facilities;

increasing the capacity for the facilities to host sporting, recreational and community events that deliver social and economic benefits back into the regional and local community (e.g. Regional Youth Basketball Championships);

the opportunity for new revenue from upgraded facilities, greater multiple use, function space and meeting rooms;

allowing Clubs and community groups to focus on their activities and programs rather than on building maintenance, insurances and security; and

creating the opportunity for commercial investment as partners in facilities and services.

The feasibility study shows that the need for major investment is required and that once the facilities are constructed, the whole of life operating costs can be managed on a more sustainable basis.

To do nothing is not a valid option for the future. The replacement and maintenance costs will climb as the existing assets further deteriorate. The health and wellbeing of the community will decline as aging and poor quality facilities no longer meet the needs of clubs and groups.

The investment in new and upgraded sporting, recreation and community facilities will help build social capital within the community.

# SECTION 1

## INTRODUCTION

### 1.1 BACKGROUND

Participation in sport and recreation results in a wide range of social, economic and environmental benefits for individuals and the broader communities in which they live. When people are physically active they are healthier, happier and more socially active. It allows people of all ages to participate in activities that contribute to the growth of body, mind and spirit. Sport and recreation can help enhance community identity and promote community integration – accessibility to sporting facilities influences where people choose to live, work and play.

The Meander Valley municipality is well known for its strong community spirit, evidenced through the organisation and participation in both sporting, recreational and cultural activities. The Deloraine Community Complex and Meander Valley Performing Arts Centre provide hubs for this activity in Deloraine. The Deloraine Primary School and Deloraine High School are located in close proximity to the Deloraine Community Complex. Outside of these two hubs are locations that cater for other sporting and recreational use including the former Deloraine racecourse area, Meander River foreshore, agricultural show/pony club and Bowls Club.

A range of past studies have referred to the potential role of the Deloraine Community Complex to be developed for sport, recreation and community use.

The *Meander Valley Strategic Sport and Recreation Plan 1999-2008*<sup>3</sup> recommended that the Deloraine Community Complex be a priority for the preparation of an overall master plan and for upgrading the facilities to meet regional needs. The *Meander Valley Sport and Recreation Action Plan 2008-2011*<sup>4</sup> review of the past plan recommended completion of the master planning process for the Deloraine Community Complex and surrounds.

In 2012, Council's Recreation Coordination Committee reviewed the 2008-2011 Action Plan and refined it into a further 3-year guideline, the *Meander Valley Sport and Recreation Action Plan 2012-2015*<sup>5</sup>. It supported the

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<sup>3</sup> Inspiring Place 2000, page 76

<sup>4</sup> Inspiring Place 2008, page 46

<sup>5</sup> Meander Valley Council

completion of the master planning process for the Deloraine Community Complex and surrounds.

The *Deloraine and Westbury Sport and Recreation Rationalisation Study 2012*<sup>6</sup> was not adopted by Council but identified the potential options and costs for precinct planning of the Deloraine Racecourse and Deloraine Community Complex sites.

The concept for a Deloraine Community Complex Recreation Precinct was further reviewed and developed by the Meander Valley Regional Recreation Precinct Working Group (MVRPPWG)<sup>7</sup>. The Working Group developed a concept plan to improve and expand the Deloraine Community Complex into a sporting and recreation precinct to service the Deloraine district and the broader Meander Valley community. The Working Group also initiated discussions with the Deloraine and Districts Community Bank Branch of the Bendigo Bank and the Australian Sports Foundation.

The ideas of the Working Group were embraced in the development of the *Deloraine Outline Development Plan 2016*<sup>8</sup> which identified the proposed Deloraine and Districts Recreation Precinct as a key strategic initiative. The Plan indicated the benefits of consolidating sporting activities in the one location, sharing facilities, integration with the local schools and locating new facilities outside of the flood-prone area to the Deloraine Community Complex site. The Plan recommended a feasibility study be undertaken for the development of a recreation precinct at the Deloraine Community Complex site.

The consultant team consisting of Inspiring Place, Montemare Consulting and DWP Sutera were engaged by Meander Valley Council to undertake the feasibility study.

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<sup>6</sup> Tredwell 2012

<sup>7</sup> The Working Group consisted of representatives from the Deloraine Football Club, Deloraine Devils Netball Club, Deloraine Amateur Basketball association, Deloraine Little Athletics Club, Apex Club of Deloraine, Rotary Club of Deloraine and Deloraine Squash Club.

<sup>8</sup> JMG Engineers and Planners 2016

## **1.2 PROJECT SCOPE**

The Project Brief indicated the need for the feasibility study to address the following objectives:

develop a clear understanding of future recreation needs for the Deloraine and districts area;

determine the benefits of consolidating (spatially) the recreation infrastructure in Deloraine;

define the role of a Deloraine and districts recreation precinct in relation to Westbury, Hadspen, and Prospect Vale Park recreation infrastructure;

determine what a reasonable level of capital investment would be in the context of projected population growth in Deloraine and districts;

determine the potential to host regional or State events;

determine the potential to partner with the Deloraine Primary School to provide infrastructure; and

determine if there is a need for additional land surrounding the current Deloraine Community Complex site and which may form part of an expanded recreation precinct.

The Project Brief also set out specific tasks to be undertaken as part of the project.

## **1.3 APPROACH**

The project was undertaken in five main stages as shown in Table 1.1.

The project was commenced in April 2017 and was completed in October 2017.

#### **1.4 ACKNOWLEDGEMENTS**

The consultant team wishes to acknowledge the input and advice received throughout the project from the following members of the Deloraine Recreation Precinct Working Group:

Alana Fazackerley – Client Manager Communities, Sport and Recreation, Dept. of Premier and Cabinet

Laura Richardson and Shaun Donohue were on the Meander Valley Regional Recreation Precinct Group and elected as community representatives

Lindy Norton – Deloraine and Districts Community Bank Branch of the Bendigo Bank

Cory Youd – Community Representative

Douglas Tangney – Community Representative

Lynette While – Director Community and Development Services, Meander Valley Council

Daniel Smedley - Recreation Coordinator, Meander Valley Council

Kris Eade- Property Management Officer, Meander Valley Council

Stage	Main Project Tasks
Stage 1 – Project Start-up	<ul style="list-style-type: none"> <li>• Initial briefing with the Deloraine Recreation Precinct Working Group (DDRPWG)</li> <li>• Adoption of the Project Plan and Community Engagement Plan</li> </ul>
Stage 2 – Context setting	<ul style="list-style-type: none"> <li>• Review of relevant reports and policies</li> <li>• Review general trends evident in Australia for sport provision and implications for future planning, development and management</li> <li>• Identify demographic and participation trends for the municipality and implications for sport demand</li> <li>• Identify case studies indicative of other responses to recreation precinct planning</li> <li>• Identify existing sport, recreation and community assets</li> </ul>
Stage 3 – Strategic Insight Report	<ul style="list-style-type: none"> <li>• Prepare survey for existing sporting, recreation and community groups</li> <li>• Undertake extensive consultations with all identified stakeholders including Councillors, Council staff, government agencies, Bendigo Bank, Tasmania Craft Fair, community clubs/groups, schools, service clubs and general public</li> <li>• Site visits to facilities</li> <li>• Meeting with the MVRPWWG</li> <li>• Meeting with the DDRPWG</li> <li>• Analysis of findings</li> <li>• Preparation of the Strategic Insights Report</li> <li>• Presentation and meeting with Councillors and DDRPWG to discuss the Strategic Insights Report</li> </ul>
Stage 4 – Concept Design and Feasibility	<ul style="list-style-type: none"> <li>• Team visit identify initial concept options</li> <li>• Assessment of options and selection of preferred option</li> <li>• Meeting with DDRPWG and Councillors to discuss initial concept options</li> <li>• Prepare concept plan for preferred option</li> <li>• Undertake business feasibility assessment</li> <li>• Present draft Business Feasibility report to DDRPWG</li> </ul>
Stage 5 – Deloraine and Districts Recreation Precinct Development Plan	<ul style="list-style-type: none"> <li>• Prepare Feasibility Report and Summary Report</li> <li>• Meeting with DDRPWG to review the reports</li> <li>• Finalise Feasibility Study Report</li> <li>• Presentation of findings to Councillors</li> </ul>

Table 1.1 Approach



# SECTION 2

## CONTEXT

### 2.1 MEANDER VALLEY

The Meander Valley municipality, located in the central north of the State (refer to Map 2.1), is one of Tasmania's largest local government areas, covering an area of approximately 3,821 square kilometres<sup>9</sup>. The municipality encompasses a diversity of landscapes, including the Great Western Tiers, the Meander Forest Reserve and Meander Falls, agricultural land, historic towns and urban suburbs. The western boundary of the municipality borders onto the rugged natural landscape of Cradle Mountain National Park and the Upper Mersey Valley. In contrast, the eastern boundary is the urban setting of the City of Launceston.

The bulk of the population is located within the eastern half of the municipality<sup>10</sup>, in particular within those suburbs bordering onto Launceston, being Prospect, Prospect Vale and Blackstone Heights accounting for about 32% of the total municipal population (19,801 persons in 2016). The suburbs of Prospect/Blackstone Heights have the highest population densities within the municipality, followed by Deloraine, Hadspen and Westbury<sup>11</sup>. Smaller population centres include the towns and villages of Carrick, Hagley, Bracknell, Elizabeth Town, Chudleigh, Whitmore, Mole Creek and Hadspen act as service centres for the surrounding rural residents.

Map 2.2 indicates a conceptual catchment hierarchy of sport and recreation provision:

Launceston and Devonport provide sporting and recreational facilities that attract and cater for the whole of a regional catchment;

a sub-regional catchment includes the Meander Valley municipality and for some sports and recreation, it may also extend to attract small numbers of users from the two regional centres of Launceston and Devonport;

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<sup>9</sup> Barret, A., Skellern, K., Wheland, J. (2007) *Meander Valley Health and Wellbeing Map Project*, Meander Valley Council, University of Tasmania, and Department of Health and Human Services, page 75.

<sup>10</sup> Ibid, page 14

<sup>11</sup> Ibid, page 15.

Deloraine and Districts catchment mainly including Deloraine, Westbury, smaller towns and rural areas in the western part of the municipality; and

Deloraine as a town catchment for some sports and recreational activity.

The Meander Valley municipality is well known for its strong community spirit, evidenced through the organisation and participation in both sporting and cultural activities and events. The annual Tasmanian Craft Fair held in Deloraine is a good example of a highly successful event, with strong community ownership.

The diversity of landscapes and differing densities of development has resulted in a diversity of communities and lifestyles, and therefore differing needs in relation to the provision and type of recreational facilities and open space across the municipality.

## **2.2 POLICY FRAMEWORK**

### **2.2.1 State Government Visionary Goal**

The State Government has announced a goal to make Tasmania the healthiest population in Australia by 2025<sup>12</sup>. It recognizes that:

21.7 per cent of Tasmanians smoke, compared to 18 per cent nationally;

69.4 per cent of Tasmanians are physically inactive, compared to 67.5 per cent nationally;

65.6 per cent of Tasmanians are now overweight or obese, compared with 63.9 per cent five years ago; and

39.4 per cent of Tasmanians have high cholesterol – compared to 32.8 per cent nationally.

Importantly it recognizes that a healthier Tasmania must also start with promoting a healthy lifestyle and preventing chronic disease.

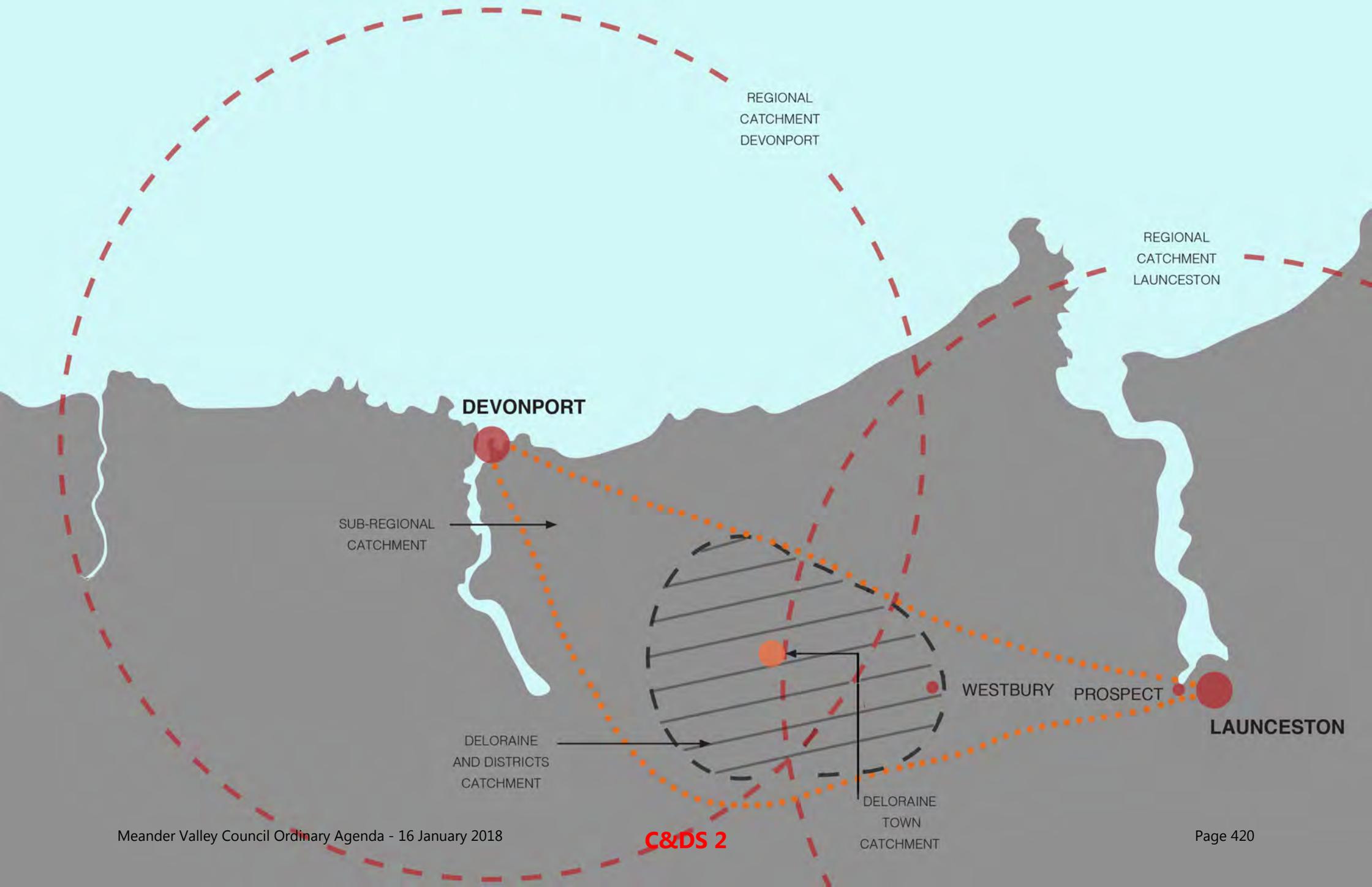
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<sup>12</sup> [http://www.premier.tas.gov.au/releases/a\\_healthy\\_tasmania](http://www.premier.tas.gov.au/releases/a_healthy_tasmania)



Map 2.1: Meander Valley Local Government Area

# Map 2.2 Conceptual Catchment Hierachy



An assessment<sup>13</sup> of sport and physical recreation value in Tasmania indicated that there is \$4 value back to the Tasmanian community for every \$1 invested in sport and recreation.

### **2.2.2 Communities, Sport and Recreation Strategic Plan 2016-17**

The Plan sets out a vision, purpose, core functions, strategic priorities and organisational priorities for Communities, Sport and Recreation (Department of Premier and Cabinet).

The purpose statement is to “Develop and support opportunities for all Tasmanians to participate in community life, sport and recreation.”

The core functions refer to:

- building community capacity;
- enhancing access and participation;
- providing quality policy advice;
- supporting individual and sector development; and
- administering a wide range of grants to meet community, sport and recreation needs.

The list of strategic priorities includes:

- implementing gender equality initiatives;
- building the governance capacity of community and sporting organisations; and
- delivering high quality services and support that maximises the sporting potential of Tasmania’s talented athletes.

### **2.2.3 Meander Valley Community Strategic Plan 2014-2024**

The Strategic Plan sets the vision, values, future directions and outcomes for Council. The implementation is undertaken through the Council’s delivery Plan (4 Year Plan) and the Council Annual Plan.

<sup>13</sup> Millar P, Wadsley, A, Adams, D, Arthur, D, D & Felmingham, B 2010, The Value of Sport and Physical Recreation to Tasmania, Australian Innovative Research Centre, University of Tasmania, Australia.

The Vision for Meander Valley in 2024 is described as:

“The backdrop of the Great Western Tiers, the mix of urban lifestyle and rural countryside give Meander Valley its unique look and feel, offering livability and healthy lifestyle choices. A community working together growing for generations to come.”

One of the future directions is about achieving a healthy and safe community. The strategic outcomes that are pertinent to the Deloraine and Districts Recreation Precinct include:

The health and wellbeing needs of all sectors in the community are planned, met and managed.

Infrastructure, facilities and programs encourage increased participation in all forms of active and passive recreation.

Public health and safety standards are regulated, managed and maintained.

Another of the future directions is about achieving planned infrastructure services. The strategic outcomes are pertinent to the Deloraine and Districts Recreation Precinct include:

The future of Meander Valley infrastructure assets is assured through affordable planned maintenance and renewal strategies.

Open space, parklands, recreation facilities, cemeteries and public buildings are well utilised and maintained.

Stormwater and flooding cause no adverse impacts

Infrastructure services are affordable and meet the community's needs into the future.

## **2.3 TRENDS**

### **2.3.1 Demographic Trends**

Tasmania has the most regional and dispersed population of any state in Australia, with 58 per cent of the population living outside the greater capital city area. The State's population is estimated to be 519,800<sup>14</sup> in 2016 with the

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<sup>14</sup> Australian Bureau of Statistics, estimates September 2016

population in the greater Launceston urban area being 107,000<sup>15</sup> in 2011 and having grown by about 5.4% in the last decade.

The estimated resident population for Meander Valley has been slowly increasing from 17,351 persons in 2001, 18,062 persons in 2006, 18,561 persons in 2011 and estimated at 19,282 persons in 2016. This represents an increase of 11% over 15 years. However, the annual rate of population growth has been declining over the last decade from a peak of 2.5% in 2003-2004 to less than 0.1% since 2012.

Some areas within Meander Valley have experienced stronger population growth in recent years, particularly in Prospect Vale-Blackstone area and Hadspen-Carrick<sup>16</sup>. Prospect, Prospect Vale and Blackstone Heights account for about 33.2% of the total municipal population and this community has convenient access to a range of well-developed sporting, recreation and community facilities within the Greater Launceston urban area.

Table 2.1 shows a summary of the population breakdown between the ABS Census regional districts of Meander Valley. The average annual growth between 2011-2016 was 0.48% for Deloraine, 0.40% for Hadspen-Carrick and 0.32% for Westbury and Prospect Vale – Blackstone.

<b>Regional District (ABS Census)</b>	<b>Total Persons 2016</b>	<b>Proportion of Meander Valley population (%)</b>	<b>Median Age</b>
Deloraine	5718	29.6	46.2
Westbury	4025	20.9	47.5
Hadspen - Carrick	3240	16.8	40.8
Prospect Vale - Blackstone	6418	33.2	43.0

Table 2.1 Population in Districts in Meander Valley in 2015  
Source : ABS

Table 2.2 shows the population change over the last decade between 2006 and 2016 for the towns within Meander Valley. There has been a significant population decline in Chudleigh and Westbury. Town populations have grown strongly in Hadspen (349 persons, 18.1%), Carrick (121 persons, 27.6%) and

<sup>15</sup> Regional Development Australia – Tasmania The Future Role and Contribution of Regional Capitals to Australia 2015.

<sup>16</sup> 3218.0 - Regional Population Growth, Australia, 2014-15

Prospect Vale (439 persons, 9.5%). The population of Deloraine increased by 104 persons representing a growth of 3.8% from the 2011 population base.

Town	2006	2011	2016	Change	Change
	Population			Numbers	%
<b>Blackstone Heights</b>	1295	1294	1270	-15	-1.1
<b>Bracknell</b>		634	614	-20	-3.1
<b>Carrick</b>	438	450	559	121	27.6
<b>Chudleigh</b>	400	335	203	-197	-49.2
<b>Deloraine</b>	2744	2741	2848	104	3.8
<b>Hadspen</b>	1926	2063	2275	349	18.1
<b>Hagley</b>	337	330	335	-2	-
<b>Meander</b>	293	415	328	35	11.9
<b>Mole Creek</b>	211	223	230	29	13.7
<b>Prospect Vale</b>	4,628	5,021	5,067	439	9.5
<b>Westbury</b>	2,206	2,104	2,006	-200	-9.0

Table 2.2 Population Change in Urban Centres in Meander Valley in 2006, 2011 and 2016  
Source : ABS

Over 50% of the Meander Valley population is located within the eastern part of the municipality from Carrick to urban suburbs of Prospect Vale-Blackstone. Not surprisingly the median age profile is lower in these newly developing residential areas.

Table 2.3 indicates the age profile for the Meander Valley in 2011 in comparison to Tasmania and Australia profiles. It shows that Meander Valley has a higher profile in the age groups 10-14 years and 15-19 years than Tasmania or Australia. These age groups span primary schoolers, secondary schoolers and those undertaking tertiary education or work experience – typically attracting a higher level of participation in sporting and recreation activities.

The Meander Valley is generally below the Tasmanian and Australian average for the age groups 20-24 years and 25-35 years. These age groups can be associated with those undertaking tertiary education, seeking employment and being parents/homebuilders. Time is often a major constraint but typically there can be a higher level of participation in sporting and recreation activities in these age groups. This age group is not likely to increase in the future and consequently will be a factor for consideration in the feasibility assessment.

Meander Valley is generally above the Tasmanian and Australian average for all the age groups from 50-59 years, 60-69 years, 70-84 years and above 85 years. Whilst past perceptions may have been that participation in sport and recreation rapidly declines with age, the 'baby boomers' have largely altered this pattern with active participation extending into the 60's and 70's age groups. This age group are often referred to as being the empty nesters and retirees.

The overall change in the five-year age structures between 2006 and 2011 showed an increasingly aged community profile with increases occurring in all age groups from 45-49 years onwards.

The movement of the age group 35-49 years (which accounts for 19% of the total population in Meander Valley in 2015) into the 60-75 years age group by 2026 will have implications for membership of sporting clubs as participation levels may decrease.

Age	Meander Valley 2015 %	Meander Valley 2011 %	Tasmania 2011 %	Australia 2011 %
People				
0-4 years	5.3	5.9	6.3	6.6
5-9 years	5.8	6.1	6.1	6.3
10-14 years	6.4	7.3	6.6	6.4
15-19 years	6.8	7.3	6.6	6.5
20-24 years	5.3	4.5	6.0	6.8
25-34 years	9.4	9.4	11.2	13.8
35-49 years	19.0	21.2	20.2	21.3
50-59 years	14.9	15.1	14.3	12.7
60-69 years	14.1	12.1	11.7	9.9
70-84 years	10.8	9.3	9.1	3.3
85 years and over	2.3	2.0	2.1	1.9
Median age	44.4	44.4	40	37

Table 2.3 Community Profile Comparison – Meander Valley, Tasmania and Australia Changes at 2011 and estimate 2015  
Source: ABS, [www.censusdata.abs.gov.au/census](http://www.censusdata.abs.gov.au/census)

Two broad indicators of socio-economic status are the level of qualifications and weekly household income. Surveys typically show that communities with higher levels of qualifications and weekly income are generally more active participants in sport and recreation.

Table 2.4 indicates that the Meander Valley profile is similar to Regional Tasmania but different to the Australian average by having a higher level of no qualifications within the community and lower attainment of tertiary education

with Bachelor or Higher degrees. However, the proportion of vocational qualifications is above the Australian average.

Qualification level	Meander Valley (%)	Regional Tasmania (%)	Australia (%)
Vocational	21.3	21.2	18.8
Not stated	9.6	10.2	10.2
No qualification	52.3	51.5	45.1
Bachelor or Higher degree	10.2	10.8	18.7
Advanced Diploma or Diploma	6.6	6.3	7.1

Table 2.4 Qualification Levels of the Meander Valley in 2011  
 Source : <http://profile.id.com.au>

Table 2.5 compares the weekly household income of the Meander Valley with the average for Regional Tasmania and Australia. The Census indicates that 36% of the households in Meander Valley have a higher proportion of households in 2011 with weekly income between \$200-\$799 as compared with 38% for Regional Tasmania and 27% within Australia. When looking at the higher weekly incomes, Meander Valley has 15% of households receiving income above \$2000 per week as compared with 13% for Regional Tasmania and 26% within Australia.

Weekly Household Income	Meander Valley %	Regional Tas %	Australia %
Negative Income/Nil Income	1.2	1.1	1.4
\$1-\$199	1.7	1.9	1.5
\$200-\$299	3.6	4.1	2.7
\$300-\$399	8.5	9.4	6.2
\$400-\$599	13.9	13.7	9.3
\$600-\$799	10.5	11.2	8.4
\$800-\$999	9.4	9.4	7.8
\$1000-\$1249	8.5	8.5	7.8
\$1250-\$1499	7.1	7.3	7.2
\$1500-\$1999	10.4	9.9	11.2
\$2000-\$2499	7.5	6.0	8.0
\$2500-\$2999	4.0	3.8	7.7
\$3000-\$3499	2.1	2.0	4.5
\$3500-\$3999	0.8	0.7	2.1
\$4000-\$4999	0.5	0.5	1.8
\$5000 or more	0.3	0.4	1.6
Not stated	10.0	10.1	10.9

Table 2.5 Weekly Household Income levels in the Meander Valley 2011  
Source : <http://profile.id.com.au>

### 2.3.2 Sport and Recreation Trends

There has been significant shift in the way Australian's participate in recreation over the last 10-20 years. At a broad level, there has been a decrease in the participation of some traditional sports and an increase in the popularity of informal recreation activities such as walking and bike riding.

Alarming rates of obesity, particularly among children and young people, and widespread cardiovascular disease and diabetes have also increased in severity in recent years.

The ways by which leisure, sport and recreation opportunities have been provided has changed quite substantially over recent years. Given the significant investment in community sport and recreation infrastructure (both

indoor and outdoor), it is important that this be considered with an understanding of the broader sport and recreation trends being observed.

These changes have encompassed:

- major trends that are likely to impact sport, recreation and leisure in coming years;
- participation levels;
- building and site designs;
- the siting of facilities;
- the development of a strong relationship between indoor and outdoor areas;
- elements of commercial provision; and
- programming.

These trends also reflect the changing aspirations of the community regarding its engagement in sporting and recreation activities. A summary of these trends is presented in the following sub-sections:

- major or mega trends;
- participation levels;
- building design trends;
- siting and locational trends;
- commercial involvement; and
- programming and use trends.

#### MEGATRENDS

The CSIRO published a key report in 2013, which sought to assess a set of critical “megatrends” which could be expected to impact on sport and recreation in Australia over coming years.<sup>17</sup>

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<sup>17</sup> CSIRO Futures, 2013: *The Future of Australian Sport. Megatrends shaping the sports sector over coming decades*, Australian Government, Australian Sports Commission

The following main conclusions were reached:

The commitment to regular, organised sport will fall in comparative terms as more people pursue single-person and small group fitness activities. This will mean that funding for facilities for these activities will need to increase, perhaps at the expense of traditional sports.

Greater efforts will need to be put into both understanding and responding to the link between sport and recreation and mental and physical health, crime prevention, social development, and international cooperation. This may mean that some activities will be found to warrant greater funding while others are given less funding than in the past.

Sport and recreation providers will need to respond to the changing age and cultural make-up of the community if they are to attract continuing support.

Corporate funding and salary differentials between sports will disadvantage “loosely organised sports associations” and activities, which do not need or have structured organisations. It is thus likely that local and state governments will need to strengthen their support for these activities if the growing diversity and quality of opportunities sought by the community is to be achieved.

#### PARTICIPATION LEVELS

Table 2.6 presents a summary of the broad findings from the *2013-2014 Australian Bureau of Statistics Multi-Purpose Household Survey Participation in Sport and Physical Recreation* module. The survey covers 500 persons over the age of 15 years and over within Tasmania.

Key Findings from the 2013-2014 Australian Bureau of Statistics Multi-Purpose Household Survey	General comment in relation to Deloraine and Districts Recreation Precinct
<p>67.3 % of Tasmanians aged over 15 participated at least once in physical activity for exercise, recreation or sport in the previous 12 months – this has grown from 65.2% in 2005-06</p>	<p>Tasmania had the second highest participation rate (67%) of all state and territories, and was 7% above the national rate (60%).</p> <p>The Australian and Tasmanian community is becoming increasingly aware of the need to participate in some form of regular physical activity – whether an organised sport or group fitness activity, or unstructured activities such as walking or cycling.</p> <p>The proposed Deloraine Recreation Precinct is strategically located to service the immediate community in Deloraine and surrounding districts. The planning for new and upgraded facilities will assist with the supply of organised physical activity opportunities. Existing sporting club membership indicates that some sports attract users across the municipality and surrounding Council areas. It would enhance the potential to cater for some State and regional events.</p>
<p>The survey shows a general trend of decreasing participation rates with age in Tasmania. Highest participation rates in Tasmania are in the 25-34 age group, then 45-54 years and 35-44 years. The lowest participation is in the 65+ age group.</p>	<p>The proposed Deloraine Recreation Precinct has the capacity to cater for a wide range of organised sports, unorganised sports and recreational activities.</p> <p>The Precinct should be planned to provide flexibility to cater for expected growth in sports and a range of active and passive community activities. It is likely that new or upgraded facilities, programs and services will assist in attracting higher participation in the 15-17 and 18-24 age groups, where there has been a decline in participation since 2005-06.</p> <p>However, it should be noted that the Meander Valley has below average proportions of its population (compared with Tasmania and Australia) in one of the most active participation sectors (the 20-34 age group).</p> <p>The new and upgraded facilities, programs and services will provide opportunities to provide for, and encourage, older people to participate in physical activity. Incorporation of community functions will foster activities – both active and passive, for a wide cross section of the community.</p>
<p>The Tasmanian rate of participation in three or more physical activity sessions per week was 26.5%. The Tasmanian regular participation rate is 3.9% above the national average of 22.6%.</p>	<p>The existing indoor sports stadium is at capacity at times, and users consider it cannot accommodate new requests for court or other space or new groups. This could limit the potential for existing clubs/groups to meet demand. The management and programming of the stadiums will be reviewed during the feasibility assessment as this may be an important factor.</p>

Key Findings from the 2013-2014 Australian Bureau of Statistics Multi-Purpose Household Survey	General comment in relation to Deloraine and Districts Recreation Precinct
Tasmanian regular participation levels increase steadily as income increases - 21% for Tasmanians with lower income levels as compared with 34.9% for higher income levels	The development of new facilities, upgrading of existing facilities and consolidation within a precinct will provide a more contemporary venue that will help the government with its goal of achieving a 10% increase in participation by different age groups by 2021. The location, age and condition of some existing facilities are not conducive to attracting new interest in sport and recreation. The higher participation levels related to income levels are supportive of having management and operational models that achieve a greater return for managing and maintaining the sports facilities in the longer term.
The survey showed that regular participation rates are stable across age groups with the highest rates of regular participation in the 35-44 age group (32%) and the lowest rates of regular participation in the 15-17 and 65 and over age groups.	This suggests the potential for the new and upgraded facilities to attract interest across all age groups within the regional community. It is likely that this will provide increased opportunities for both male and female participation in physical activities and organised sports.
The survey indicates that regular participation in physical activities in Australia and Tasmania are correlated with education levels – regular participation rates increase as the level of education increases.	The existing facilities are accessible to a broad range of users, including those of lower socio-economic status. It is important that these people continue to have access to community facilities, and to be encouraged to participate in sport and recreational activities in the future. This will require consideration in the Business Case for the proposed Deloraine and Districts Recreation Precinct. Improved access for students to the DCC will encourage greater participation during school hours and after school programs.

Table 2.6 Sport and Recreation Trends Assessment

The *Exercise, Recreation and Sport Survey 2010* (ERASS) indicated that there was a moderate trend of increased physical activity in Tasmania in the previous decade – an increase of 3.1%. It provides an indication of the most popular organized sports and physical activity undertaken within Tasmania.

It found that the most popular organised sport activities were (listed in order) aerobics/fitness, golf, Australian rules football, netball, basketball, cricket, running, tennis, football, lawn bowls and dancing. The most popular physical activities (listed in order) were walking, aerobics/fitness, swimming, cycling, bushwalking, running, golf, Australian rules football, fishing and tennis.

The Australian Sports Commission provides data on participation in sport and physical activity by adults and children in Tasmania. In the period October 2015 to September 2016, the most popular club sports for adults were netball, golf, football, tennis and touch football. Some 80% of adults participated in sport and physical activity once a week, 69% twice a week and 59% three times a week. This participation level is similar to that of the national participation level.

There are general observations that dance, soccer and cycling are some of the fastest growing activities across Australia whilst traditional sports must work hard to maintain levels of use. The exception to this is the emergence of women's AFL football and continuing growth in basketball and netball.

The most popular club sports for children in Australia were football (soccer), netball, Australian football, basketball and swimming. The participation level of 53% was comparable with the National level of 54% but was lower than all other States except Western Australia.

There has been an overall trend of decreasing participation in organised physical activities (e.g. organised by a sporting club, association, fitness centre or other organisation) over the last 5 years. The shift towards unstructured, or un-organised physical activities is likely, due in part, to the time and financial pressures that the community face. Despite this overall trend, sports like basketball, netball and futsal continues to grow in participation and attraction within the Australian community.

Many people now pursue sport and recreational activities specifically because they are aware of the significant personal and community health benefits that involvement provides rather than for the enjoyment of the selected activities *per se*. This is occurring across a wide range of age groups with people taking up or recommencing activities that offer body strengthening, enhanced aerobic capacity, weight loss and a general improvement in their health. Much of the activity is non-competitive engagement but some sports are also gaining significant participation numbers such as dancing and martial arts.

Significantly, the pursuit of healthy outcomes has generated another linked trend, that being participation in active recreation pursuits across nearly all age groups with some of the greatest growth occurring in the 50s, 60s and 70s age groups as older, healthier people remain active.

Importantly, venues that deliver these programs need to be attractive and the presence of staff and programmers is often very important <sup>18</sup>.

Consultation with the Deloraine Primary School indicated that student numbers have grown from 300-400 in the last four years partly with the closure of the Meander Primary School and new families moving into the local area. Student numbers at the Catholic Primary School have been around the 110-140 level from kinder to Grade 6. Student numbers at Deloraine High School have remained static around 210 mark with new students opting to continue in the Grade 11/12 program from 2018.

During consultation, several of the clubs and groups indicated that juniors are often involved with different sports and this can cause issues with the timing of competitions. For instance, over 50% of the juniors involved with football also play basketball.

#### BUILDING DESIGN TRENDS

Building design and presentation have been greatly improved over recent years, as have the settings in which the buildings are placed, to attract more use and to meet rising user expectations of attractive venues.

Building quality and user conditions (e.g. use of colour, materials, air conditioning, heating, quality amenities, lounge areas etc) are rising dramatically in response to building and health regulations, workplace safety standards, competition, wider user experiences, expectations regarding the standards of local provision, and the recognition that the quality of the use setting enhances the quality of the user experience and the number of users.

There are substantial increases in the expectation of, the legal requirement for improved building amenities and services, for user safety, parking, safety and security lighting, access, pathways, and signage. Provision of these reduces costs and litigation while enhancing the user experience and attracting higher use levels.

Buildings are increasingly being designed with inherent use flexibility and the capacity to “move spaces around” or be changed and expanded as demands and needs grow, contract and change.

<sup>18</sup> Research reported in early 2015 by Latrobe University academics has found strong links between participation in sporting activities, community health and wellbeing and social benefits. Professor Russell Hoye from Latrobe stated to Radio ABC (See “Local AFL clubs deliver economic, social and mental health benefits study finds”) that “we found that for every dollar...the community and local governments invested in getting a club to operate... they (the clubs) generated a \$4.40 return in social value”. See <http://www.abc.net.au/am/content/2015/s4187997.htm>

There is an increased focus on the linked provision of indoor and outdoor/ breakout/ bootcamp and informal spaces as a means of allowing programming flexibility and variability, providing attractive social areas, linking the built facilities to surrounding and district spaces (such as parks and trails) and providing cheaper program areas.

Overall, there is a growing move to create community hubs and “destinations” for all members of the community.

#### SITING AND LOCATIONAL TRENDS

Buildings are no longer treated as stand-alone venues but rather, are increasingly being sited along with other community activity hubs such as schools, rail and bus interchanges and stations, outdoor sporting and recreation venues and trail networks, shopping centres and libraries. This co-location widens community awareness, encourages the “cross pollination” of use and saves significantly on infrastructure and servicing costs

In a similar vein, the consolidation and co-location of sport and recreation opportunities entails the development of multi-component and multi-user venues rather than multiple, stand-alone facilities for each different sport and recreation activity.

There is increased linking of sport and recreation initiatives with other wider economic, social and educational initiatives. For instance, TAFE colleges in Victoria have recently used sporting venues as a base for hospitality and catering student work placements.

The consolidation of provision and sharing of use allows:

- the freeing up of land for other purposes;

- efficiency savings through the sharing of enhanced infrastructure and other services across several user groups and activities;

- clubs to focus on their activities and programs rather than on building maintenance, operation, building insurances and security;

- reduced maintenance costs by having fewer venues to care for and repair;

- the possible application/sharing of professional management; and

the hosting of far more effective regional events and programs.

#### COMMERCIAL INVOLVEMENT

There is a growing mix of community and commercial program and services delivery (e.g. physiotherapists, hairdressing, chiropody, personal trainers, café and food services) associated with major sporting and recreation facilities. There has been some degree of commercial investment in public venues.

The growth of leisure and sport participation and the greater capacity of many in the community to pay for recreation activities not provided by government has led to substantial commercial investment in recreation. While some pursuits such as restaurants, travel, tourism and the like have always been commercially-focused, more and more businesses are investing in health and fitness venues, recreation-related service industries, tennis and golf clinics, boating, off road adventure activities, music and the arts.

Traditionally, governments and commercial leisure providers have taken a them-and-us approach –or worse still, a them-versus-us approach to commercial provision. Yet this need not be: in one mainland example, a community performing arts centre includes a commercially-operated “fine dining” restaurant. Similarly, many Councils now license the use of parks and gardens for bootcamp/fitness programs while others lease the operation of their aquatic, health and fitness and stadium facilities to private or not-for-profit organisations.

Increasingly in these situations, leaseholders are expected to provide diverse, quality programs and in some instances, to make a capital investment in the assets. In other Councils, commercial providers have offered to invest in Council facilities, to diversify the mix of opportunities provided. Such opportunities should be pursued and promoted as they strengthen the economic and market base of venues, diversify the client base that is attracted and offer opportunities that may not have otherwise been afforded by, or appropriately provided by, a Council or government agency.

#### PROGRAMMING AND USE TRENDS

There is increasingly tight management control over programming and program timetabling to optimise venue use and to offer a diverse array of activities to a wider cross-section of the community

Professional programmers have replaced volunteers at many venues in response to user expectations, risk and insurance issues, and competition. In

virtually every Council across Australia, professional managers and programmers are now employed to run libraries, indoor leisure and sports centres, pools, museums and galleries. Good managers and programmers know how to engage people, how to identify and meet community and member needs and how to evaluate and improve on what they have offered previously.

One of the strengths of programming is that it does not have to be regular. Rather, programs might be run on anything from a one-off, daily, weekly, monthly, half yearly, annual, holidays/seasonal or even less frequent basis. Many Councils, which do not have the financial capacity or space to build new facilities, have put a growing emphasis on targeted programming and services.

There is a growing trend to link the activities that are programmed to local, state and national health objectives rather than running programs for the program's sake. This has led to the deletion of some activities and replacement with others with known health benefits. Some community sporting and recreation venues have developed doctor referral programs while the opportunity to include medical practices in community leisure centres has been explored by many Councils.

Venues are staying open for increasingly longer hours to accommodate demand levels, to ensure accessibility for shift workers, part time workers and families of mixed make-up and to counter commercial 24/7 operators.

Program diversification entails providing new and different activities that encourage participation. It includes:

- provision of new opportunities that target residents who are not actively involved in existing groups and clubs e.g. youth at risk, people with disabilities, new residents, aged and lone household members of the community, members of cultural minorities;

- provision of programs that deliver benefits that cannot be achieved through existing pursuits; and

- existing clubs working together to offer a mixed program of activities over say one or two weekends annually.

There is a growing provision of community activities and sports, and non-competitive activities. This trend embraces two elements - the provision of activities and sports as opposed to buildings, and the provision of non-competitive activities.

Built sport and recreation facilities (whether ovals, parks or buildings) are simply the means to a recreational outcome: not an end in themselves. Councils and State governments are increasingly recognising that there are many people in the community who need access to programs and services (such as community transport, information, fee assistance) ahead of facilities. They are also recognising that where existing facilities are better programmed, greater benefits are delivered to the community. This applies to all age and ability groups, but particularly to the aged, people with disabilities, a person from different cultural backgrounds, children, and the families of working couples, single parents, lone residents and new arrivals in a town or district. Well-designed multi-user facilities have a strong capacity to support a diversity of programming initiatives.

From a competition versus non-competition perspective, for many people, being active does not involve competitive sports: instead, it involves for example, boot camps, fitness classes, walking a dog, cycling, gardening, going for a run, casual swimming, scratch matches of 5-a-side teams, and the use of walking/ cycle tracks. The availability of facilities for these self-programming opportunities encourages regular but casual enjoyment of healthy, largely self-directed recreation activities.

The non-competitive programming trend is increasing as the population ages, as people become more aware of the health benefits of exercise, as the cost of competitive participation increases and as family, work and other commitments impact on the availability of regular free time in large blocks. As such, it is important that whatever sport and recreation facilities, programs and services are provided, they are provided with a capacity to sustain casual, informal, non-competitive or irregular use.

A final point of relevance, about this trend is that greater support needs to be given to sports that can be pursued across a far broader age span compared with those with a narrow age span. Activities with a narrow age span are looking to identify and develop ways by which people can/will continue to participate. These may include rule changes for older participants (e.g.: different balls, fewer players, shorter duration games), the addition of social activities as part of the competition program, the development of alternate training regimes, and changed times of competition.

## **2.4 IMPLICATIONS FOR FUTURE PLANNING**

There are several important trends in sport and recreation provision that warrant consideration in planning all future sport, recreation and leisure facilities, programs and services provision. In terms of the present project, reflecting these trends is likely to mean:

development of facilities, which, while having a capacity to cater for various levels of competition, will still have a multi-purpose use capacity;

a venue which will need to have the flexibility to offer a greater diversity of programs and/or changes the programs on offer as needs change so that more people are attracted to become engaged;

an opportunity to develop a greater focus on activities that promote healthy living and community wellbeing in addition to core sporting team programs;

an opportunity to develop a greater focus on activities that build social capital in the community;

significant benefits from the use of skilled management and programming; and

an opportunity to consider commercial or government investment and involvement in providing sporting, recreation and community opportunities.

Action with consideration to these trends will help contribute to the economic wellbeing of the venue and make it a more attractive and resilient place in the future.

## **2.5 EXISTING PROVISION OF SPORT AND RECREATION FACILITIES WITHIN THE MUNICIPALITY**

Table 2.7 provides a summary of the existing sporting and recreation facilities that are Council owned or managed within the Meander Valley as taken from the Council's asset base information. The facilities vary in scale to meet the needs of the local population and to service the wider community and various levels of competition. It indicates the significant investment by the Council in

owning, managing and maintaining a range of sporting, recreation and community assets across the municipality.

These facilities are supported by private investment and other public investment in sporting and recreation facilities. For instance, the Deloraine Primary School and Hagley Farm School have indoor heated pools that are available for public access. There are also indoor pools that are privately owned for commercial aquatic programming use.

There are a range of clubs (e.g. Deloraine Bowls Club, Deloraine Golf Club) that own and manage sporting and recreation facilities that are available to club members.

Location	Existing Council Owned/Managed Sport, Recreation and Community Facilities
Biralee	recreation ground and sports facility, hall
Blackstone Heights	basketball court (outdoors), playgrounds
Bracknell	recreation ground and sports facility, hall, playground
Carrick	recreation ground and sports facility, hall, playground, tennis courts, bmx
Caveside	hall, recreation ground and sports facility, outdoor pool
Chudleigh	hall, playground
Dairy Plains	hall
Deloraine	recreation ground and sports facility, indoor sports complex, performing arts centre, swimming pool, tennis, outdoor gym/fitness sites, playgrounds, skate jump, mens shed
Hadspen	recreation ground and sports facility, playgrounds, skate park, bmx, outdoor gym site, tennis court
Hagley	recreation ground and sports facility, playground, tennis court
Meander	recreation ground and sports facility, playground, hall
Mole Creek	hall
Prospect Vale	recreation ground and sports facility, outdoor gym site, playgrounds
Rosevale	recreation ground and sports facility, hall
Selbourne	hall
Weegen	hall
Westbury	recreation ground and sports facility, playgrounds, hall, bmx, outdoor gym site, skate park, tennis courts
Whitemore	recreation ground and sports facility, playground, tennis courts

Table 2.7 Council Owned and Managed Sporting and Recreation Facilities

About half of the total residents live within the Prospect – Hadspen- Carrick area and have convenient access to utilize the wide range of sporting, recreation and community facilities located within Launceston City (including Longford within the Northern Midlands municipality and Riverside in West Tamar municipality).

Residents living in Westbury would need to travel about 36kms to access these facilities within Launceston City. Residents living in Deloraine would need to travel 52 kms. Those playing netball and soccer are required to travel to Launceston on weekends to be involved in regional competitions. Many of the other sports and recreational activities require participants to travel similar distance to compete in regional or sub-regional level of competition. For instance, the Deloraine Football Club seniors team will travel to Launceston, Bridgenorth, Bracknell, Rocherlea, Scottsdale, Longford, Hillwood and George Town to play games in the NTFA competition. The juniors may also travel to similar locations depending on the rosters and teams involved.

## **2.6 REVIEW OF CASE STUDIES**

The consolidation of community assets into a “Community Hub” structure has become more prevalent over the last decade. There are many advantages to be gained if the structure of these hubs is carefully planned in the first stage and effectively managed and administered throughout the term of operations.

The potential benefits include:

- efficiencies and savings including land use, expenses, management and administration;

- the ability to have shared resources, across multiple facilities and functions, including equipment, first aid, technology and even volunteers;

- the ability to cross promote and gain the benefits of cross pollination of participants through the exposure of various activities to the attending audience;

- bringing infrastructure and programs to one location gives the site a significant profile within the community resulting in greater awareness of programs and services which are on offer;

having a variety of participants and programs activated within the one precinct creates a more vibrant atmosphere and environment; and

the delivery and monitoring of a wide range of programs within one site enables greater ability to vary programs and introduce new programs over time, and provides the ability to respond to trends and participation rates through the capacity to re-purpose the use of the programmed space.

Through researching the outcomes of existing community hub scenarios, it is evident that there have been many lessons learnt by those Councils who have established this style of leisure and recreation facilities and services. While there are many benefits to be derived, these are based on upon effective and cooperative use, management and operation of the site.

In order to provide every opportunity for success the following matters need to be considered:

the engagement of an appropriately resourced, and skilled management structure;

the application of a governance structure which monitors and measures the effectiveness of the operation;

documented tenancy arrangements which clearly detail the arrangement between each user group and management;

documented and clearly detailed distinction of rights and responsibilities of all parties accommodated on the site;

the inclusion of measurable Key Performance Indicators (KPI's), for all tenants and management;

an effective maintenance plan for all elements of the site;

the inclusion of a Sinking Fund which sets aside funds for maintenance, refurbishment, and improvements to the site;

acknowledgment and acceptance that not all sport and recreation activities are complimentary, and as such some programming or the hosting of certain sports or events may be better suited at alternate sites; and

awareness and consideration to the amenity of neighbouring residents, especially with noise, lights, traffic and parking.

There are many examples of community hub structures which have similarities to the investigation of the most appropriate allocation of sport and recreation facilities and services for the Meander Valley community.

Attachment A provides case study examples including:

recent interstate community hub developments in Cockburn (Western Australia), Boroondara (Victoria) and Manning (Western Australia); and

smaller scale sporting and recreation developments at Kingston, Penguin/Dial Range and Wynyard in Tasmania.

# **SECTION 3**

## **COMMUNITY INSIGHT**

### **3.1 INTRODUCTION**

This section of the report provides a summary of the community views expressed about sporting, recreation and community needs in relation to the proposed Deloraine and Districts Recreation Precinct. The community views are based on a review of:

the key findings from community consultation conducted for the *Deloraine Outline Development Plan 2016*;

surveys sent out to current sporting, recreation and community users of the Deloraine Community Complex, Meander Valley Performing Arts Centre and other sporting venues in Deloraine;

key findings from extensive consultations undertaken with the local community clubs and groups, Councillors, Council staff, service clubs, schools, Deloraine and Districts Community Bank and the wider community; and

submissions or additional consultations undertaken.

### **3.2 IDENTIFIED COMMUNITY VIEWS AND NEEDS**

#### **3.2.1 Deloraine Outline Development Plan**

The preparation of the Outline Development Plan involved extensive consultation within the Deloraine community. This included public workshops, focus groups, primary and high school student workshops and surveys. A summary of the community outcomes of relevance to the proposed Deloraine and Districts Recreation Precinct is presented in Table 3.1.

Consultation Used	Comments relevant to the proposed Deloraine and Districts Recreation Precinct
Public workshop	<ul style="list-style-type: none"> <li>• Disability support – need for additional facilities</li> <li>• Better use of performing arts centre and parking</li> <li>• Improve the sport and recreation precinct</li> <li>• Aquatic centre – concern about access and costs but need a pool</li> <li>• Skate park – poor existing facility</li> </ul>
Arts focus group	<ul style="list-style-type: none"> <li>• Need to upgrade existing arts infrastructure</li> </ul>
Sports and recreation focus group	<ul style="list-style-type: none"> <li>• Inadequate facilities</li> <li>• Lack of netball facilities</li> <li>• School facilities are inadequate</li> <li>• Concept of a Deloraine Recreation Precinct</li> <li>• Lighting around the river loop, improve track surface, provide outdoor gym equipment</li> <li>• Deloraine has a large sporting catchment – potential to cater for demand</li> <li>• River pool – open later, potential for volunteer lifeguards</li> <li>• Boat launching pontoon on the Meander River</li> <li>• New basketball rings</li> <li>• BBQ and lighting near river pool</li> </ul>
Primary School Students (two workshops with Grade 5/6 students)	<ul style="list-style-type: none"> <li>• For U13 – new skate park, bigger pool, clean river, more playground facilities, bike track around Deloraine, basketball facilities, dances</li> <li>• For Families – new skate park, spa, park benches, public toilets</li> <li>• For Sporting Groups – new skate park, upgrade football ground, running track, swimming, fitness club, tennis courts, shooting range, BMX/mountain bike/motor bike tracks, volleyball facilities, Bowls Club</li> <li>• For Elderly – activities, swimming club, footpaths, seats in public spaces</li> </ul>
High School Students workshop	<ul style="list-style-type: none"> <li>• New indoor pool, better basketball facilities (including outdoor area), golf course (driving range), performing arts eisteddfod, enhance river walk</li> </ul>
Community surveys	<ul style="list-style-type: none"> <li>• New sporting and recreation facilities, improve the connection to public spaces for pedestrians and cyclists</li> </ul>
Public workshop	<ul style="list-style-type: none"> <li>• Significant support for the concept of the Deloraine Recreation Precinct, improve River Park facilities, retention of the existing outdoor aquatic facility (less cost than new facility), Wild Wood loop track for MTB and joggers, walking track improvements.</li> </ul>

Table 3.1 Community Views on Sport and Recreation  
(Source JMG Deloraine Outline Development Plan 2016)

One of the key themes (priorities) arising from the above consultation was the broad support for community and recreation facilities. This was linked to the proposal for a Deloraine Recreation Precinct on Alverston Drive. It was envisaged that the opportunity exists to provide facilities to cater for regional demand whilst enhancing recreational opportunities for the local community. This included a strong desire from the community for better trails and linkages within Deloraine.

### 3.2.2 Club and Group Surveys

To help inform the DDRPWG, surveys were sent out to current sporting, recreation and community users of the Deloraine Community Complex, Meander Valley Performing Arts Centre and other sporting venues including the Deloraine Racecourse area and Deloraine Primary School grounds.

The surveys asked questions about:

- membership numbers and trends (past and future);
- venues and times of use;
- critical issues that the club/group may face in the next 5 years;
- priorities for upgrading infrastructure/facilities;
- whether these priorities could be met or integrated within the Deloraine Community Complex and surrounding areas;
- and
- any further comments on the proposed Deloraine and Districts Recreation Precinct.

The survey data and additional input obtained from the individual meetings with the current users will be utilized in the Feasibility Study assessment. A summary of the key findings is presented below.

#### DELORAIN E COMMUNITY COMPLEX USERS

The survey respondents were the Deloraine Devils Netball Club, Meander Valley Netball Association, Deloraine Badminton Association Inc, Deloraine Junior Basketball Club Inc and Deloraine Amateur Basketball Association.

The membership numbers and trends are shown in Table 3.2.

Club/Group	Current Members	Change over last 5 years	Change expected next 5 years	Change expected next 10 years
Deloraine Devils Netball Club/ Meander Valley Netball Association <sup>19</sup>	45 but will grow to 120 by end of 2017 <sup>20</sup>	up	120-160	160-200
Deloraine Badminton Association Inc,	115	down	115	115
Deloraine Junior Basketball Club Inc	203	up	350	500
Deloraine Amateur Basketball Association.	420	up	600	1000
TOTAL	783-858	-	1185 -1225	1775 -1815

Table 3.2 Membership Trends and Expectations

The main reasons given for change in membership over the next 5 and 10 years were based upon:

- upgrading existing facilities to meet unmet and expected demand;

- improved facilities would allow greater promotion of the sport and attract higher levels of use; and

- more capacity with extra courts to run competitions including all year roster.

Discussions with Northern Tasmania Netball Association indicated there was strong membership in netball generally and increasing year by year. The highest priority in the northern region was to have indoor netball courts in Launceston.

Discussions with Basketball Tasmania indicated very high participation in the sport per capita for the region with Deloraine being a recognized hub. Very little use has been made of the old Westbury courts for many years. The provision of two extra courts would be ideal for Deloraine to host more regional

<sup>19</sup> Most members of the Meander Valley Netball Association are also members of the Deloraine Devils Club

<sup>20</sup> The membership will increase with the spring/summer roster to include increased teams, junior teams and net-set-go numbers.

basketball events. The highest priority is for Hobart and Launceston to have new indoor sports facilities that can meet current and future needs.

Table 3.3 lists the main infrastructure priorities identified by the clubs and groups. All clubs and groups considered these priorities for upgraded sporting or recreational infrastructure/facilities could be located within the proposed Deloraine and Districts Recreation Precinct.

The clubs and groups made the following comments about the proposed Deloraine and Districts Recreation Precinct:

the project is essential for the growth, health and wellbeing of every resident of the Meander Valley;

it will create a community hub for everyone while providing much needed upgraded or new facilities for all sporting groups and easy access for the Deloraine Primary School and Deloraine High School;

the current complex and playing surface is adequate for our needs and would like to see money spent on minor and required extensions (concern about costs for new and better facilities if demand not existing);

two extra courts needed for basketball with adequate run-off from each court;

tournaments and championships could be held with additional courts;

function facilities not adequate and need umpires rooms.

Club/Group	Priority 1	Priority 2	Priority 3	Other Priorities
Deloraine Devils Netball Club/ Meander Valley Netball Association	Outdoor courts with seating and lighting	Function facility, changerooms, gym and meeting rooms	Extended community complex (new indoor courts)	
Deloraine Badminton Association Inc,	Better and more practicable seating	More secure and cleaner storage facility	Lighting to suit playing badminton	Fix drafts, larger kiosk/shop
Deloraine Junior Basketball Club Inc	Portable bench and seating to use the show court	New scoring clocks	Outside court for free community access	
Deloraine Amateur Basketball Association.	Portable bench and seating to use the show court	New scoring clocks	Outside court for free community access	

Table 3.3 Priority Club and Group Infrastructure Needs

MEANDER VALLEY PERFORMING ARTS CENTRE USERS

The survey respondents were GKR Karate, Deloraine Dramatic Society, Deloraine Table Tennis League, Deloraine Community Band, Western Tiers Film Society and Deloraine Squash Club.

The membership numbers and trends are shown in Table 3.4.

Club/Group	Current Members	Change over last 5 years	Change expected next 5 years	Change expected next 10 years
GKR Karate	6	up	15-20	15-20
Deloraine Dramatic Society	10	varies	10 (unsure)	10 (unsure)
Deloraine Table Tennis League	24	down	24-50	45-50
Deloraine Community Band	35	up	40	50
Western Tiers Film Society	65	same	65-70	65-70
Deloraine Squash Club*	45	same	100-120	100-120
TOTAL	185	-	254-310	285-320

Table 3.4 Membership Trends and Expectations  
(\* change in figures based on new squash courts being developed)

The main reasons given for change in membership over the next 5 and 10 years were based upon:

greater preference and more will get involved;

ongoing junior participation program and promotion for all ages;

capacity to have additional playing day;

benefit from more music in education, recreation and entertainment; and

upgrading existing facilities to meet unmet and expected demand.

Discussions with Squash Tasmania indicated that Deloraine has been a hub of interest in squash with steady membership and had generated very good squash players in the State. The opportunity exists for the club to affiliate with Squash Tasmania and benefit from school promotion programs to increase junior membership.

Table 3.5 lists the main infrastructure priorities identified by the clubs and groups. Most clubs and groups considered these priorities for upgraded sporting or recreational infrastructure/facilities could be undertaken at the Meander Valley Performing Arts Centre. The exception was the Deloraine Squash Club indicating a preference to be located within the proposed Deloraine and Districts Recreation Precinct.

The clubs and groups made the following comments:

long association with the Meander Valley Performing Arts Centre and would like to see it developed further as an arts precinct;

lighting, flooring and surrounds must be suitable to be able to host Table Tennis State and National tournaments;

need secure storage facility for table tennis equipment;

critical that any future design for the Meander Valley Performing Arts Centre involve people with experience in theatre and/or music (auditorium at the Deloraine Community Complex example of poor design);

ideally any future function centre should have the capacity to seat 1,000 people to better attract seminars, events and functions; and

the squash courts could be built along the western side of the main stadium at the Deloraine Community Complex as this would allow easy access to current amenities.

Club/Group	Priority 1	Priority 2	Priority 3
GKR Karate	Better heating		
Deloraine Dramatic Society	Upgrade the costume room space	Upgrade the seating raking in upstairs area	Upgrade stage roof and area to ensure possums stay out and prevent rain damage
Deloraine Table Tennis League	Purpose built table tennis facility so table can remain in place ready for use (easier setup for older players)		
Deloraine Community Band	Bigger performing venue		
Western Tiers Film Society	Under floor insulation in the theatre	Develop the foyer to provide a socialize space after films	
Deloraine Squash Club	New three courts with ability for fourth court	Major facility upgrade at current location with addition of third court	

Table 3.5 Priority Club and Group Infrastructure Needs

#### OTHER VENUES

The survey respondents were the Deloraine Football Club and Deloraine Junior Football Club that use the oval and club facilities located at the former Deloraine Racecourse. The Deloraine Junior Soccer Club uses the lower grounds of the Deloraine High School. The Deloraine Little Athletics Club Inc. use the grounds of the Deloraine Primary School adjacent to the Deloraine Community complex. The Deloraine District Pony Club uses the Deloraine Agricultural and Pastoral Society showground property. The Deloraine Tennis Club are located near the entry road to the former Deloraine Racecourse.

The membership numbers and trends are shown in Table 3.6.

Club/Group	Current Members	Change over last 5 years	Change expected next 5 years	Change expected next 10 years
Deloraine Football Club	150 players 150 social members	up	200 players 150 social members	220 players 180 social members
Deloraine Junior Football Club	130	same	150	180
Deloraine Junior Soccer Club,	60	same	100	150
Deloraine Little Athletics Club Inc	57	same	50-80	100
Deloraine District Pony Club	42	same	40-45	40-45
TOTAL	589	-	690-695	870-875

Table 3.6 Membership Trends and Expectations

The main reasons given for change in membership over the next 5 and 10 years were based upon:

- the introduction of women’s AFL football and potential for junior girls teams;

- support of Northern Tasmania Junior Soccer Association and schools to grow members; and

- potential for developing an adult roster for soccer and introducing futsal in the longer term.

Discussions with the Northern Tasmania Football Association and AFL indicated that Deloraine Football Club was recognized as an important and strong financial member of the Division 1 competition. It was noted that Deloraine would always be a member of the senior competition and was the logical place to base AFL football teams at Deloraine rather than Westbury.

Table 3.7 lists the main infrastructure priorities identified by the clubs and groups. All clubs and groups considered these priorities for upgraded sporting or recreational infrastructure/facilities could be located within the proposed Deloraine and Districts Recreation Precinct.

The clubs and groups made the following comments about the proposed Deloraine and Districts Recreation Precinct:

strong interest to link football with netball but not possible given separate locations - the Deloraine Community Complex would be a great location;

football is growing and current football location does not allow for expansion and integration;

reality of floodplain issues affect training times, playing times and deters any major works;

ideally require twin ovals with main oval and junior sportsground to cater for multi-use;

could be associated with cricket in the future

require function room/bar area, four changerooms, kitchen/kiosk, lighting to support night games, gymnasium, storage, car parking around ground and in car park;

soccer pitch could be shared with other sports such as hockey with futsal use of indoor stadium;

use cost to members is a major issue for junior soccer; and

current playing surfaces for Little Athletics are sub-standard, no changerooms, toilets (some 100m away), limited storage and kiosk facilities.

Club/Group	Priority 1	Priority 2	Priority 3	Other Priorities
Deloraine Football Club	Need for new/upgraded football club facilities and oval to avoid flood damage	Netball courts	Gymnasium	
Deloraine Junior Football Club	Need for new/upgraded football club facilities and oval to avoid flood damage	Change rooms required for future girls teams	Better lighting for training and also night games	Modernise the clubrooms to become more inviting
Deloraine Junior Soccer Club,	Soccer specific facilities to cater for juniors. Ideally one full size pitch with fixed goals and capacity to split into two small pitches.	Lighting to allow training and night games	Toilet facilities (not available at DHS site)	Secure storage space
Deloraine Little Athletics Club Inc	New 400m running track	Long jump runways and jumping pit with removable lockable cover	Storage sheds	
Deloraine Pony Club	Lost access to a cross country course and would like to relocate to have a course and host state competitions	Better facilities for the annual camp.	Deloraine would provide a central location for an equestrian centre	Potential for re-use of the football ground if relocated to DCC

Table 3.8 Priority Club and Group Infrastructure Needs

### 3.2.3 Stakeholder Consultation Findings

Individual consultations were held with:

Meander Valley Councillors;

Meander Valley Council staff;

GKR Karate;

Rotary Club of Deloraine;

Tasmania Craft Fair;

Toddle Inn;

Deloraine Primary School;

Deloraine Men's Shed;

Deloraine Devils Netball;

Deloraine Little Athletics;

Western Tiers Film Society;

Deloraine Table Tennis;

Deloraine Amateur Basketball Association;

Deloraine Badminton Association;

Deloraine Junior Basketball Association;

Deloraine Dramatic Society;

Deloraine High School;

Deloraine Catholic Primary School (Our Lady of Mercy);

Deloraine Junior Soccer Club;

Deloraine Football Club and Deloraine Junior Football Club;

Arts Deloraine;

Deloraine and Districts Community Bank Board;

Apex Club of Deloraine;

Deloraine District Pony Club;

Regional peak bodies including the Northern Tasmania Football Association, AFL Tasmania, Northern Tasmania Netball Association, Squash Tasmania and Basketball Tasmania;

Meander Valley Recreational Precinct Group; and

Deloraine Squash Club.

A local community forum was well attended (20+ people) and a community 'walk and talk' was held at the Deloraine Community Complex. A meeting was also arranged for any interested sporting clubs and groups outside of Deloraine and Districts area. This involved the Deloraine Football Club, Darts Tasmania Inc. and the Deloraine Agricultural and Pastoral Society.

Considerable information and input about community needs, issues and ideas was gathered through the consultation process and will be considered in the identification of possible options for the Deloraine and Districts Recreation Precinct.

A summary of the more general views that were expressed through the above consultations is listed below.

GENERAL VIEWS ABOUT THE OVERALL CONTEXT FOR THE  
DELORAIN AND DISTRICTS RECREATION PRECINCT

Sport, recreation and community activities are very important to the way of life enjoyed by residents in Meander Valley.

Deloraine services a wide catchment area and is the logical centre to consolidate sporting and recreation facilities for the municipality<sup>21</sup>. It is located midway between Devonport and Launceston.

Clubs/groups appreciate the range of existing Council owned/managed sporting, recreation and community assets being available with affordable costs to meet current needs.

Many sporting, recreation and community facilities are tired and no longer meeting user expectations or needs.

Recognition of the importance of events and competitions for the Tasmanian, regional and local community. These include the Tasmanian Craft Fair (four-day event), Youth Drama Festival, Street Car Show and the Deloraine Showground Market.

The Deloraine High School indicated the desire to have improved access to the DCC rather than relying on the inadequate street footpaths. The School has a priority to seek funding to develop a new multi-use gymnasium and performing arts centre on the school property within the next 5 years.

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<sup>21</sup> Review of membership data from Clubs indicated that the catchment was far wider than Deloraine. For example, 40% of the basketball members were from Deloraine, 37% from outlying districts in Meander Valley, 14% from Launceston/Prospect Vale/Tamar Valley, 6% from Devonport/Latrobe/Railton and 2% from northern midlands. Over 50% of the junior soccer players, junior football players and squash members live outside of Deloraine.

The Deloraine Primary School allow community use of the small undeveloped sportsground for various sports including athletics. The indoor pool is available for community use and provides a good example of the shared access to a sporting facility. The School has a duty of care for managing public access on the school property, but would consider the opportunity for a direct access path if security and safety measures are fully addressed.

The Catholic Primary School utilise the football oval but make little use of the DCC other than for the Anzac Day celebrations.

Future of the former Deloraine Racecourse area needs direction given the issues with poor access, flooding, condition of heritage listed sites and buildings. The flooding causes major problems for the Deloraine Football Club and Deloraine Junior Football Club as it restricts access and use of the oval, requires major repairs and clean-up operations and imposes significant costs given that insurance can no longer be obtained for the club facilities. These issues will only get worse if nothing is done to relocate the sports facilities to a more suitable location.

There was interest from the Deloraine District Pony Club to relocate to the former racecourse area to have access to a cross country course<sup>22</sup> and hold state-wide competitions. The Club is interested in looking at alternative venues and considers the Racecourse site would be well suited to future needs for equestrian events including dressage.

Many of the current users of the Meander Valley Performing Arts Centre value the opportunity to use the facility and consider some improvements would help grow their use and activities. The existing squash courts are well beyond their useful life and no longer meet competition or accessibility standards. The courts either need total upgrading or redevelopment of facilities at a better site.

The ageing community will be looking for facilities that can cater for their needs.

<sup>22</sup> The Club lost access to the cross-country course near the Deloraine Agricultural and Pastoral Society Showgrounds with rises in water levels on the Meander River. The current facilities (e.g. toilets, showers, sleeping are) can longer handle large numbers at the events.

Many of the clubs and groups are cost sensitive with perceived limited capacity to increase membership and use costs. Most clubs and groups are seeking to set fees at a level that are reasonable for the community to pay. Increasing costs make this difficult.

Most clubs and groups face difficulty with finding sufficient volunteers. Membership and involvement is affected by young people finding work or attending college/university out of the local area.

Limited pathways for many sports and this requires locals to access Launceston and Devonport for higher standards of competition. Clubs have a realistic understanding of the hierarchy of regional sporting and recreation facilities that require the need to travel to be involved in regional based competitions e.g. netball, soccer, football.

There are ongoing management, maintenance and replacement costs involved with investment in new sporting, recreation and community facilities.

Staging of works and improvements will be required over time.

GENERAL COMMUNITY AND USER CLUB VIEWS ABOUT  
THE DELORAINÉ COMMUNITY COMPLEX SITE:

Consolidating sport, recreation and community facilities around the Deloraine Community Complex makes good sense. Must also cater for wider community use including free or low cost facilities, trails, meeting spaces, internet/wifi, play, fitness and café facilities.

The Deloraine Community Complex suffers from past design flaws that affect users and spectators. The facility does not provide all abilities access and is not well designed to cater for multi-use. There are design limitations with courts, club storage, indoor courts, kiosk and kitchen facilities. The auditorium is considered by many to be unattractive and not suitable for functional use.

The stadium at the Deloraine Community Complex is well used (85% occupancy) from after school to 10.30pm in the evenings.

Further land will be required for the Deloraine Community Complex to have the potential capacity to accommodate future demand for many sporting, recreation and community facilities – both indoor and outdoor.

Establishing better linkages with the local schools and town is essential. There are very low levels of school children using bikes to reach schools – in part due to lack of trails, perception of routes/crossings being unsafe and local topography (although bikes were used more often back in the 1970's).

Support for the integration with public transport would be beneficial for Clubs if school buses from Launceston and Devonport provided a stopping point at the DCC.

Many of the Clubs and groups identified the potential to host regional and State events if the facilities were upgraded.

The Rotary Pavilion building has become an affordable multi-use facility for community use including meetings/conferences, workshops/trade shows, funerals, functions, receptions and weddings.

#### **3.2.4 Additional Consultations and Submissions**

Contact was also made with other individuals and organisations that may be interested in providing input about any potential issues and opportunities with the Deloraine and Districts Recreation Precinct.

These individuals and organisations included the Deloraine Neighbourhood House, Deloraine Agricultural and Pastoral Society, Darts Tasmania, Deloraine Public Pool operator, Deloraine Rollerskating, Rural Youth, Deloraine Gym, Giant Steps Tasmania, Aged Care Deloraine and the Western Tiers Community Club.

Written submissions and correspondence was received from the Tasmanian Craft Fair, Parkrun Tasmania and Wild About Hooves.

A summary of the key points raised in these discussions is presented in Table 3.9.

Individual/Organisation	Key Points Discussed
Tasmanian Craft Fair	<ul style="list-style-type: none"> <li>• Detailed information about the history of the Fair, venues used, transport systems and projects that have benefitted from the successful fundraising results.</li> <li>• Discussion about the use of the Deloraine Community Complex site during the events and importance of using sites and spaces (especially the areas near the Rotary Pavilion)</li> </ul>
Darts Tasmania	<ul style="list-style-type: none"> <li>• Originally at the Meander Valley Performing Arts Centre but relocated to Westbury – better heating and can use entire hall with capacity to run national and state events</li> </ul>
Deloraine Agricultural and Pastoral Society	<ul style="list-style-type: none"> <li>• Flood prone site</li> <li>• Site owned by Society and big enough to cater for range of activities including show, winter fire art event, dragon boat storage</li> <li>• No link between Rotary Park and showgrounds (private land)</li> <li>• Washed out link to Wildwood that was previously used by Pony Club</li> </ul>
Wild About Hooves	<ul style="list-style-type: none"> <li>• Frequently uses Rotary Pavilion for educational clinics</li> <li>• Considers the Deloraine Community Complex could include educational library, fitness, café, childcare, meeting rooms, internet access, green space for music concerts and outdoor festivals, more car parking</li> <li>• Council should consider sponsoring some fitness activities (subsidy for trying healthy activity)</li> </ul>
Rollerskating	<ul style="list-style-type: none"> <li>• The Meander Valley Performing Arts Centre is ideal for this activity – accessible and low cost venue</li> </ul>
Deloraine Public pool operator (leased by Council)	<ul style="list-style-type: none"> <li>• Pool is 30-40 years old and is small and has limited heating</li> <li>• Not well utilized other than during summer on warm – hot days</li> <li>• Site subject to flooding damage</li> <li>• Long term planning for the Precinct should consider the potential for a new pool if funding could be found</li> </ul>

Table 3.9 Key Points Raised by Other Individuals/Groups

Individual/Organisation	Key Points Discussed
Movement Effects (Deloraine Gym)	<ul style="list-style-type: none"> <li>• Community based functional fitness, strength and conditioning centre with the main focus to better the lives of the local community through, fundamental training methods, healthy nutrition and a family friendly environment</li> <li>• Currently lease site in Deloraine which is sufficient for current needs but would consider opportunities for future including within the proposed Precinct</li> <li>• Primarily attracts clients from Deloraine but some will travel from elsewhere in Meander Valley or outside to access the Centre</li> </ul>
Parkrun Tasmania	<ul style="list-style-type: none"> <li>• Potential course mapped out along the Meander River banks with a loop into the Wildwood</li> <li>• Potential to conduct a weekly run</li> <li>• Other aspects to be resolved include liaising with interested stakeholders, course development, course management, volunteers, funding, program scheduling, promotion and implementation</li> </ul>

Table 3.9 Key Points Raised by Other Individuals/Groups (Cont)

### 3.2.5 Critical Issues for Clubs and Groups

The survey sent out to key clubs and groups asked the respondents to indicate which issues (from a list) were critical for them in the next 5 years. The results are shown in Table 3.10. A total of 14 clubs and groups answered this question.

The highest ranked issues were lack of volunteers to help administer and run the club and group and the poor standard of facilities used and the inability to provide quality sporting and recreation opportunities. These two issues were common to clubs and groups at all venues – the Deloraine Community Complex, Meander Valley Performing Arts Centre and the other venues.

Most clubs and groups at the Deloraine Community Complex also listed the following issues as being critical:

increased demands resulting from major growth expected in the sport or recreational activity;

limited funding assistance from government or Council; and

limited resources to upgrade/maintain club or group facilities.

Critical Issue	Response by Clubs/Groups %	Overall Ranking (Top 4)
Decline in the population making it difficult to maintain players, clients and supporters	29	
Increased demands resulting from major growth expected in the sport or recreational activity	43	=4
Decline in club or group membership	36	
Lack of volunteers to help administer and run the club and group	65	=1
Increased legal liability pressure and rising insurance costs	36	
Need for the Club/group to prepare a development or business plan	14	
Limited funding assistance from government or Council	58	=2
Limited information to help club/group (	-	
Lack of suitable venues or appropriate facilities to meet needs	58	=2
Poor standard of facilities used and the inability to provide quality sporting and recreation opportunities	65	=1
Limited resources to upgrade/maintain club or group facilities	50	3
Limited resources for developing or programming of facilities and activities	14	
Lack of support services (e.g. public transport, childcare, information)	-	
Decline in fundraising capability	-	
Increased competition and diversity of recreational and leisure opportunities which will reduce members	21	
Lack of professional advice and support available	-	
Lack of master plans for venues and facilities	14	
Lack of, or need for a Strategic Plan to help guide the vision and future direction of your Club	7	
Limited junior development programs	43	=4
Increased operational or asset management costs	36	
Increased insurance costs or difficulty to get appropriate insurance cover (e.g. flood prone areas)	36	
Decline in spectators to support the sport or activity	21	
Limited skilled or sufficient coaches	21	
Changing working hours affecting support for programs, activities	7	
Aging community	21	
Facilities for emerging sports or recreation pursuits (indoor and outdoor)	43	=4
Rapid population growth which will put excess pressure on resources	14	
Too many legal/compliance restrictions being placed on clubs and groups	14	
Limited avenues now for sponsorship	7	
Other critical issues which will affect your club/group – lack of junior/school age children taking up sport	7	
Other critical issues which will affect your club/group – not enough room around courts and unable to use show court	14	

Table 3.10 Critical Issues for Clubs and Groups

Most clubs and groups at the Meander Valley Performing Arts Centre also listed limited junior development programs as being critical.

### 3.2.6 Summary of Club/Group Key Issues and Needs

A summary of the issues and needs expressed by the sporting clubs and recreation groups is shown in Table 3.11.

Club/Group	Existing Issues	Priority Needs	Preferred Location
Deloraine Devils Netball Club/ Meander Valley Netball Association <sup>23</sup>	Limited facilities designed for netball and to cater for future needs. Lack of outdoor courts and facilities.	Indoor courts designed for netball use, outdoor netball courts, lighting, seating, changerooms, gym, meeting rooms as part of the extended DCC	DCC
Deloraine Badminton Association Inc,	Poor design and fit-out of the existing facilities which require improvements	Improved seating, more secure storage, better lighting, better heating and control of cold drafts, larger kiosk	DCC
Deloraine Amateur Basketball Association, and Deloraine Junior Basketball Club Inc	Lack of courts to meet demand, lack of suitable seating, insufficient room around the courts, not able to use show court without portable bench	Two extra courts, provision for run-off at each court, flood prevention, larger kiosk, portable bench and seating for show court, new scoring clocks and outside court, umpires room, function facilities	DCC
GKR Karate	Poor heating	Better heating at the MVPAC	MVPAC
Deloraine Dramatic Society	Limited space and need to upgrade existing facilities	Upgrade costume space, upgrade seating raking in upstairs area, upgrade stage floor at the Little Theatre	MVPAC
Deloraine Table Tennis League	Improve lighting, flooring and storage to allow easy access and use and potential for tournaments.	Upgrade space to better cater for table tennis needs including a purpose built table to avoid setting up time prior to use	MVPAC

Table 3.11 Club/Group Issues and Needs

<sup>23</sup> Most members of the Meander Valley Netball Association are also members of the Deloraine Devils Club

Club/Group	Existing Issues	Priority Needs	Preferred Location
Deloraine Community Band	Inadequate space and storage facilities, lack of a suitable performing venue	Bigger performing venue, better design for future needs of buildings and spaces for theatre and music	MVPAC unless better venue
Western Tiers Film Society	Poor heating, lack of social space	Improved heating and development of the MVPAC foyer	MVPAC
Deloraine Squash Club*	Poor quality facilities, no longer meet accessibility standards, subject to flooding, inadequate space	New courts in precinct location or major upgrade of existing facilities	DCC
Deloraine Football Club	Oval and clubrooms subject to being located with a high flooding zone with regular damage/impact, old club and amenity facilities without capacity to meet expected growth and increased female participation, lack of twin oval to cater for junior football needs, lack of suitable function space, gym and storage	Need relocation with new oval and club facilities, developing site association with netball and provision of a gymnasium	DCC
Deloraine Junior Football Club	As above	As above including better ground conditions, changerooms for girls teams, better lighting for training, better clubrooms	DCC
Deloraine Junior Soccer Club	No soccer specific facilities, poorly maintained sportsground, lack of space to cater for all ages, lack of night lights, no toilet or change facilities, inadequate storage space	Grassed full size soccer pitch, lighting, access to storage, toilet and changeroom facilities	DCC or upgraded school ground close by

Table 3.11 Club/Group Issues and Needs (cont)

Club/Group	Existing Issues	Priority Needs	Preferred Location
Deloraine Little Athletics Club Inc	Poor playing surfaces, no changerooms, lack of accessible toilet, storage facilities at capacity, limited kiosk capacity	400m track, long jump runways, pit and lockable cover, storage shed for equipment	DCC or upgraded school ground close by
Deloraine District Pony Club	Loss of access to cross country course due to flooding, inadequate toilets, limited capacity or suitability for camps, high costs for use of site	Access to cross country course to allow state wide competitions, better club facilities, opportunity to use the former Deloraine Racecourse area	Deloraine Racecourse

Table 3.11 Club/Group Issues and Needs (cont)

### 3.2.7 Functional Space Requirements

A detailed analysis of the functional space requirements was determined following the consultation with clubs and groups. A comprehensive outline of the functional space requirements is provided as an Appendix to the Feasibility Business Plan in Attachment B of this report.

A summary is provided below in Table 3.12.

	<b>Functional Space</b>	<b>Total Area Required (m<sup>2</sup>)</b>
Indoor Sports Hall	Multi-Use Indoor Sports Courts	1708
	Squash Courts	252
	Community Courts Spectator Seating (Min 250-300 pax)	225
	Showcourt Spectator Seating	100
	Storerooms	400
	First Aid	15
	Court Office/Show Court Office	25
Programmes	Mixed Martial Arts/Dance Studio (multi-use with squash)	0
	Storerooms for MMA/Dance Studio	60
	High Performance/Functional Training Gym	250
	Office/Storeroom for HPGym	20
	Multi-Use Programmes - Health/Fitness/Wellness - Aerobics / Zumba	200
	Storeroom	20
	Office	20
Toilets/Change Amenities	Storage - Admin	10
	Indoor Home/Visitor Players Change/Toilets/Massage	80
	Outdoor Player Change/Toilets/Massage	160
	Referees Toilets/Changerooms	60
	Programmes/Club/Function Area Toilets	60
	Public Toilets accessible	30
	Staff Amenities	20
Club Social/ Function Areas	Club/Social Facilities/Mezzanine Viewing/Corporate & Coaching areas	400
	Board Room/Meeting Rooms	60
	Outdoor Plaza/Social Spaces (covered in site works)	0
	Commercial Kitchen/Bar/Café	150

Table 3.12 Functional Space Requirements

	<b>Functional Space</b>	<b>Total Area Required (m<sup>2</sup>)</b>
Front of House	Entry Foyer/Reception/Function/Memorabilia Display/Sponsor Acknowledgement	50
	Café/Kiosk seating area	50
	Retail	50
	Social Spaces/Kids Lounge/Play area	100
	Centre Admin/Sports Club Admin/Staff Room & Amenities	50
Back of House	Plant Rooms, Delivery/Loading Dock Area, Lifts/Circulation, Facility Maintenance/Presentation Area, Storage	230
	Provision for circulation	95
Outdoor Sports Facilities	AFL/Cricket	26100
	Spectator Seating - Car	10650
	Spectator Seating - Seating/Standing (covered under site works)	0
	Rectangular Field (multi-use)	8970
	Outdoor Multi-Sport Courts (Modified)	1008
	Club House/Social/Function facilities (included in indoor sports hall)	0
	Sport Training Gym (included in indoor sports hall)	0
	Outdoor BBQ/Social/Plaza Spaces (included in site works)	0
	Front of House and Back of House/Circulation (included in site works)	0
	Storage/Grounds Shed	200

Table 3.12 Functional Space Requirements (cont)

	Functional Space	Total Area Required (m <sup>2</sup> )
Site Works	Sealed road and car parks - 300 cars plus stormwater, wheel stops, line marking and circulation	8000
	Gravel roads - including stormwater	5000
	Paths - gravel (no edging)	1800
	Paths - paved	600
	Entry pavements	3500
	Soft landscaping including site prep trees, shrubs, mulch, fertiliser (excluding topsoil)	2000
	Outdoor furniture including bins, seats, bike racks, gym equipment, lighting, play equipment (included in other spaces)	0

Table 3.12 Functional Space Requirements (cont)

The total functional space area required is 4951m<sup>2</sup> for indoor facilities and 46,928m<sup>2</sup> for outdoor sports facilities and spaces.

# SECTION 4

## CONCEPT SITE PLAN OPTIONS

### 4.1 INTRODUCTION

Three concept site plan options were developed by the consultant team for the Deloraine and Districts Recreation Precinct. These options were:

**Option 1** - Consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with the purchase of the adjoining private land parcel;

**Option 2** - Consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with purchase of the adjoining private land and upgrading of the Deloraine Primary School sportsground;

**Option 3** - Consolidate sporting, recreation and community facilities at both the Deloraine Community Complex and former Deloraine Racecourse Site.

The relative potential advantages and disadvantages with each of the options were identified (Section 4.2) and presented to the DDDRPWG and Meander Valley Councillors.

The preferred option was determined by the DDDRPWG and a modified concept plan and floor layout plan prepared (Section 4.3). This was recognized as being the aspirational concept plan reflecting the needs and views expressed by the sporting and recreation clubs and community.

### 4.2 ASSESSMENT OF OPTIONS

#### 4.2.1 Option 1 Site Concept Plan

This option consolidates the sporting, recreation and community facilities at the Deloraine Community Complex site with the purchase of the adjoining private land parcel.

The key components of the site plan are:

relocating the football club facilities and infrastructure to the DCC;

construction of a multi-use main oval and junior sportsground;

relocation of squash courts and facilities to the DCC;

addition of two indoor courts;

major upgrade of the DCC to overcome existing design and functional limitations e.g. entry, accessibility, function centre, kiosk, commercial kitchen, meeting rooms, gymnasium, multi-use spaces, improved spectator facilities;

new car parking areas and internal roads;

community park with play, picnic and barbeque facilities;

relocation of Little Athletics to the main oval with jump pits located adjacent to the oval;

an outdoor netball court and 3:3 outdoor basketball court;  
and

a network of shared use trails that better link the DCC to the schools and wider community.

Plan 4.1 shows the site concept plan for this option.

Figure 4.1 shows a conceptual layout of the Deloraine Community Complex building.

It should be noted that Plan 4.1 and Figure 4.1 are conceptual or indicative only, and would be refined through a detailed design stage involving considerable consultation with user groups and Council.



- ① New AFL Oval; 180x145 (includes 5m run off)
- ② New multipurpose oval 135m x 110m (includes 5m runoff)
- ③ Renovate Deloraine Community Complex building; refer to architect's 'plan option 2' for concept plan and arrangement of facilities
- ④ Gravel road to perimeter of ovals, including provision for spectator car parking
- ⑤ Paved spectator standing / seating area
- ⑥ Paved entry plaza to new building; plaza extends to existing Rotary Pavilion to create a pedestrianised area
- ⑦ Option to reconfigure car park to Rotary Building
- ⑧ Existing car park
- ⑨ New car park ~ 200 cars. Entry off existing car park, with access road running to the north of Rotary Pavilion
- ⑩ Bus lay by
- ⑪ Gravel road leading off car park; gated entry, with access only permitted on game / function days. Link gravel road through to East Barrack Street
- ⑫ Community park, including play area, BBQ and outdoor gym circuit
- ⑬ Little athletics facilities, including long jump, triple jump, discus, sandpits etc
- ⑭ Gravel car park to netball and community courts
- ⑮ 1 x outdoor netball court
- ⑯ 1 x 3:3 outdoor basketball court
- ⑰ Reconfigure existing drain line
- ⑱ Create shared use trail network, which links wider community including Primary and High school to the site
- ⑲ Existing undeveloped oval on school property
- ⑳ Investigate potential to sell off Council and Crown owned land for residential subdivision

## Plan 4.1 Deloraine and Districts Recreation Precinct OPTION 1 Concept Site Plan





## P O T E N T I A L   A D V A N T A G E S

- Achieves the concept of a single sporting and recreation precinct for the town – a more attractive asset that will also encourage community access and use.
- Opportunity to better integrate passive and active/formal recreation, and combine public art and landscape architecture to present an attractive leisure destination within the town. (i.e. not just a stadium next to a paddock)
- Purchase of the private land parcel would provide capacity for future development/growth of the precinct and improve long term security of the precinct (reduce conflict of interest)
- Consistent with the *Deloraine Outline Development Plan* and outcomes from local community consultations
- Provides two new sportsgrounds that are designed for multi-use
- Opportunity to integrate functions and achieve better multi-use outcomes from the investment in access, car parking, amenities, function space, sportsgrounds etc.
- Relocates clubs (football and squash) that have old facilities and subject to ongoing flooding damage and disruption
- Major upgrade of the existing building and opportunity to address its current design and functional limitations
- Existing site has capacity to accommodate future growth in sporting and recreation activities – football facilities, function Complex, two additional multi-use courts including show court, spectator seating, storerooms, multi-functional room, gym, offices, change rooms/amenities etc.
- Capacity to host sporting events e.g. basketball with 4 courts
- Good synergy between various uses e.g. netball (indoor and outdoor) with football, basketball and netball, little athletics and football (400m track), schools and sporting facilities, sport and community
- Opportunity to address the opportunity for bus drop-off and turning at the DCC

- Would not interfere with the Tasmanian Craft Fair and would provide additional opportunities to grow the fair at the site (e.g. use of oval and sportsgrounds, additional parking, improved traffic flows)
- Increased parking would also be beneficial for the Rotary Pavilion hosting community events
- New community park facilities (e.g. trails, fitness circuit, play, picnic/barbeque, outdoor gym, outdoor basketball 3:3 court)
- Potential to sell some land for residential use (as recommended in the *Deloraine Outline Development Plan*)

#### POTENTIAL DISADVANTAGES

- Requires purchase of private land to accommodate proposed sporting uses and to allow for future long term development and this may require rezoning.
- High capital costs for development of the new facilities – although indicative cost estimates show it being similar to achieving Options 2 or 3
- Capital (and ongoing operational) cost of including facilities for a very limited number of participants, limited revenue capacity and with limited future growth
- Loss of the DCC auditorium through conversion to other uses (e.g. gymnasium, multi-use space, entry foyer, squash courts) although the current use levels of the auditorium are very low
- Possible that limited use of the Primary School oval continues
- Opportunity for income from sale of land is limited as identified area in *Deloraine Outline Development Plan* is part Crown Land and Council owned land

### 4.2.2 Option 2 Site Concept Plan

This option consolidates the sporting, recreation and community facilities at the Deloraine Community Complex site with purchase of the adjoining private land and upgrading of the Deloraine Primary School sportsground.

The main differences to Option 1 are:

the main entry being developed at the southern side of the DCC in association with the proposed two indoor courts;

upgrading of the Deloraine Primary School sportsground as a multi-use junior sportsground, thus avoiding the need to have a separate junior sportsground as envisaged in Option1; and

new car parking to service the entry to the DCC.

The advantages and disadvantages are very similar to those outlined for Option 1.

Plan 4.2 shows the site concept plan for this option.

Figure 4.2 shows a conceptual layout of the Deloraine Community Complex building for this option.

It should be noted that Plan 4.2 and Figure 4.2 are conceptual or indicative only, and would be refined through a detailed design stage involving considerable consultation with user groups and Council.

#### POTENTIAL ADVANTAGES

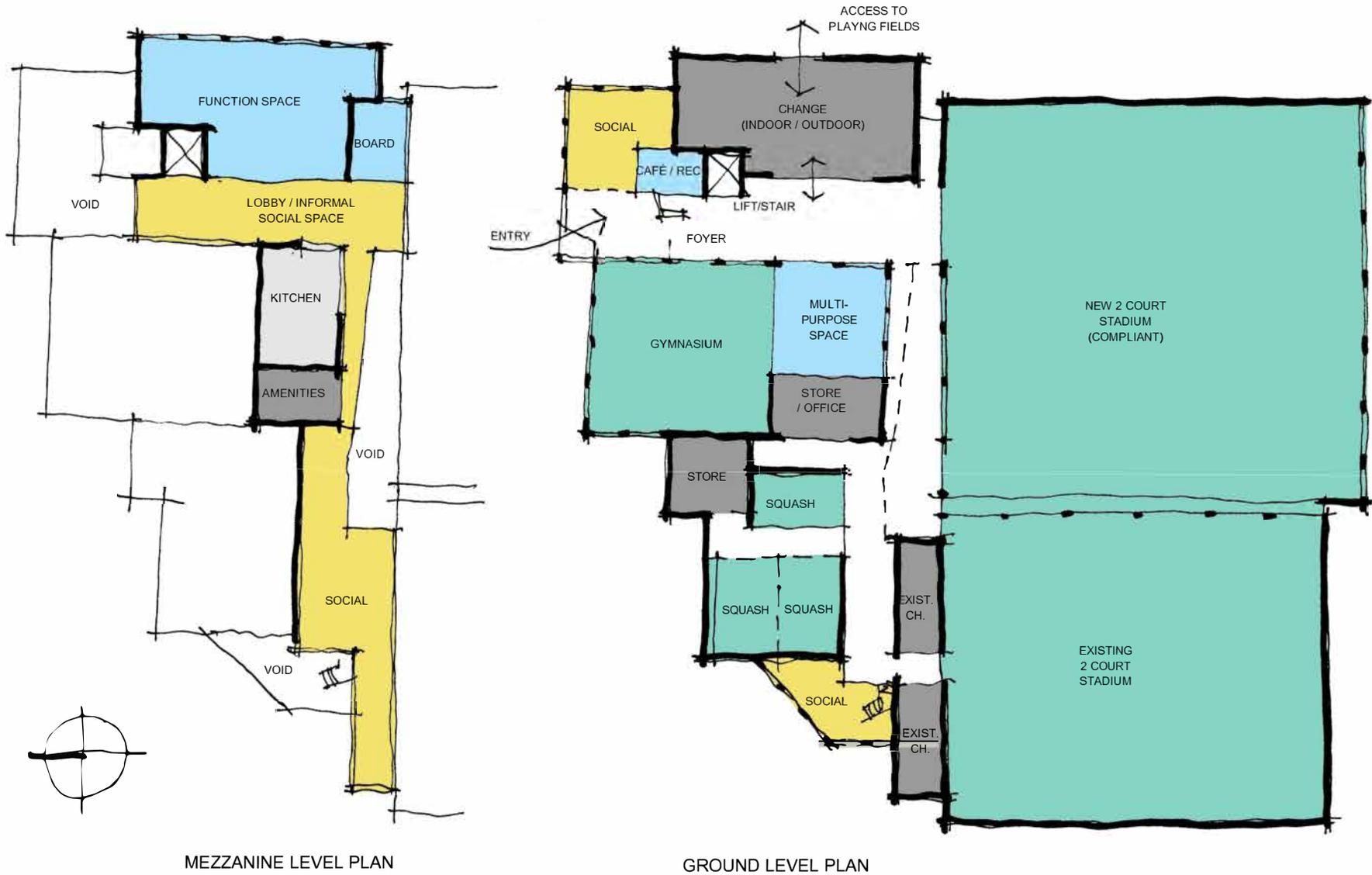
- Achieves the concept of a single sporting and recreation precinct for the town – a more attractive asset that will also encourage community access and use.
- Opportunity to better integrate passive and active/formal recreation, and combine public art and landscape architecture to present an attractive leisure destination within the town. (i.e. not just a stadium next to a paddock).
- Purchase of the private land parcel would provide capacity for future development/growth of the precinct and improve long term security of the precinct (reduce conflict of interest)



- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"> <li>① New AFL Oval; 180x145 (includes 5m run off)</li> <li>② New multipurpose sports field 115 x 78 (including 5m run off), with provision for adjacent junior / training ground</li> <li>③ Renovate Deloraine Community Complex building; refer to architect's 'plan option 3' for concept plan and arrangement of facilities</li> <li>④ Gravel road to perimeter of main oval, including provision for spectator car parking</li> <li>⑤ Paved spectator standing / seating area</li> <li>⑥ Paved entry plaza to new building; create new entry plaza to Rotary Pavilion</li> <li>⑦ Option to reconfigure car park to Rotary Pavilion</li> <li>⑧ Existing car park</li> </ul> | <ul style="list-style-type: none"> <li>⑨ New car park ~ 200 cars. Entry off East Barrack Street, with sealed access road leading into site</li> <li>⑩ Bus lay-by</li> <li>⑪ One way bus loop only; road closed to all other vehicles</li> <li>⑫ Gravel road leading off existing car park; gated entry, with access only permitted on game / function days. Link gravel road to new access road off East Barrack Street</li> <li>⑬ Community park, including play area, BBQ and outdoor gym circuit</li> <li>⑭ Little athletics facilities, including long jump, triple jump, discus, sandpits etc</li> <li>⑮ 1 x outdoor netball court</li> </ul> | <ul style="list-style-type: none"> <li>⑯ 1 x 3:3 outdoor basketball court</li> <li>⑰ Reconfigure existing drain line</li> <li>⑱ Create shared use trail network, which links wider community including Primary and High school to the site</li> <li>⑲ Potential for additional oval in long term</li> <li>⑳ Investigate potential to sell off Council and Crown owned land for residential subdivision</li> </ul> |
|---|--|---|

## Plan 4.2 Deloraine and Districts Recreation Precinct OPTION 2 Concept Site Plan





MEZZANINE LEVEL PLAN

GROUND LEVEL PLAN

- Contribution from Education Department – low cost land acquisition through shared use
- Greater connection and relationship between the Schools and the Deloraine Community Complex
- Makes use of an existing but un-developed sportsground for the benefit of the wider community (and potentially the School with reduced safety and maintenance concerns)
- Opportunity to access precinct and the DCC from both ends – Alverston Drive and East Barrack Street which provides convenience, better traffic flows after events and emergency options
- Consistent with the *Deloraine Outline Development Plan* and outcomes from local community consultations
- Opportunity to integrate functions and achieve better multi-use outcomes from the investment in access, car parking, amenities, function space, sportsgrounds etc.
- Overcomes the exposure to flood risk for sporting uses at the Deloraine Racecourse and the squash courts at the Performing Arts Complex
- Major upgrade of the existing building and opportunity to address its current design and functional limitations
- Existing site has capacity to accommodate future growth in sporting and recreation activities – football facilities, function Complex, two additional multi-use courts including show court, spectator seating, storerooms, multi-functional room, gym, offices, change rooms/amenities
- Capacity to host sporting events e.g. basketball with 4 courts
- Good synergy between various uses e.g. netball (indoor and outdoor) with football, basketball and netball, little athletics and football (400m track), schools and sporting facilities, sport and community
- Opportunity to address the opportunity for bus drop-off and turning at the DCC

- Would not interfere with the Tasmanian Craft Fair and would provide additional opportunities to grow the fair at the site (e.g. use of oval and sportsgrounds, additional parking, improved traffic flows)
- Increased parking would also be beneficial for the Rotary Pavilion hosting community events
- New community park facilities (e.g. trails, fitness circuit, play, picnic/barbeque, outdoor gym, outdoor basketball 3:3 court)
- Potential to sell some land for residential use (as recommended in the *Deloraine Outline Development Plan*)

#### POTENTIAL DISADVANTAGES

- Requires purchase of private land to accommodate proposed sporting uses and to allow for future long term development – whilst the extent of the land would be less than for Option1, it would be expected that the balance land may have limited functional farming value and would be retained for community use in the long term). The land may require rezoning.
- High capital costs for development of the new facilities – although indicative cost estimates show it being similar to achieving Options 2 or 3
- Capital (and ongoing operational) cost of including facilities for a very limited number of participants, limited revenue capacity and with limited future growth
- Loss of the DCC auditorium through conversion to other uses (although not highly used or valued)
- Need to manage/control possible thru-traffic
- Opportunity for income from sale of land is limited as identified area in *Deloraine Outline Development Plan* is part Crown Land and Council owned land
- Some loss of amenity (lights, noise, traffic) for residents in proximity to the Primary School oval and with through road.

### 4.2.3 Option 3 Site Concept Plan

This option consolidates sporting, recreation and community facilities at both the Deloraine Community Complex and the former Deloraine Racecourse site (used by the Deloraine Football Club and Deloraine Junior Football Club).

This option utilises existing public land (Crown land and Council owned land) and does not require the purchase of private land adjacent to the Deloraine Community Complex. The precinct would be split between the two existing sites.

The key features are:

- replacement and major upgrading of the Deloraine Football Club facilities to avoid the risk of flooding and damage;
- design of the Deloraine Football Club facilities to better meet identified future needs for improved amenities, function room space etc;
- new access road to the sporting facilities;
- provision of an outdoor netball court and 3:3 basketball court;
- provision for Little Athletics (use of sportsgrounds and jumps area);
- provision for the Deloraine District Pony Club to relocate to the area and utilise the existing stables and tracks;
- development of a community park with play, picnic and barbeque facilities;
- construction of a shared trail with connections to the Meander River shared trail;
- relocation of the RV park to near the Meander River (former Council works depot site);
- construction of a central car park to service all the sports;
- relocation of squash courts and facilities to the DCC;
- addition of two indoor courts at the DCC;

major upgrade of the DCC to overcome existing design and functional limitations e.g. entry, accessibility, function centre, kiosk, commercial kitchen, meeting rooms, gymnasium, multi-use spaces, improved spectator facilities; and

provision for an outdoor netball court and 3:3 basketball court at the DCC.

Plan 4.3 shows the site concept plan for the Deloraine Community Complex and Plan 4.4 for the former Deloraine Racecourse site.

Figure 4.3 shows a conceptual layout of the Deloraine Community Complex building for this option.

It should be noted that Plan 4.2, Plan 4.3 and Figure 4.2 are conceptual or indicative only, and would be refined through a detailed design stage involving considerable consultation with user groups and Council.

#### POTENTIAL ADVANTAGES

##### ***Former Deloraine Racecourse Site***

- Retains the existing main oval and night lighting (although there are limitations with the existing lighting to cater for current use as identified by the clubs)
- Proposed multi-sportsground that could cater for junior football, little athletics, soccer and other activities
- Upgrades the Deloraine Football Club and Deloraine Junior Football Club facilities (including amenities, function space, bar/catering, kitchen, gym, offices, storage etc) and relocates these outside of the flood prone area with viewing over both the main oval and proposed multi-sportsground
- Possible space to add outdoor netball court(s) in close proximity to the football facilities and possible synergy with tennis club
- Improve entry and parking into the site and create safe space for a community park and extended trail (e.g. Park run)



- |   |   |   |   |
|---|---|---|---|
| <ul style="list-style-type: none"> <li>① Upgraded AFL Oval; 180x145 (includes 5m run off)</li> <li>② New clubroom building built up on earth mound above flood level. Change rooms, kiosk and toilets at bottom level, clubrooms / kitchen / function room on first floor</li> <li>③ Spectator seating / standing incorporated into earth mound</li> <li>④ Gravel road to perimeter of oval, including provision for spectator car parking</li> <li>⑤ Paved entry plaza to new clubrooms</li> </ul> | <ul style="list-style-type: none"> <li>⑥ New car park ~200 cars</li> <li>⑦ Bus lay-by</li> <li>⑧ Upgrade access road off Racecourse Drive</li> <li>⑨ 1 x outdoor netball court</li> <li>⑩ 1 x 3:3 outdoor basketball court</li> <li>⑪ Little athletics facility; long jump, triple jump, discus, sandpits etc</li> <li>⑫ New multi purpose sports field; 115 x 78 (including 5m run off); option to use as rectangular field or oval</li> </ul> | <ul style="list-style-type: none"> <li>⑬ Community park, including play equipment, outdoor gym circuit, BBQ. Include provision for parking</li> <li>⑭ Terminate Racecourse Drive at community park with gate; retain existing gravel road into site, with ticketed public vehicle access only permitted on game day (retain day to day service vehicle access)</li> <li>⑮ Relocate RV park to edge of Meander River (former MV Works Depot Site)</li> <li>⑯ Extend trail network from existing pedestrian bridge; trail to follow river edge and lead into sports complex and wetlands</li> <li>⑰ Existing Tennis Club; retain courts and update car park layout. Option to resurface courts budget permitting</li> </ul> | <ul style="list-style-type: none"> <li>⑱ Refurbish existing buildings for lease</li> <li>⑲ Pony club trailer parking</li> <li>⑳ Retain existing stables for Pony Club use</li> <li>㉑ Create new shared trail network around existing water body; trails to be used by a range of users, including Pony Club</li> <li>㉒ Rehabilitate land around water to wetland</li> </ul> |
|---|---|---|---|

*\*Note; all heritage hedges within Race course retained*

## Plan 4.3 Deloraine and Districts Recreation Precinct OPTION 3A Concept Site Plan

Prepared for **DRP Working Group / MV Council** August 2017 1:2000 @ A3  
 Meander Valley Council Ordinary Agenda - 16 January 2018

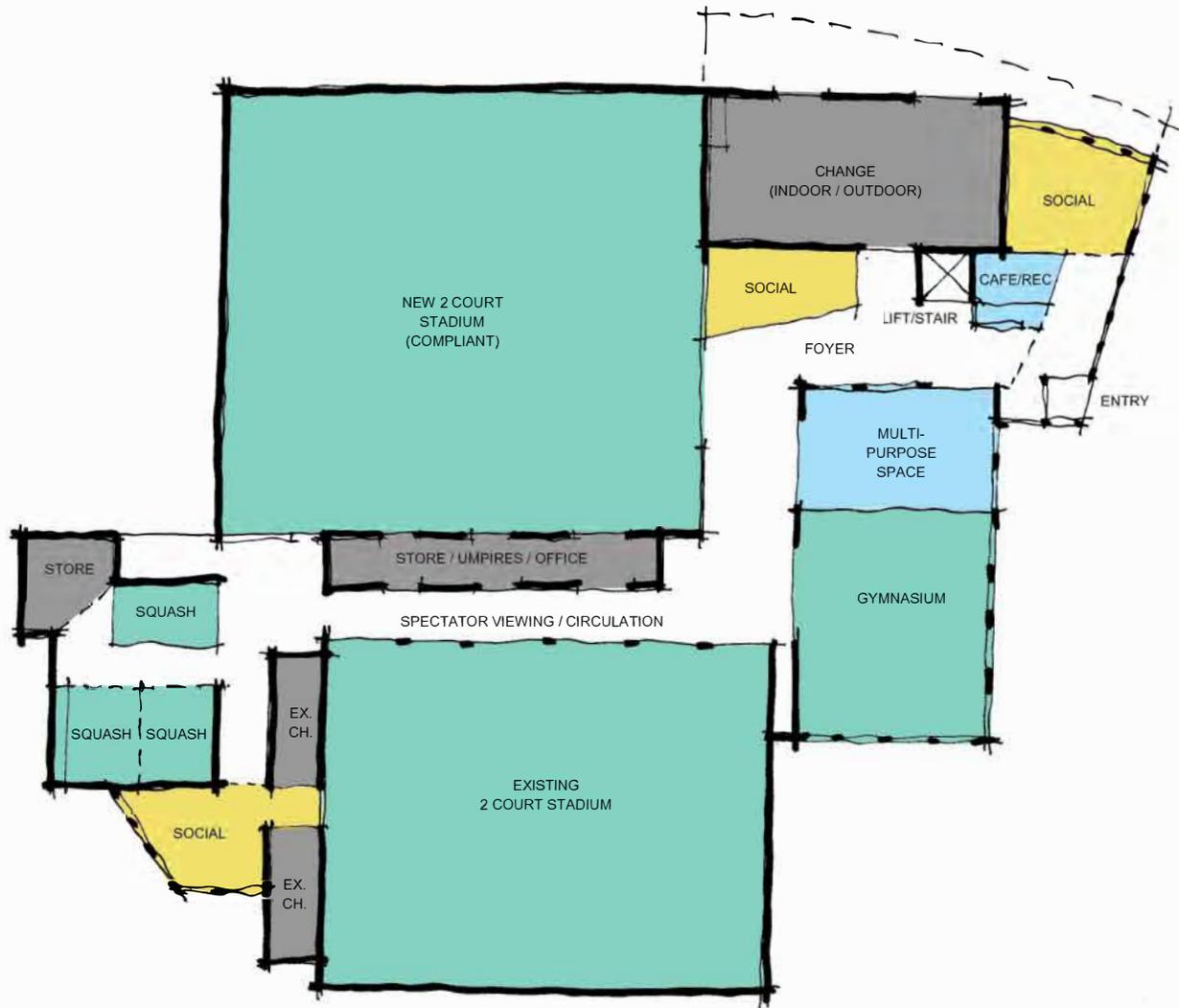
**C&DS 2**



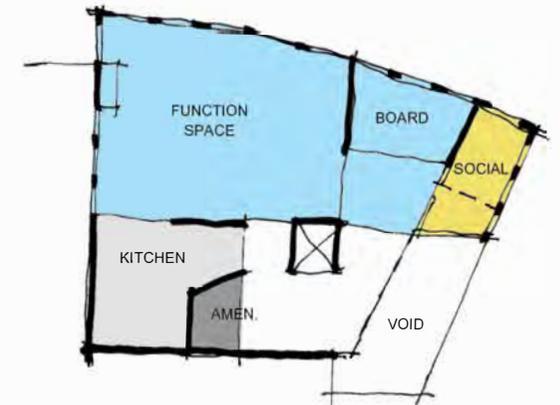
- ① Renovate Deloraine Community Complex building; refer to architect's 'plan option 1' for concept plan and arrangement of facilities
- ② New entry plaza off existing car park / road way
- ③ New shared path network, linking primary school and high school to new facilities. New paths to connect existing car park to new facilities
- ④ Existing car park
- ⑤ Upgrade outdoor gym fitness facilities
- ⑥ Potential location of 1 x outdoor netball court
- ⑦ Potential location of 1 x 3:3 outdoor basketball court
- ⑧ Investigate potential to create residential subdivision on Council and Crown owned land

## Plan 4.4 Deloraine and Districts Recreation Precinct OPTION 3B Concept Site Plan





GROUND LEVEL PLAN



MEZZANINE LEVEL PLAN



- Relocation of the Council works depot would allow relocation of the recreational vehicles to river-edge site and proximity to community park facilities
- Relocation of the Pony Club to the site to utilize stables and trails
- Retention of historic steeple jumps
- Not dependent on Taswater to relocate treatment plant

### ***Deloraine Community Complex Site***

- Major upgrade of the existing building and its current design and functional limitations
- Does not require purchase of additional land with the existing site having the capacity to accommodate future growth in sporting and recreation activities – two additional multi-use courts including show court, spectator seating, storerooms, multi-functional room, gym, offices, change rooms/amenities
- Capacity to host sporting events e.g. basketball with 4 courts
- New squash facilities relocated outside of the flood risk zone at the Performing Arts Complex
- Improved access and parking
- Would not interfere with the Tasmanian Craft Fair
- New community park facilities (e.g. trails, fitness circuit, play, picnic/barbeque, outdoor gym, outdoor basketball 3:3 court)
- Potential to sell some land for residential use (as recommended in the *Deloraine Outline Development Plan*)
- Minimal, if any, negative impact to local amenity for nearby residents.

### POTENTIAL DISADVANTAGES

- High capital costs for development of the new facilities – indicative cost estimates show it similar to Options 1 and 2 (but no cost required for purchase of additional land)

- Capital (and ongoing operational) cost of including facilities for a very limited number of participants, limited revenue capacity and with limited future growth
- Council will continue to manage two principal sporting and recreation venues rather than being consolidated at one site
- Main oval and sportsgrounds would remain affected by flood debris and damage during floods with consequences for access and use of the facilities
- Some duplication of facilities between the football club and the upgrading of the DCC facilities e.g. function room, kitchen, amenities
- Netball indoor and outdoor use is split between the two sites
- Loss of the DCC auditorium through conversion to other uses (although not highly used or valued)
- Some negative community perception was received about the location of the Deloraine Racecourse – poor location, unsafe access, poor lighting
- Limited use of the Primary School oval continues
- May not address the opportunity for bus drop-off and turning at the DCC
- Opportunity for income from sale of land is limited as identified area in *Deloraine Outline Development Plan* is part Crown Land and Council owned land

#### **4.3 PREFERRED SITE CONCEPT PLAN**

The DDRPWG determined that the Preferred Site Concept Plan was a blend of Option 1 and Option 2 based around consolidation of sporting, recreation and community activities at the Deloraine Community Complex site. The key points requested for the preferred option were:

entry to the Complex should continue to be from the north along Alverston Drive;

consolidate parking around the entry from the north;

maintain road link to East Barrack Street to cater for major events and home games;

removal of the proposed small car parking area to the west of the Rotary Pavilion (as not needed with the larger proposed car park);

maintain the future use of the Primary School site as a multi-use sportsground;

make provision for another outdoor netball court;

re-position the main oval to ensure the clubrooms/function centre are centrally located to the oval and would allow a glass frontage for viewing of the oval;

indicate the potential for future expansion of the sporting and recreation facilities within the balance of land;

show potential for an off-leash dog area in the balance of the land (this could be an offset to relocating this use from Alverston Drive); and

show the capacity for the shared trail network to link the precinct within the town.

Plan 4.5 shows the revised site concept plan. It also incorporates a potential location for the development of a skatepark facility following a request by Council as to where this could be potentially located within the precinct.

Figure 4.4 shows a conceptual floor plan layout of the Deloraine Community Complex building for this option.

Plan 4.6 shows a plan for shared trail connections to the precinct. This indicates the need to upgrade existing street footpaths to provide safer and wider footpaths to service the needs of the community including the Deloraine High School and Deloraine Primary School. It also indicates the opportunity to link trails between the Deloraine Racecourse site, Deloraine Community Complex, Meander Valley Performing Arts Centre, Deloraine town centre and the existing Meander River trails.

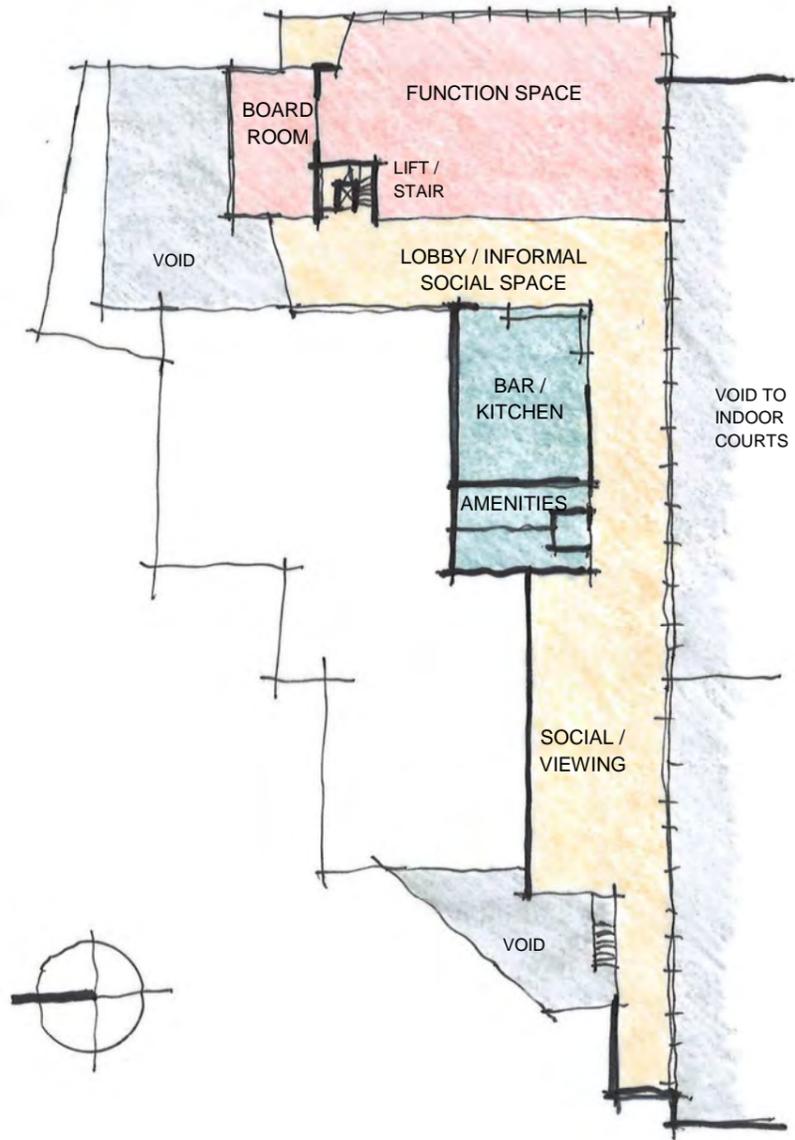
Plan 4.7 shows the capacity to add further sportsgrounds into the balance of land adjoining the Deloraine Community Complex in the long term. It shows the capacity to add in two junior ovals and three junior sportsfields (e.g. soccer fields). This is indicative only and not based on an assessment of future need.



- ① New AFL Oval; 180x145 (includes 5m run off)
- ② Install gates to restrict through traffic outside of events and games days
- ③ Renovate Deloraine Community Complex building; refer to architect's 'plan preferred option 2' for concept plan and arrangement of facilities. Ensure building has glass frontage for function room and changeroom facilities are positioned central to main oval
- ④ Gravel road to perimeter of ovals, including provision for spectator car parking
- ⑤ Paved spectator standing / seating area
- ⑥ Paved entry plaza to new building; plaza extends to existing Rotary Pavilion to create a pedestrianised area / events space
- ⑦ Retain as open space, but option to reconfigure car park to Rotary Building in long term
- ⑧ Existing car park
- ⑨ New car park ~ 200 cars. Entry off existing car park, with access road running to the north of Rotary Pavilion
- ⑩ Bus lay by
- ⑪ Gravel road leading off car park; gated entry, with access only permitted on game / function days. Link gravel road through to East Barrack Street. Maintain option for use of road link to East Barrack Street to cater for major events and home games
- ⑫ Community park, including nature play area, BBQ and outdoor gym circuit
- ⑬ Little athletics facilities, including long jump, triple jump, discus, sandpits etc, adjacent to main oval
- ⑭ Gravel car park
- ⑮ 2 x outdoor netball courts
- ⑯ 1 x 3:3 outdoor basketball court
- ⑰ Reconfigure existing drain line
- ⑱ Create shared use trail network, which links wider community including Primary and High schools to the site. Potential for use as a bike circuit around sportsground.
- ⑲ Upgrade existing undeveloped oval on school property to multi-use sportsground. Preferred multi-use sportsground site in partnership with Primary School
- ⑳ Investigate potential to sell off Council and Crown owned land for residential subdivision
- ㉑ Potential skatepark location
- ㉒ Consolidate parking and main entry from the north
- ㉓ Potential for overflow parking and expansion of sport, recreation and community use in longer term
- ㉔ Potential to relocate off leash dog area into balance land

## Plan 4.5 Deloraine and Districts Recreation Precinct Preferred Option





MEZZANINE LEVEL PLAN



GROUND LEVEL PLAN

# Plan 4.6 Shared Trail Connections



Existing River Trail

Proposed trail connections

Upgrade/install shared footpaths





- ① Potential junior football oval 135x110m (includes 5m run off). Possibility to fit 2 x ovals within left over space
- ② Potential multi-purpose junior rectangular sports fields 90x45m. Possibility to include 3 x sports fields within left over space

## Map 4.7 Deloraine and Districts Recreation Precinct Potential Capacity for Future Recreation Development



There are other potential opportunities for the use of the balance land that could be envisaged in the future, subject to future strategic and use and planning approval. This could potentially include community, educational, research and tourism uses if there was no demonstrated need for additional sporting and recreational use. Council would retain the ability to release land in the future that would be compatible with the Deloraine and Districts Recreation Precinct.

An additional meeting was held with the DDRPWG to discuss a range of points regarding:

- the option of reducing the indoor courts from four courts to three courts;

- the option of a separate building for football and netball rather than be integrated with the Deloraine Community Complex building;

- the option for having a separate pavilion between the proposed ovals including function space, clubrooms and changerooms;

- the opportunity to house memorabilia from existing and many lost sporting clubs within Meander Valley before it is lost forever;

- whether squash courts could be added to the western side of the Complex rather than retrofitting the existing building;

- trail connections to the Deloraine Community Complex;

- adding a children's cycleway, nature play park and calisthenics park.

The previous points were discussed and it was agreed that:

- the Preferred Option was the aspirational plan that has resulted from extensive consultations with sporting and recreation clubs and the wider community;

- most of the proposed options (other than the reduction of courts) would add to the overall infrastructure costs and it would be appropriate to wait until the Business Feasibility and quantity surveyor cost estimates were available;

the Business Case would assess whether there was justified need for new courts or not;

a trails connection map would be prepared;

a map showing the potential layout of sportsgrounds in the balance land would be prepared; and

that the review of the Business Feasibility and cost estimates would allow the DDRPWG to make a more informed judgement on what components of the aspirational plan were achievable within different funding scenarios.



# **SECTION 5**

## **BUSINESS FEASIBILITY PLAN**

A copy of the full Business Feasibility Plan is provided in Attachment B. A summary of the key findings is presented in this section.

### **5.1 DEMANDS AND NEEDS ANALYSIS**

#### **5.1.1 Key Demographic Trends**

The key demographic trends for Meander Valley indicate:

The proposed Deloraine Sport and Community precinct indicate the precinct is likely to have a primary catchment of approximately 10,000 persons, encompassing the Deloraine and surrounding townships, west of Westbury.

The primary catchment is where a majority of centre usage is expected to be generated from, and is utilised to drive the business and financial planning assumptions, although the centre will provide participation opportunities to and draw usage from a much broader district and regional catchment.

This catchment is likely to remain static over the foreseeable future.

Whilst the population is expected to age, Deloraine's larger family profile, is likely to see higher participation and demand for "family friendly" programmes and services.

Similarly, Tasmanian population trends indicate, whilst the Tasmanian population is aging, there are also likely to be more people in their middle years. Societal trends are seeing more people active longer, translating to higher participation rates in passive recreation and indoor based activities. Therefore, in the future an aging, does not necessarily mean lower demand - it's just changing.

#### **5.1.2 Sport and Recreation Participation Trends**

The key findings from a review of key trends indicates the following aspects should be taken into consideration for the future planning of the Deloraine and Districts Recreation Precinct:

#### INDOOR SPORT & ACTIVITIES

National sport club participation data indicates demand for court based sports including basketball, netball and soccer/futsal are on the increase.

Several these high participant high growth sports are currently under represented in the Deloraine Community Complex.

There is potential growth in the indoor court market, particularly with respect to soccer, netball and gymnastics.

Consultation with State sporting bodies and clubs confirms trends locally.

Demand for dance/martial arts, health/fitness and wellness programming is also high. These activities should be prioritised in the future scope for the precinct.

#### OUTDOOR SPORT & ACTIVITIES

National participation data indicates demand for soccer and several other outdoor sports is on the increase, particularly due to women's participation.

Several high participant high growth outdoor sports are currently under represented.

There is potential to increase usage of outdoor playing fields.

Priority should be placed on improving the quality/capacity of fields, multi-use configuration and appropriate support amenities to support women's participation.

#### PASSIVE RECREATION & COMMUNITY NEEDS

Demographic trends indicate a need to provide social, gathering and recreational spaces that are both attractive to older people, as well as young people and that are "family friendly".

Priority should be placed on provision of flexible multi-use indoor programmed spaces to cater for diverse and changing needs, indoor/outdoor passive areas and play spaces.

Proximity to local schools and range of sports programmes on offer in a community hub/precinct setting open up opportunities for children's out of school hours programs and services.

Connectivity to public transport and active transport routes to facilitate walking/running/cycling will be important to both meeting future needs for passive recreation and facilitating high use of the centre.

#### DESIGN ISSUES

Multi-purpose, flexible and scalable design to enable facility programming to change over time with customer preferences and demand.

Designed to enable staged development approach.

## 5.2 DEVELOPMENT SCOPE

The Business Feasibility Report sets out the future development direction, priority facility components, potential development staging scenarios and capital cost estimates.

A Facility Brief was prepared to identify and summarise the priority component/elements and nominal area requirements based on the Preferred Option (refer to Table 5.1).

Turner & Townsend Quantity Surveyors undertook a pre-design capital cost estimate for the Preferred Option concept plan. A breakdown of the cost estimates is provided in Attachment B.

The total capital cost estimate is \$26.8 Million, allowing for a 12-month escalation, comprising:

Indoor Community, Sport, Health & Wellness Components	\$17.4 M
<u>Outdoor Sports and Open Space Components</u>	<u>\$ 9.4 M</u>
Total Capital Cost	\$26.8 M

The cost estimates allow for one indoor multi-purpose court only.

As it is unlikely the Preferred Option would be able to be delivered in one development phase, the DDRPWG identified two potential staged development scenarios, to enable the plan to be delivered over a 10+ year time horizon.

The staged development scenarios consider the following key drivers:

priority community and sport needs;

technical feasibility;

operational feasibility and impacts;

capital funding availability;

enabling factors; and

AREA	COMPONENT	ESTIMATED SQM
Indoor Sports Courts	3 x Multi-Sport Courts (includes 2 existing)	2,400
	2-3 x Multi – Use Squash Courts (moveable walls)	200-300
	Spectator Seating – Showcourt & General per court	TBD
Health/Wellness Programmes	Health/Fitness/Wellness, Martial Arts/Dance Studio	580
Clubroom/Meeting/Function Space	Multi-Purpose Function/Meeting/Programme Room(s), Café/Catering Kitchen/Bar	610
	Outdoor Entertainment Deck/BBQ Area	TBD
Lease Area	Clubs/Associations Office	Incl. in Clubroom/Meeting Space
Amenities	Game Support, Corporate/Function/Programme, Administration, Public Amenities/Change	410
Front and Back of House	Entry Foyer/Social Areas, Reception/Centre Management, café/retail	300
	Plant, Deliveries, Storage, Circulation & Lifts, Cleaning/Presentation	300
	Total	4,200
Carparking & Access	Minimum 150 carparks	4,500
Outdoor Space	Entry/Exit Plaza, Outdoor Sport Court/Event Areas, Children’s Play Area/Expansion, Youth/Casual Play Spaces	12,900
Outdoor Sports	1 x Full Size Multi-Sport field (AFL/Cricket, 2 x Rectangular pitch, Athletics)	47,000
	1 x Training Playing Field (includes existing school ground)	TBD
	1 x Outdoor Multi-Sports Court & sports training space	Incl. Outdoor Space
	Clubrooms	Incl. in Clubroom/meeting Space

Table 5.1 Priority Facility Components/Elements

risk factors.

The three scenarios that were taken to business feasibility were:

**Scenario 1** - represents the full scope of the Preferred Option delivered in one development phase.

**Scenario 2** (Phase 1) – prioritises Indoor Sports, Community Health and Wellness.

**Scenario 3** (Phase 1) – prioritises Outdoor Sports and Club Facilities.

Scenario 1 would be developed in one phase.

The staging of development for Scenario 2 and Scenario 3 are shown in Table 5.2.

The capital cost implications of each of the presented development scenarios, in the first phase of development (i.e. 0-5 years) is summarised below:

Scenario One:	\$26.8 M
Scenario Two:	\$17.4 M
Scenario Three:	\$13.2 M

**Scenario 1** is the full development of the master plan as outlined in Table 5.1 for a total capital cost estimate of \$26.8M.

The following cost estimates apply to Scenario 2 and Scenario 3.

Scenario 2		
Development Phase	Components	CAPEX
Phase 1 (0-5 Years)	<ul style="list-style-type: none"> <li>Indoor Sports Courts (Multi-purpose Sports Court, Squash Courts)</li> <li>Game Support</li> <li>Health &amp; Wellness</li> <li>Front/Back of House</li> <li>Amenities</li> <li>Carparking &amp; Access</li> <li>Outdoor Entry Plaza/Landscape Amenity \$1M Allowance (includes better site access for schools &amp; outdoor netball/multi-use court)</li> </ul>	\$17.4
Phase 2 (5-10 Years)	<ul style="list-style-type: none"> <li>Main Outdoor Multi-Sport Field &amp; Perimeter Access</li> <li>Club/Meeting/Function Space</li> <li>Outdoor Precinct/Landscape Allowance (\$1.5M)</li> </ul>	\$8.9 *
Phase 3 (+10 years)	<ul style="list-style-type: none"> <li>Secondary Outdoor Sports Field</li> <li>Outdoor Precinct/Landscape Allowance(\$0.5m)</li> </ul>	\$1.4*

• excludes escalation allowance costs

Scenario 3		
Development Phase	Components	CAPEX
Phase 1 (0-5 Years)	<ul style="list-style-type: none"> <li>Indoor Sports Courts (Squash only)</li> <li>Main outdoor Multi-Sport Field and Perimeter Access</li> <li>Club/Meeting/Function Space</li> <li>Front/Back of House</li> <li>Amenities</li> <li>Carparking &amp; Access</li> <li>Outdoor Entry Plaza/Landscape Amenity \$1M Allowance (includes better site access for schools &amp; outdoor netball/multi-use court)</li> </ul>	\$13.2
Phase 2 (5-10 Years)	<ul style="list-style-type: none"> <li>Indoor Sports Courts (Multi-purpose Sports Courts Only) Access</li> <li>Game Support</li> <li>Health and Wellness</li> <li>Outdoor Precinct/Landscape Allowance (\$1.5M)</li> </ul>	\$12.2 *
Phase 3 (+10 years)	<ul style="list-style-type: none"> <li>Secondary Outdoor Sports Field</li> <li>Outdoor Precinct/Landscape Allowance(\$0.5m)</li> </ul>	\$1.4*

• excludes escalation allowance costs

Table 5.2 Staging for Scenarios 2 and 3

### **5.3 BUSINESS FEASIBILITY**

#### **5.3.1 Business Structure**

The feasibility modelling is based on:

The precinct will be actively managed by a single operator (Council or contract operator) and will benefit from the inherent management efficiencies of that structure.

Sports Clubs will be hirers/anchor tenants of the precinct, not operators, and have priority access to sports fields/courts and club/social facilities as agreed in a timeshare arrangement.

It is envisaged, Sports Clubs will continue to be able to hold club functions/events and activities, within their agreed arrangements with Council, to raise revenues to support club operations aligned to current activities.

Council may determine at some point in the future, that some elements (e.g. Health & Wellness) could be operated via sub-lease with a straight lease and/or revenue share arrangement in place with the sub-lessor. This decision would be made subject to a review of operational needs and financial implications, and subject to market interest, at the time of decision.

#### **5.3.2 Business and Management Assumptions**

The Business Feasibility Plan outlines a range of business and management assumptions to assist in determining the operating results. These assumptions include operating hours, program pricing and hire charges, management and staffing levels, usage targets, revenue targets, expenses, business sensitivity, global impacts and business growth (e.g. Consumer Price Index, whole of life costs, maintenance/major refurbishment, building and plant depreciation, capital loan repayments).

#### **5.3.3 Operating Financial Performance**

The assumptions and outcomes of the operational financial modelling are provided within the Feasibility Business Plan in Attachment B.

Based on the 10-Year business projections, the annual average per annum financial indicators for Scenario 1 are:

Revenue	\$738,000
Expenditure	\$773,000
Nett Operating Profit/(Loss)	(\$35,000)
Visitations	173,000 visits/year

The Nett Operating Profit/(Loss) for Scenario 2 is (\$68,000) per annum and (\$215,000) per annum for Scenario 3. In addition, the Outdoor Sports Field Facilities are expected to be a further expense area, in the order of \$70,000 per annum.

#### 5.4 WHOLE OF LIFE COST ANALYSIS

The purpose of identifying whole of life costs is to enable Council – the future asset owner of the proposed precinct to understand the full extent of financial obligation in operating and maintaining the venue. It will also enable full cost financial analysis to be completed to compare both options over the life of the asset. It covers phase one development only, for the three development scenarios being considered.

COST AREA	INPUTS	ALLOWANCE	SCENARIO 1 \$'Million pa	SCENARIO 2 (Phase 1) \$'Million pa	SCENARIO 3 (Phase 2) \$'Million pa
CAPEX	CapEX Estimate (excl. land acquisition costs)	Construction Only	\$20M	\$15.5M	\$11.7
	Total CapEx Costs	Total Development Costs	\$26.8M	\$17.4	\$13.2
OPERATING	Operating Cost – Indoor	10 Year Base Case Avg. pa	(\$0.035)	(\$0.068)	(\$0.145)
	Operating Cost - Outdoor	Est.	(\$0.07)	**	(\$0.07)
	Maintenance/Major Refurbishment	2% of CapEx pa **	(\$0.4)	(\$0.3)	(\$0.23)
	<b>Total Operating Cost</b>		<b>(\$0.505)</b>	<b>(\$0.368)</b>	<b>(\$0.445)</b>
ACCOUNTING	Depreciation	50 Year Straight line	(\$0.536)	(\$0.348)	(\$0.264)
	Capital Funding Costs/Divestment Costs/(Income)	Excl.***	-	-	-
		Sub-Total	\$1.041	\$0.716	\$0.709

Table 5.3 Whole of Life Costs for the Three Scenarios

## Notes:

CapEx excludes cost of land acquisition. This has not been included as is not known at this stage.

Scenario 3 – Operating performance assumed as per existing, based on last 3 year average.

\*Maintenance/Major Refurbishment allowance has been set equivalent to standard industry asset depreciation rates of 50 years and excludes existing building asset management.

\*\* It should be noted this option excludes cost of outdoor facility provision, which are still born by Council, through existing provision.

\*\*\*Capital Funding and divestment strategy to be determined.

The capital finance costs, acquisition or disposal costs are not included in the financial models. These costs would be more accurately identified in a more detailed design, cost and business planning stage and once a capital financing strategy is identified. As such, at this stage it is assumed capital costs for the proposed precinct would be met through government capital reserves (e.g. either through State, Local Government or Federal Government and potentially via multi-lateral government funding arrangement).

The results indicate the Preferred Option (Scenario One) is likely to result in the highest per annum whole of life (WOL) costs, based on first 10 Year Operating results.

However, it must be noted, these results are based on:

Phase One Development only. This means for Scenario Two and Three, the WOL costs do not take into account potential future development phase WOL costs.

Phase Two and Three are not providing for the full range of programmes and services (i.e. levels of service delivery) on offer through the full masterplan, and therefore levels of community activity and participation (i.e. social benefits).

Scenario Two is likely to result in slightly higher total WOL costs (i.e. \$0.716M) to Council, than Scenario three, if the WOL costs for AFL facility provision at the existing location is taken into consideration

## 5.5 OVERALL REVIEW OF SCENARIOS

Overall, the review of the key considerations benefits and risks indicates:

**Scenario 1** - Offers the greatest level of participation benefits to the community in the short term (i.e. 10 Years) and best operating financial performance results, however, has higher overall WOL costs and level of risk with respect to funding attraction and land acquisition factors.

**Scenario 2** – Offers the next greatest level of participation benefit to the community and operating financial performance results in the short term, however, has higher overall WOL costs, but has lower levels of risk, when compared to scenario one, mainly due to delayed need to acquire land to enable the development scenario to proceed.

**Scenario 3** – Offers the least participation benefit to the community, has the least favourable operating financial performance results in the short term, however, has a lower overall WOL cost, and lower level of risk, mainly due to likelihood of attracting the capital funding levels required.

KEY CONSIDERATIONS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Priority Community Needs	<p>Meets the growth needs of indoor sport and immediate needs of outdoor sports.</p> <p>Maximises opportunities for a broad range of leisure, health &amp; wellness, community &amp; cultural activities.</p> <p>Maximise multi-use, flexibility and adaptability to meet changing sport, recreation and community needs (and mitigate financial risks).</p>	<p>Meets the growth needs of existing indoor sport (e.g. basketball, netball, badminton) and provides opportunity for new and emerging sports, more commercially orientated programmes and services and events.</p> <p>Enables the immediate re-location of Squash from existing existing aging, sub-standard &amp; at-risk facilities (i.e. flood plain risks).</p> <p>Enables the conversion of existing underutilised asset (due to poor design) to meet the contemporary needs of the community for indoor leisure, health &amp; wellness, community &amp; cultural activities.</p>	<p>Enables the immediate re-location of AFL from existing aging, sub-standard &amp; at-risk facilities (i.e. flood plain risks). Provides appropriate quality facilities for AFL – men and women’s participants.</p> <p>Provides access to facilities for many other outdoor sports currently not played or represented in the area, including Cricket, Soccer, Rugby/touch and Athletics, due to lack of facilities.</p>
Technical Feasibility	Meets construction staging requirements.	Meets construction staging requirements.	Meets construction staging requirements.
Operating and WOL Financial Impacts	<p>Maximises levels of participation and operating financial performance.</p> <p>Likely to result in best performing operating results, however higher WOL costs over first 10 Years operations.</p>	<p>Prioritises establishment of programmes and services to meet high growth sports and activities, maximise participant numbers, levels of participation and revenue yields.</p> <p>Likely to result in improved operating results, compared to Scenario 3 and existing situation, and slightly higher WOL costs, than scenario 3 over first 10 Years operations.</p>	<p>Reduces capacity to deliver new indoor programmes or services, therefore offers limited opportunity to increase levels of participation and revenue yields.</p> <p>This is likely to see financial operating performance aligned to status quo, and WOL costs only marginally better than Scenario 3.</p>
Capital Funding Feasibility	Preliminary capital cost is estimated at \$26.8 M	Preliminary capital cost is estimated at \$17.4 M	Preliminary capital cost is estimated at \$13.2 M

KEY CONSIDERATIONS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Enabling Factors	Requires immediate acquisition of additional land.	Delays requirement for land acquisition.	Requires immediate acquisition of additional land.
Key Risk Considerations	Key risks include: -Likelihood of attracting required capital funding -Ability to acquire land in short timeframes and at appropriate cost - Ongoing Operational Risks – achieving usage and financial targets.	Key risks include: -Likelihood of attracting required capital funding, phase one -Ability to attract funding to deliver future phases -Ability to acquire land to deliver future phases - Ongoing Operational Risks – achieving usage and financial targets.	Key risks include: -Likelihood of attracting required capital funding to deliver future phases -Ability to acquire land in short timeframes and at appropriate cost -Level of ongoing operational subsidy, particularly if future phases not delivered

# SECTION 6

## IMPLEMENTATION

### 6.1 KEY FINDINGS

Extensive community and stakeholder consultations indicate a strong desire for consolidating sporting activities at the Deloraine Community Complex site, sharing facilities, integration with the local schools and locating new facilities outside of the flood-prone area. This is consistent with the findings of the *Meander Valley Strategic Sport and Recreation Plan 2012-2015*, the *Deloraine and Westbury Sport and Recreation Rationalisation Study 2012* (although not adopted by Council), the *Deloraine Outline Development Plan 2016* and the concept ideas developed by the Meander Valley Regional Recreation Precinct Working Group.

Three concept options were identified and assessed for the Deloraine and Districts Recreation Precinct at the Deloraine Community Complex site, with one option including a split model with the use of the Deloraine Racecourse site.

The preferred option was to consolidate the sporting, recreation and community facilities at the Deloraine Community Complex site with purchase of the adjoining private land and upgrading of the Deloraine Primary School sportsground.

The preferred option represents the aspirational plan for the Deloraine and Districts Recreation Precinct based on the expectations of the sporting clubs, recreation groups and community.

Turner and Townsend Quantity Surveyors prepared indicative cost estimates for the preferred option. The total costs for works was \$19.94M but the total project cost was \$26.81M when allowing for a contingency (20%), professional fees and authority fees and allowance for escalation of costs over the next 12 months.

The feasibility assessment reviews the market and demand, applies business modelling and identifies the financial implications for the Deloraine and Districts Recreation Precinct.

The key findings include:

the precinct catchment population is estimated at approximately 10,000 persons and likely to remain static;

slightly higher than average demand for sport and leisure facilities could be expected;

given trends in participation, having an ageing population does not necessarily mean lower demand;

the centre will be actively managed by a single operator (Council or contract operator) and sports clubs will be hirers/anchor tenants of facilities, not operators;

financial operating results have been determined, based on assumptions for three outcomes – base, optimistic and conservative models;

the three scenarios taken to business feasibility were:

Scenario 1 - represents the full scope of the Preferred Option delivered in one development phase,

Scenario Two – prioritises Indoor Sports, Community Health and Wellness, and

Scenario Three – prioritises Outdoor Sports and Club Facilities;

The capital cost implications of each of the presented development scenarios, in the first phase of development (i.e. 0-5 years) were:

Scenario One:	\$26.8 M
Scenario Two:	\$17.4 M
Scenario Three:	\$13.2 M

The 10-Year operating results for the different Scenarios indicate:

an average net surplus of \$35,000 per annum for the indoor community and sports facilities using a base case of Scenario 1 (but a conservative model would result in an annual loss of \$104,000 whilst an optimistic model would have a surplus of \$34,000 per annum),

the outdoor sportsfield facilities are expected to require additional expenses of \$70,000 per year,

an average net loss of \$68,000 per annum for Scenario 2, and

an average net loss of \$215,000 per annum for Scenario 3;

Overall, the review of the key considerations benefits and risks indicates:

**Scenario 1** - Offers the greatest level of participation benefits to the community in the short term (i.e. 10 Years) and best operating financial performance results, however, has higher overall WOL costs and level of risk with respect to funding attraction and land acquisition factors,

**Scenario 2** – Offers the next greatest level of participation benefit to the community and operating financial performance results in the short term, however, has higher overall WOL costs, but has lower levels of risk, when compared to scenario one, mainly due to delayed need to acquire land to enable the development scenario to proceed, and

**Scenario 3** – Offers the least participation benefit to the community, has the least favourable operating financial performance results in the short term, however, has a lower overall WOL cost, and lower level of risk, mainly due to likelihood of attracting the capital funding levels required.

Council will need to consider staging of the proposed development or alternative site/sports infrastructure development models depending on timing, budget, capacity to attract funding support and infrastructure requirements.

## 6.2 ACTION PLAN

### **1. The Deloraine and Districts Recreation Precinct Working Group (DDRPWG) and Meander Valley Council (MVC) adopt, (in principle) the Deloraine and Districts Recreation Precinct Feasibility Study, as a tool for guiding the future development of the precinct.**

#### INITIATING ACTIONS AND RESPONSIBILITIES:

DDRPWG to review and adopt the Feasibility Study in principle and forward its recommendations to the Meander Valley Council.

The Feasibility Study presented to a workshop of Meander Valley Councillors.

MVC consider the in-principle adoption of the Deloraine and Districts Recreation Precinct Feasibility Study.

Undertake further stakeholder and local community consultation to develop a broad agreement for the implementation of the Deloraine and Districts Recreation Precinct.

MVC, DDRPWG and key stakeholders use the study as a guide for seeking funding, development and management of the recommended works.

MVC to commence negotiations for the purchase of private land adjoining the Deloraine Community Complex.

Initiate discussions with Crown Land Services regarding future development of the Deloraine and Districts Recreation Precinct site.

### **2. Seek funding support and grants to support implementation of the Deloraine and Districts Recreation Precinct on a staged basis.**

#### INITIATING ACTIONS AND RESPONSIBILITIES:

MVC to seek written support from key stakeholders and interest groups for the implementation of the Deloraine and Districts Recreation Precinct.

MVC to identify its funding capacity for the project over the short (1-2 years), medium (5 years) and longer term (10 years).

MVC, sporting clubs and recreation groups lobby the State Government parliamentarians for special funding assistance in the lead-up to the State elections in 2018, especially those members representing the Lyons electorate.

MVC to target the Commonwealth Government for funding assistance for the implementation of project stages through:

the National Stronger Regions Fund initiative which aims to boost social and economic development in Australia's regions by funding priority infrastructure projects in local communities

(<http://investment.infrastructure.gov.au/funding/NSRF>),

the Building Better Regions Fund which aims to fund projects outside of the major capital cities;

the Stronger Communities Program which aims to fund small capital projects that deliver social benefit (support of Federal Member of Parliament required for the project), and

individual sporting clubs and community recreation groups to consider opportunities for fund raising support from the Australian Sports Foundation involving opportunities such as tax deduction for donations, deductible gift recipient and Fundraising4Sport-F4S;

MVC, individual sporting clubs and community recreation groups to review the guidelines for Sport and Recreation Major Grants or Sport and Recreation Minor Grants administered by Communities, Sport and Recreation for projects consistent with the vision and implementation of the Deloraine and Districts Recreation Precinct

([http://www.dpac.tas.gov.au/divisions/csr/sportrec/funding\\_opportunities/major\\_grants](http://www.dpac.tas.gov.au/divisions/csr/sportrec/funding_opportunities/major_grants));

Individual sporting clubs and community recreation groups work to with their State peak bodies to seek funding under the State Grants Program administered by Communities, Sport and Recreation.

**3. Providing funding is available for the project, MVC to take a lead role in facilitating the staged implementation of the Deloraine and Districts Recreation Precinct.**

INITIATING ACTIONS AND RESPONSIBILITIES:

MVC to agree on a staged implementation process to match sourced funding.

MVC to engage suitably qualified professionals to undertake design, construction documentation and cost estimates for the Stage 1.

MVC to seek development approval for the proposed Stage 1 works.

MVC to seek tenders for approved works.

MVC or appointed Project Manager to oversee the works.

MVC to continue seeking funding support for the implementation of other stages of the project.

**ATTACHMENT A**  
**CASE STUDIES**



## INTERSTATE COMMUNITY HUB CASE STUDIES

### Cockburn Regional Centre, Western Australia



The most recent, and arguably the most grandiose, example of a consolidated community hub of infrastructure and services is the Cockburn Central West Regional Physical Activity and Education Centre in Western Australia.

This development includes the following key features:

a six-court, multi-sport indoor sports stadium;

specialist community facilities, including crèche, birthday party room, indoor play centre and meeting and function rooms;

fully equipped gym and separate studios for fitness, mind and body and spin;

café;

aquatic Centre including

- Four waterslides
- Eight-lane, 25-metre indoor heated pool
- 50-metre outdoor heated pool
- Three specialty pools: warm water, learn-to-swim and interactive water facilities, including three world-class water slides
- Hot spa, sauna and steam room
- Hot and cold recovery pools (not open to general public, for use by FFC only)

- Change facilities catering for families, schools/group entry and people with a disability

multi-sport rectangle fields catering for rugby, soccer and a variety of junior sport;

two elite AFL training fields being Fremantle Football Club's new professional permanent training facilities;

aquatic recovery and hydrotherapy pools, an altitude chamber and indoor running track offer first class facilities for elite footballers; and

educational components include a lecture theatre, health and wellness consulting suites, sports medicine facilities and multi-media rooms.

The project integrates elite sport, community and educational facilities into one large complex with one central management responsible for the tenancy arrangement with the Fremantle Football Club, sporting clubs and the education tenant.

### **Boroondara Sports Complex, Eastern Melbourne**

Another example of bringing sport and recreation facilities and community services together is the Boroondara Sports Complex, which shares its integrated site with Gordon Barnard Reserve and the Balwyn Library. The site was previously an example of disjointed facility provision which had no planned relationship or amalgamation. There were stand-alone ovals with distant amenities, a leisure centre (now the library), swimming pools and a stadium all operating without any relationship to one another.

Now with an effective Master Plan of the total precinct there is obvious linkage between all aspects, complimentary activity and combined provision of programs and services across the site.

The works completed to integrate the facilities included the following:

re-development of the two main ovals with the building of a two-way pavilion clubhouse between the two Ovals which services activities on both ovals and provides for meetings and functions on non-sport days;

a new Sports Complex which brings together the aquatic facilities, multi-sport indoor sports stadium, and gymnastics. - the programs and activities originally accommodated at the Balwyn Leisure Centre have also been transferred to the new Sports Complex, and the original Leisure Centre is now the site of the Balwyn Library;

community spaces, a crèche, flexible program rooms, and a Café are also provided within the Sports Complex; and

the open space has been reconfigured to provide areas of informal recreation and play, and pathways have provided obvious links between the various components of the site.

### **Manning Community Hub, City of South Perth**



The Manning Community Hub facility was developed with Council's underlying objective being to create a new 'heart' for Manning and provide the community with a vibrant, connected and attractive precinct integrating community services, sporting and social activities.

The development includes the relocated Manning Library, a community hall, Manning Child Health Clinic, Moorditj Keila Aboriginal Group, a sporting clubroom to house the Manning Rippers Football Club and an early years' centre which is the home of the Manning Toy Library and a new Manning Playgroup association.

The Manning Community Hub was developed with Council's aim being to deliver the following benefits and features for the local community:

sustainable, modern and multipurpose spaces for groups and community use;

an integrated open space with pedestrian orientated development, with linkages between the oval and the Community Centre;

design that activates the area and encourages passive surveillance, based on the principles of crime prevention through environmental design;

the provision of family orientated services in one location;

economic development and investment and employment opportunities for the local community;

opportunities for public art and the inclusion of Aboriginal culture and local heritage creating a vibrant cultural precinct; and

seventy-five bay basement level car park, which maximises the opportunity for public open space and waterwise landscaping at ground level.

Similar to Meander Valley this project was initiated by the City of South Perth in response to studies undertaken demonstrating that the existing community facilities were ageing and reaching the end of their life.

There are many other working examples including Kyneton Sports and Aquatic Centre and the Hume Regional Tennis and Community Centre, successfully delivering integrated sport and community programs and services within the one site.

It is evident that the ultimate success of these developments is determined by careful planning specific to the needs of that community, followed by detailed and documented agreements between all parties involved.

## **TASMANIAN SPORT AND RECREATION CASE STUDIES**

### **Kingborough Sports Centre**

The Kingborough Council had the vision to acquire land off Summerleas Road in Kingston for the future development of regional and municipal sporting and recreation facilities. The Kingborough Sports Centre (KSC) was opened in 1979 and considered to be one of the best regional sporting facilities in Australia at the time. The population of Kingborough was 35,833 in 2016.

The main centre had a four-court indoor stadium, gymnastics centre, fitness centre, squash courts, table tennis centre, netball courts and sauna facilities. The centre offered a comprehensive range of sports and recreational activities including fitness programs, basketball, volleyball, indoor cricket, martial arts, indoor soccer, squash, badminton, netball, table tennis, tennis, gymnastics, dance, school and vocational care programs.

A number of sporting and recreational clubs utilise these facilities and also other sporting and recreational facilities that have been developed at the site – this includes tennis, netball, soccer, cricket, football, croquet, little athletics, sea scouts, dog obedience training and radio car control activities.

In 1999, the Tasmanian Football League granted a licence for the formation of the Southern District Football Club in the statewide competition. This decision was a catalyst for assessing the sporting facilities required to participate at the highest level of competition in Tasmania, given the recognised inadequacies of the Kingston Beach Oval to serve this role. A Southern Community Sports Grounds Task Force was formed and an initial concept design and pre-feasibility assessment were undertaken for new sportsground facilities to be located on land near the Kingborough Sports Complex.

A joint submission from local sporting clubs led to Council initiating a review of the needs and requirements for new sportsground facilities within the Kingborough urban area. The review recommended that two new sportsgrounds be developed at the Kingborough Sports Centre site.

In 2004, the Department of Education indicated the desire to replace the existing Kingston High School with a new modern complex located within the Kingborough Sports Centre site. The Education Department contributed \$1.1m towards the development of Council's new indoor stadium and agreed to make use of Council's sporting and recreation facilities at the site. A new State Gymnastics Centre was constructed as part of the main centre with funding support from the Commonwealth and State Governments.

In 2008 Council applied for funding under the Australian Government economic stimulus package to allow for construction of the ovals, basic spectator and player amenities, surrounding fences, access road, car parking and landscaping. The submission was supported with funding from the AFL towards player and spectator amenities. The application was successful and site works commenced in mid 2009. Funding was granted by the State Government to support the construction of the player/spectator/club facilities.

In November 2008, Council engaged consultants to prepare a preliminary concept plan for the Kingborough Sports Centre site. The plan was to assist Council in guiding the overall planning and development of the site given work commencing on the new stadiums, twin ovals and the \$30M Kingston High School projects. The focus of the master plan was on reviewing and resolving some of the more immediate pressures arising with the current developments – the detailed design of the twin ovals, car parking and access arrangements, amenity, landscaping, stormwater management, public safety and new activities (e.g. mountain bike riding trails).

Whilst funding for capital works was met by government grants and Council<sup>24</sup>, the master plan indicated works to improve access (e.g. roads, car parks, signage, shared trails), sustainability (e.g. water sensitive design) and improved landscape and amenity (e.g. soft and hard landscaping). The cost estimates for these works was \$4.4M including site preparation, preliminaries and contingency.



<sup>24</sup> A total of about \$7M from governments including \$1m from Council and 0.5M from the AFL. This does not include the State Gymnastics centre or the Education Department costs for indoor stadiums.

## **Wynyard Sports and Community Precinct (Wynyard)**

The Council commissioned the preparation of a master plan in 2009 to indicate the best way to develop a community sporting and recreation precinct in Wynyard. The population of Warratah -Wynyard municipality was 13,855 in 2016 with Wynyard having a population less than 5000.

The master plan recommended:

integrating the Wynyard Recreation Reserve with the site occupied by the indoor stadium, community gardens, car parking, squash, tennis and band hall, outdoor sports facilities at the High School and the surrounding areas;

creating attractive outdoor social areas and entryways to the precinct and to built facilities;

open the overall precinct for wider community access and attract wider uses through pathways and fence removals;

providing upgraded lighting for the main sports field and if warranted, for the southern school oval;

providing lit pathways into and through the precinct;

providing a perimeter training track around the school playing fields;

relocating, expanding and servicing the tennis courts;

creating a public plaza/ courtyard area which links and integrates the built facilities within the precinct;

linking the precinct to other community and public assets within Wynyard, most notably, the river, other parklands and the town centre;

providing adequate public parking, including provision for accessible parking, taxi and bus drop-off areas;

providing outdoor social, seating, picnic and barbeque areas;

providing a substantial children's play facility;

optimising the role of natural features and open areas in the precinct;

reserving land for future additions and extensions to the outdoor and indoor opportunities to be provided; and  
 creating a safe public environment that adds to the quality and attractiveness of central Wynyard.



Wynyard Sporting Precinct Master Plan  
 HM Leisure Planning/Inspiring Place/Suters Architects, December 2009

The above recommended works in the precinct were costed at some \$27M.

A review of the master plan was undertaken in 2017 and recommended the following changes:

- moving Wynyard Cricket Club to the football ground;
- joint development of the High School land for sport;
- consolidation of indoor facilities in the precinct;
- redevelopment of the recreation/football ground;
- ongoing development of lawn bowls; and
- purchasing land to allow for further development of precinct.



## Penguin/Dial Range Sports Centre

The population of Penguin was 3,819 in 2016 and the Central Coast municipality population was 21,362.

The past development of Dial Range Complex included the following facilities:

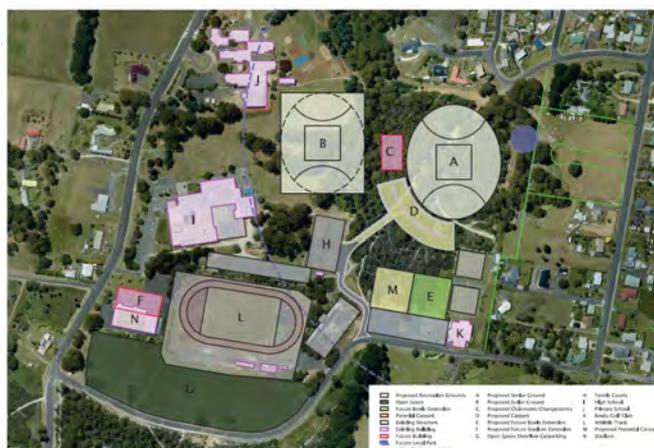
- Penguin Regional Athletics Centre (the only all-weather track in North-West Tasmania);
- Penguin tennis courts;
- indoor sports centre;
- wood chopping centre;
- Penguin Sports & Services Club and associated car park;
- lawn bowls facilities;
- golf course (nine hole) and cross country track that circumnavigates the course; and
- overflow car park/grassed area.

In 2012, the Central Cost Council completed an Open Space and Recreation Plan 2012-2022 which identified that a number of under-utilised and problematic grounds were due for major asset upgrades and/or replacement in the short to medium term. It also identified that replacement of these assets would not provide the same benefits as redirecting those funds to improving or establishing new grounds that do not face the same constraints.

The Plan concluded that relocating the users and facilities of some grounds including Penguin Recreation Ground, to a preferred location will sustainably meet a variety of sport and recreation activities over the long-term.

The Dial Regional Sports Complex Master Plan was developed in 2013. It identified that its development can integrate current users of Penguin Recreation Grounds with existing users of Dial Regional Sports Complex to increase the standards available for these sporting codes and their spectators. The development would also provide improved facilities and opportunities for several other potential sport, recreation and community users to meet the growing needs of the area.

Attachment 3 – Dial Sports Complex Master Plan (Diagrammatic Layout)



The indicative costs were:

Redevelop and resurface the Penguin Regional Athletics Centre	\$1,053,000
Construct recreation grounds and associated amenities (short to medium term e.g. 4–6 years), including additional car parking and new entrance off Recreation Drive	Between \$4,870,000 – \$6,670,000 depending on final scale and scope
Tennis courts – retain in current location	N/A
Wood chopping centre – retain in current location – maintain as per the existing forward works program	\$2,000/annum
Former hockey grounds – develop a dedicated off-leash dog exercise area and retain overflow parking	\$5,000
Indoor sports centre - provision for extension subject to need	\$5,000,000
Penguin Sports & Services Club – preserve space for future development of existing building and proposed indoor bowling green	N/A
Add new playground, shared paths/social spaces (developed as available funding permits)	\$50,000 playground \$30,000 tracks and trails

The first stage was to:

establish Penguin Regional Athletics Centre Project Team and Reference Group;

finalise/commence implementation of the Penguin Regional Athletics Centre Redevelopment;

establish Dial Sports Complex Master Plan Project Team and Reference Groups; and

commence detailed planning and scoping phase.

The cost estimates for the redevelopment of the Penguin Regional Athletics Centre was around \$1M and the preliminary costs estimates for the Dial Range Complex was \$4.8M (single storey clubrooms) - \$6.6M (double storey clubrooms).

The Central Coast Council commenced construction of two sports ovals, and associated facilities at the Dial Regional Sports Complex.



**ATTACHMENT B**  
**FEASIBILITY BUSINESS PLAN**



# Meander Valley Council

## Deloraine & Districts Recreation Precinct Feasibility Study

# FEASIBILITY BUSINESS PLAN

## Final Report

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January 2018

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# 1. Study Background

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## 1.1 INTRODUCTION

Meander Valley Council, together with its community are considering the possibility of developing a new integrated sports and community precinct, proposed to be located at the existing Deloraine Community Sports Complex, Deloraine. This Feasibility Study has been commissioned to explore the appropriateness of the site, present potential development scope and design options, and outline the likely capital and ongoing operational costs of the proposed development.

This Study has been commissioned by Council, and precipitated by the Deloraine Sport and Community Precinct Working Group, comprising a range of sports club representatives and community stakeholders.

Inspiring Place was commissioned to prepare the study, with DWP Architects and Montemare Consulting. Montemare Consulting's role amongst the project team was to prepare the feasibility business plan. Background Research, Stakeholder Consultation, Site and Technical Review and Concept Design Development has been prepared by Inspiring Place. DWP assisted with the preparation of concept design for Indoor sport and community facility components.

This report summarises the findings of the feasibility business plan and includes:

- Needs and Demand Analysis
- Development Scope
- Staged Development Planning
- Capital Cost Planning
- Financial Planning, including operational and Whole of life cost planning
- Development Scenario Options Analysis

This report should be read in conjunction with the Inspiring Place report, which includes Background Research and Consultation, Concept Design Development Options, prepared with DWP and Project Recommendations.

## 2.Demand & Needs Analysis

---

## 2.0 INTRODUCTION

Background Research, Market Research and Stakeholder Consultation for the study, has been prepared by Inspiring Place. This Section should be read in conjunction with the Inspiring Place Market Research and Stakeholder Consultation findings.

This Section provides a summary of the outcomes of this research, plus additional research undertaken by Montemare, with the express purpose of identifying future market demand, needs and requirements, opportunities and constraints to guide facility development scope, business and operational financial planning for the proposed Deloraine Sport and Community Precinct.

It includes a summary of

- Key Demographic Trends
- Size of Potential Market
- Future Needs and Requirements
- Sport, Leisure & Community Activity Demand Projections

## 2.1 KEY DEMOGRAPHIC TRENDS

The key demographic trends for Meander Valley indicate:

- The proposed Deloraine Sport and Community precinct indicate the precinct is likely to have a primary catchment of approximately 10,000 persons, encompassing the Deloraine and surrounding townships, west of Westbury.
- This catchment is likely to remain static over the foreseeable future.
- Whilst the population is expected to age, Deloraine's larger family profile, is likely to see higher participation and demand for "family friendly" programmes and services.
- Similarly, Tasmanian population trends indicate, whilst the Tasmanian population is aging, there are also likely to be more people in their middle years. Societal trends are seeing more people active longer, translating to higher participation rates in passive recreation and indoor based activities. Therefore, in the future an aging, does not necessarily mean lower demand - it's just changing.

## 2.2 SPORT AND RECREATION PARTICIPATION TRENDS

National Sport and Recreation Participation Survey's Indicate:

- Approx. 65% of Australians participate in some sort of active recreation or sport activity regularly.
- Older people, females, Aboriginal and Torres Strait Islanders and people from NESB are less likely to participate,
- Children, young people and adult males are likely to participate at higher rates.
- The most popular & highly participated activities are active recreation activities:
  - Walking
  - Fitness/Gym/Yoga/Pilates

- Running/Jogging
  - Cycling/MTB/BMX
  - Swimming/Aquatics
- Children participate at greater and more regular rates than the adults in Sport. The most popular & highly participated activities for children are:
- Soccer
  - Dance
  - Swimming
  - Netball
  - Basketball
  - AFL
  - Tennis

These trends, **in both Sport and Recreation** should be taken into consideration when planning for future facilities and services at the Deloraine Sport and Community Precinct.

### **Long-term Competitive Sport Trends**

Newly released sports participation data from Roy Morgan Research show that just one in five Australians now regularly play competitive sports, down from 27% just 16 years ago, and that many sports have experienced participation declines of in excess of 60% since 2001. The research shows, that whilst approximately two thirds of Australian still regularly participate in a sport, recreation or leisure activity, over the past 15 years more Australians are walking for exercise, jogging, cycling, gymming and participating in yoga - but fewer are playing most of the 27 competitive sports shown in the table below.

		Number of Regular Participants		
		2001	2016	Change
1	Soccer	428,000	623,000	46%
2	Golf	814,000	621,000	-24%
3	Tennis	711,000	463,000	-35%
4	Basketball	422,000	438,000	4%
5	Cricket	418,000	377,000	-10%
6	Martial arts	281,000	321,000	14%
7	Netball	414,000	315,000	-24%
8	Australian Rules football	256,000	253,000	-1%
9	Lawn bowls	312,000	233,000	-25%
10	Darts	238,000	232,000	-3%
11	Pool/Snooker/Billiards	680,000	213,000	-69%
12	Athletics/Track & field	158,000	173,000	9%
13	Table tennis	187,000	170,000	-9%
14	Volleyball	177,000	160,000	-10%
15	Badminton	103,000	141,000	37%
16	Field hockey	156,000	129,000	-17%
17	Rugby League	175,000	127,000	-27%
18	Ten Pin bowling	318,000	122,000	-62%
19	Rowing	73,000	118,000	62%
20	Gymnastics	108,000	101,000	-6%
21	Softball	104,000	79,000	-24%
22	Triathlons	52,000	67,000	29%
23	Baseball	49,000	61,000	24%
24	Squash	178,000	59,000	-67%
25	Ballroom Dancing	99,000	55,000	-44%
26	Rugby Union	148,000	55,000	-63%
27	Archery	35,000	50,000	43%
<b>TOTAL</b>		<b>4,211,000</b>	<b>3,937,000</b>	<b>-7%</b>

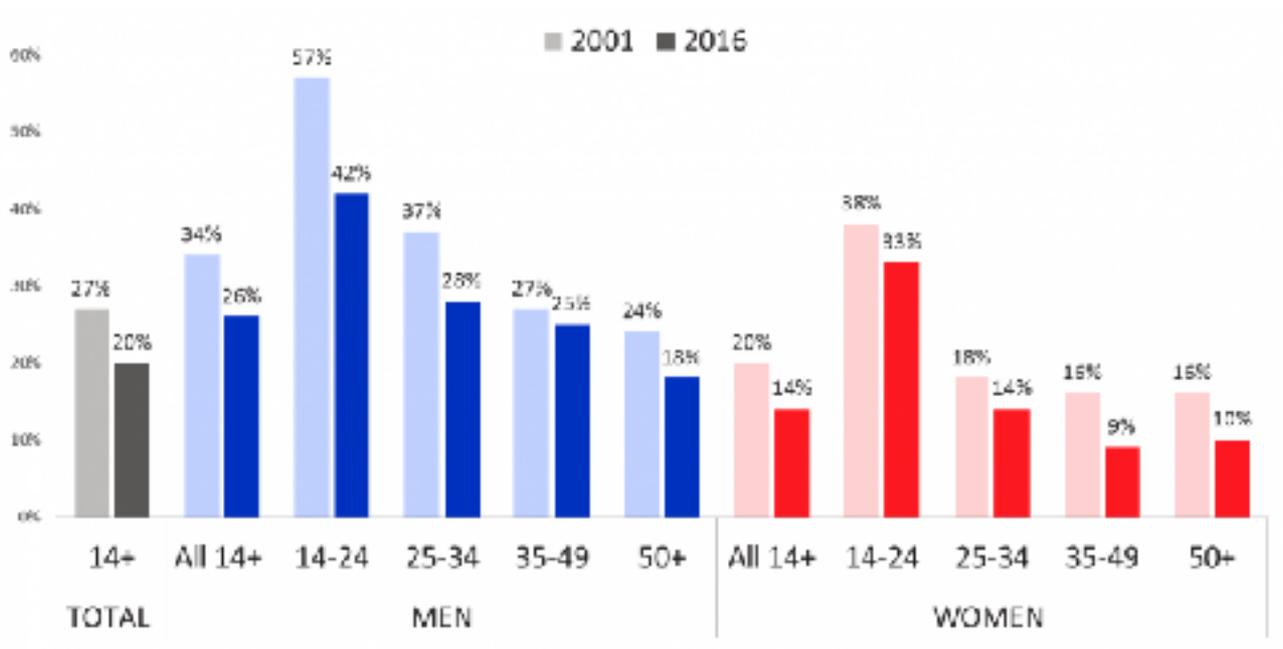
Source: Roy Morgan Single Source Australia. Base: Australians aged 14+, January to December 2001 (sample = 26,198) and January to December 2016 (sample = 14,330).

Only a third of the competitive sports monitored in the survey (60 in total) have gained regular participants since 2001 (and only five beat the national population growth of 26% over the period).

The research found the key growth sports over the last 15 years have been Football (soccer) up 46% to 623,000 regular participants, rowing (up 62% to 118,000 regular participants), badminton (up 37%), triathlons (up 29% to 67,000) and archery (up 43% to 50,000).

The only other competitive sports that gained regular participants over the period (although not quite enough to exceed population growth) are basketball (up 4% to 438,000), martial arts (up 14% to 321,000), athletics or track and field events (up 9% to 173,000), and baseball (up 24% to 61,000).

While Australia has an ageing population, the decline in competitive sports participation is apparent across all age groups - and both sexes. Participation rates among men and women in most different age groups have shrunk by well over 20%. Sport is losing men and women of all ages as the following graphic details.



Source: Roy Morgan Single Source Australia. Base: Australians aged 14+, January to December 2001 (sample = 26,198) and January to December 2016 (sample = 14,330).

## 2.3 SPORT & LEISURE DEMAND ANALYSIS

The latest ABS National Sports and Recreation Survey indicates the following levels of “regular” participation in the top sports club based activities. Regular participation indicates weekly or more participation across a season.

Club sport (Adults and Children combined) Top activities	Population estimate	Percent of population	Percent of club sport population
Football	1,000,900	4.7%	16.0%
Golf	606,717	2.6%	11.9%
Australian football	695,627	2.6%	11.0%
Netball	625,721	2.6%	10.8%
Tennis	588,751	2.4%	10.1%
Cricket	562,660	2.3%	9.7%
Basketball	530,311	2.0%	9.2%
Touch football	271,628	1.1%	4.7%
Swimming	207,090	1.1%	4.0%
Rugby league	247,000	1.0%	4.3%
Athletics, track and field	230,004	1.0%	4.1%

Similar data has been produced for many other organised leisure activities such as health & wellness activities, dance and mixed martial arts (MMA), which the team have reviewed and extrapolated in future demand projections.

As a guide to potential future demand for various sport, health & wellness and leisure activities that could be offered at the proposed precinct, the consultant team have compared these National participation data with local membership/participation data and indicated opportunity for market development and growth.

The results are summarised in the tables below:

### Outdoor sports field based sports

SPORT	CURRENT PARTICIPANTS	CLUB ESTIMATES +5 Yrs	NATIONAL PARTICIPANT INDICATOR (NOW/FUTURE)	POTENTIAL FOR GROWTH	TARGET @ YEAR 5	% GROWTH
AFL	230	310	260	-	310	35%
Cricket	0	N/A	230	++	60	N/A
Soccer/ Futsal	54	100	450	+++	105	51%
Athletics	50	80	100	+	80	60%
Touch/Rugby	0	N/A	210	++	0	0%

Note: Includes regular sport club users only. Excludes other potential sports/emerging sports (eg. Touch, Baseball, Ultimate Frisbie, Five-a-side, PT).

### Indoor Sports and Activities

SPORT	CURRENT PARTICIPANTS	CLUB ESTIMATE +5 Yrs	NATIONAL INDICATOR (NOW/FUTURE)	POTENTIAL GROWTH	TARGET @ YEAR 5	% GROWTH
Basketball	623*	600	220	-	420	35%
Netball	43	80	260	++	100	N/A
Soccer/Futsal	0		450	+++	100	51%
Badminton	115		60	-	100	-13%
Squash	45	45	24	-	45	0%
Gymnastics			100	++	50	50% Potential Market
Health/Fitness & Wellness			3900	+++	500	15% Potential Market
Mixed Martial Arts	9	15	90	++	50	55% Potential Market
Dance			140	++	70	50% Potential Market

\*Note: Current Basketball Membership is comprised of 203 juniors and 420 seniors. These members are competition based members only, not year round members. Future estimates and National Indicators represent annualised memberships.

The results indicate:

- A strong base of existing regular participants in key sports for which facility improvements are being considered such as AFL, Basketball, Badminton and Squash, with these sports currently attracting at or above national sports average participants.
- Substantial opportunity for growth in key Indoor and Outdoor Sports that currently do not have access to facilities in the Deloraine area (ie appropriate facilities do not exist), or cannot access facilities due to a lack of availability at suitable times/locations, due to high levels of usage and demand from other sports/activities.
- Key Indoor and Outdoor sports, recreation and leisure activities where growth could occur if appropriate facilities provided include:
  - Soccer
  - Futsal
  - Netball
  - Cricket
  - Rugby/Touch
  - Gymnastics
  - Health & Wellness
  - Dance
  - MMA

## 2.4 SUMMARY KEY FINDINGS

The demand analysis indicates the following key trends should be taken into consideration when planning for the future of Deloraine Sports and Community Precinct:

### Indoor Sport & Activities

- National sport club participation data indicates demand for court based sports including Basketball, Netball and Soccer/Futsal are on the increase.
- A number of these high participant high growth sports are currently under represented in the Deloraine Sport and Community Complex.
- There is potential growth in the indoor court market, particularly with respect to Soccer, Netball and Gymnastics.
- Consultation with State sporting bodies and clubs confirms trends locally.
- Demand for dance/MMA, health & fitness and wellness programming is also high. These activities should be prioritised in future scope.

### Outdoor Sport & Activities

- National participation data indicates demand for Soccer and a number of other outdoor sports is on the increase, particularly due to women's participation.
- A number of high participant high growth outdoor sports are currently under represented.
- There is potential to increase usage of outdoor playing fields,
- Priority should be placed on improving the quality/capacity of fields, multi-use configuration and appropriate support amenities to support women's participation.

### Passive Recreation & Community Needs

- Demographic trends indicate a need to provide social, gathering and recreational spaces that are both attractive to older people, as well as young people and that are "family friendly".
- Priority should be placed on provision of flexible multi-use indoor programme spaces to cater for diverse and changing needs, indoor/outdoor passive areas and play spaces.
- Proximity to local schools and range of sports programmes on offer in a community hub/precinct setting open up opportunities for Children's OOSHC services.
- Connectivity to public transport and active transport routes to facilitate walking/running/cycling etc will be important to both meeting future needs for passive recreation and facilitating high use of the centre.

### Design Issues

- Multi-purpose, flexible and scalable design to enable facility programming to change over time with customer preferences and demand.
- Designed to enable staged development approach.

**3.**

**Development Scope**

---

### 3.1 INTRODUCTION

This section provides the priority development scope and potential staged development scenarios for the proposed Deloraine Community and Sports Complex. The priority development scope, or masterplan, is the culmination of the background review, market research and stakeholder consultation undertaken by the consultant team during the course of this and previous studies.

The section includes:

- Future Development Direction
- Priority Facility Components
- Potential Development Staging Scenarios
- Capital Cost Estimates

### 3.2 FUTURE DEVELOPMENT DIRECTION

The background and market research and consultation indicated overwhelming support the development of “high quality and integrated community, sports and leisure facilities, catering to local community and broader LGA needs”.

This would be subject to more detailed analysis, design and development planning, as well as capital cost and business feasibility studies.

The following aims have been developed to guide the future precinct and facility development:

Council’s aim in providing community, sports and leisure facilities is:

- To meet the needs of current & future Deloraine and broader LGA community, including sports, recreation, leisure, community and cultural focussed markets;
- To encourage high levels of participation in sport, leisure and community activities, and thus promote health & wellbeing;
- To encourage economic development through the attraction of local and regional events.
- Ensure viable and sustainable facility provision and operations.

### 3.3 FUTURE DEVELOPMENT MASTERPLAN

The proposed Deloraine Community and Sports Complex will provide for local community, sport and leisure activities and competitions, and may attract regional or State events on an occasional basis. It will also provide community cultural, health and wellness programmes, meeting/conference, social and events spaces.

The project steering committee have developed a 10 year masterplan for Councils' consideration to meet the future community, indoor and outdoor sports, leisure and community facility provision aims & objectives.

The masterplan, comprises the following priority facility components and scope. The priority components are proposed subject to favourable design, business & operational feasibility, acceptable and achievable, planning & development assessment & capital costs;

#### Indoor Community, Sport and Programme Spaces

- 3 x Indoor Multi-Sport Courts (including 2 existing indoor courts)
- Spectator Seating (flexible temporary seating, up to 1,500 persons)
- 2-3 x Squash Courts
- Multi-Use Program Rooms/Health & Wellness Spaces
- Club Rooms/Meeting/Conference Facilities
- Entry, Café, Retail and Social Spaces
- Supporting Amenities

#### Outdoor Sports and Openspaces

- 1 x Full Size Multi-Sport Playing Field (AFL/Cricket, 2 x Rectangular, Athletics)
- Spectator viewing areas (indoors, outdoor perimeter and mounded seating areas)
- 1-2 x Training/Modified Sports Playing Field
- 1-2 Outdoor Multi-Sports Courts (integrated with outdoor plaza spaces)
- Outdoor Openspace Areas – Playspaces, Outdoor plaza's, trails & linkages and greenspace
- Carparking and Access areas

The masterplan, includes the upgrade and integrations with the existing Deloraine Community Sports Complex as far as practical, as well as new build facility components as required.

A summary of the proposed priority facility components/elements and nominal area allocation requirements is provided in the preliminary facility scope brief below.

AREA	COMPONENT	ESTIMATED SQM
<b>Indoor Sports Courts</b>	3 x Multi-Sport Courts (includes 2 existing)	2,400
	2-3 x Multi – Use Squash Courts (moveable walls)	200-300
	Spectator Seating – Showcourt & General per court	TBD
<b>Game Support</b>	Umpires Rm's, First Aid/Testing, Media & Comm's, Team Change/Amenities	Incl
<b>Health/Wellness Programmes</b>	Martial Arts/Dance Studio	Incl
	Health/Fitness/Wellness	580
<b>Clubroom/Meeting/Function Space</b>	Multi-Purpose Function/Meeting/Programme Room(s)	610

AREA	COMPONENT	ESTIMATED SQM
	Café/Catering Kitchen/Bar	Incl
	AFL/NETBALL Clubrooms	Incl
	Outdoor Entertainment Deck/BBQ Area	Incl
<b>Lease Area</b>	Clubs/Associations Office	TBD
<b>Amenities</b>	Game Support, Corporate/Function/Programme, Administration, Public Amenities/Change	410
<b>Front and Back of House</b>	Entry Foyer/Social Areas, Reception/Centre Management, café/retail	300
	Plant, Deliveries, Storage, Circulation & Lifts, Cleaning/Presentation	300
	Total	4,200
<b>Carparking &amp; Access</b>	Minimum 150 carparks	4,500
<b>Outdoor Space</b>	Entry/Exit Plaza, Outdoor Sport Court/Event Areas, Children's Play Area/Expansion, Youth/Casual Play Spaces	12,900
<b>Outdoor Sports</b>	1 x Full Size Multi-Sport field (AFL/Cricket, 2 x Rectangular pitch, Athletics)	47,000
	1 x Training Playing Field (includes existing school ground)	TBD
	1 x Outdoor Multi-Sports Court & sports training space	Incl. Outdoor Space
	Clubrooms	Incl.

The expected total indoor community, sports and health and wellness built areas is approximately, 4,000 sqm (minimum). Outdoor sports fields and courts and outdoor spaces is approximately 60,000 sqm, with additional 8,000 sqm of access and carparking area. The exact allocation of outdoor areas/openspaces will be determined through the design process.

### Future Expansion Zones

Likely facility components and areas that may require expansion, subject to future demand and feasibility analysis include:

- Additional indoor multi-sport courts,
- Multi-use programme space, and
- Outdoor sports training fields.

Precinct spatial planning and conceptual design should allow for future expansion in these areas.

A more detailed facility brief is provided in Appendix 1.

## 3.4 CAPITAL COST ESTIMATE

The project architects DWP Architects have commissioned Turner & Townsend Quantity Surveyors to develop a pre-design capital cost estimate for the priority development concept masterplan

layout plan to provide guidance to the project team until a preferred development scenario was identified.

Towner and Turner has completed a preliminary order of cost estimate, which is presented below. The estimate is based on 2017 construction timeframe and based on the initial functional brief and layout concept plans.

It includes all building works, services, professional fees and a contingency. Building rates apply to the foot print of the building only.

It excludes the following:

- GST
- Loose Fittings & Furniture
- Remediation of any contamination or remediation of existing ground
- Land, holding & interest charges
- Finance & Legal Costs
- Works to surrounding roads
- Works associated with heritage items or protected flora and fauna
- Relocation of existing underground/overhead services
- Unknown Site conditions/excavations in rock
- Works outside of those identified on the plans
- Escalation beyond December 2018

This cost estimate is detailed in the following tables.

AREA	COMPONENT	EST. SQM	E S T CAPEX
<b>INDOOR COMMUNITY, SPORT AND PROGRAMME SPACES</b>			
<b>Indoor Sports Courts</b>	3 x Multi-Sport Courts (1 new court only)	850	\$2.36
	3 x Multi – Use Squash Courts (moveable walls)	250	\$0.7
	Spectator Seating – Showcourt & General per court	TBD	\$1.8
<b>Game Support</b>	Umpires Rm's, First Aid/Testing, Media & Comm's, Team Change/Amenities	Incl	\$1.2
<b>Health/Wellness Programmes</b>	Martial Arts/Dance Studio	Incl	
	Health/Fitness/Wellness	580	\$1.6
<b>Clubroom/Meeting/Function Space</b>	Multi-Purpose Function/Meeting/Programme Room(s)	610	\$1.69
	Café/Catering Kitchen/Bar	Incl	
	AFL/NETBALL Clubrooms	Incl	
	Outdoor Entertainment Deck/BBQ Area	Incl	
<b>Lease Area</b>	Clubs/Associations Office	Incl	
<b>Amenities</b>	Game Support, Corporate/Function/Programme, Administration, Public Amenities/Change	410	\$1.133

AREA	COMPONENT	EST. SQM	E S T CAPEX
<b>Front and Back of House</b>	Entry Foyer/Social Areas, Reception/Centre Management, café/retail	300	\$0.83
	Plant, Deliveries, Storage, Circulation & Lifts, Cleaning/Presentation	300	\$0.783
	Total Construction Costs	4,200	\$12.1M
	+ Locality Allowance (7%)		\$0.85
	+ Contingency Allowance (20%)		\$2.59
	+ Professional Fees (8% Construction, Locality, Contingency Costs)		\$1.24
	+ Authority Fees (1% Construction Costs)		\$0.13
	<b>TOTAL INDOOR FACILITIES</b>		<b>\$16.91</b>
	Including Escalation (3%)		\$17.42
<b>OUTDOOR SPORTS AND OPENSACES</b>			
<b>Carparking &amp; Access</b>	Minimum 150 carparks	4,500	\$0.7
<b>Outdoor Space</b>	Entry/Exit Plaza, Outdoor Sport Court/Event Areas, Children's Play Area/Expansion, Youth/Casual Play Spaces	Allowance	\$2.3
<b>Outdoor Sports</b>	1 x Full Size Multi-Sport field (AFL/Cricket, 2 x Rectangular pitch, Athletics) + perimeter access and carparking	26,000	\$2.2
	Main field perimeter access and carparking	11,000	\$0.8
	1 x Training Playing Field (includes existing school ground)	9,000	\$0.5
	Clubrooms	Incl. in Indoor	
	Total Construction Costs		\$6.5
	+ Locality Allowance (7%)		\$0.46
	+ Contingency Allowance (20%)		\$1.4
	+ Professional Fees (8% Construction, Locality, Contingency Costs)		\$0.67
	+ Authority Fees (1% Construction & Locality Costs)		\$0.07
	<b>TOTAL OUTDOOR</b>		<b>\$9.1M</b>
	Including Escalation 12 Months (3%)		\$9.37

The total capital cost estimate is \$26.8 Million, allowing for a 12 month escalation, comprising:

<b>Indoor Community, Sport, Health &amp; Wellness Components</b>	<b>\$17.4 M</b>
<b>Outdoor Sports and Openspace Components</b>	<b>\$ 9.4 M</b>

**Total Capital Cost**

**\$26.8 M**

A more detailed cost estimate is provided in Appendix 1.

Note: The cost estimate includes 1 new indoor multi-purpose court only.

### **3.5 STAGED DEVELOPMENT SCENARIOS**

As it is unlikely the total masterplan would be able to be delivered in one development phase, the project steering committee have identified two potential staged development scenarios, to enable the masterplan to be delivered over a 10+ year time horizon.

The staged development scenarios consider the following key drivers:

- Priority community and sport needs
- Technical feasibility,
- Operational feasibility and impacts,
- Capital funding availability
- Enabling Factors
- Risk Factors

The two scenarios are as follows:

- **Scenario Two – Prioritises Indoor Sports, Community Health and Wellness**
- **Scenario Three – Prioritises Outdoor Sports and Club Facilities**

The main difference between Scenario Two and Three is the prioritisation of Indoor facility components, versus outdoor sports components respectively.

Scenario One represents the full scope of the masterplan (as presented in Section 3.3) delivered in one development phase.

The key components, likely development timing and associated capital costs of Scenario's 2 and 3, are summarised in the following table.

Note: Please refer to Section 3.3 Masterplan for more detailed description of each element/ component.

DEVELOPMENT PHASE	SCENARIO TWO		SCENARIO THREE	
	ELEMENT/COMPONENT	CAPEX*	ELEMENT/COMPONENT	CAPEX*
Phase 1 (0-5 Years)	<ul style="list-style-type: none"> <li>- Indoor Sports Courts (Multi-purpose Sports Court, Squash Courts)</li> <li>- Game Support</li> <li>- Health &amp; Wellness</li> <li>- Front/Back of House</li> <li>- Amenities</li> <li>- Carparking &amp; Access</li> <li>- Outdoor Entry Plaza/Landscape Amenity Allowance (\$1M, includes better site access for schools &amp; outdoor netball/multi-use court)</li> </ul>	\$17.4	<ul style="list-style-type: none"> <li>- Indoor Sports Courts (Squash Only)</li> <li>- Main Outdoor Multi-Sport Field &amp; Perimeter Access</li> <li>- Club/Meeting/Function Space</li> <li>- Front/Back of House</li> <li>- Amenities</li> <li>- Carparking &amp; Access</li> <li>- Outdoor Entry Plaza/Landscape Amenity Allowance (\$1M, includes better site access for schools &amp; Outdoor netball/multi-use court)</li> </ul>	\$13.2
Phase 2 (5-10 Years)	<ul style="list-style-type: none"> <li>- Main Outdoor Multi-Sport Field &amp; Perimeter Access</li> <li>- Club/Meeting/Function Space</li> <li>- Outdoor Precinct/Landscape Allowance (\$1.5M)</li> </ul>	\$8.9	<ul style="list-style-type: none"> <li>- Indoor Sports Courts (Multi-purpose Sports Court Only)</li> <li>- Game Support</li> <li>- Health &amp; Wellness</li> <li>- Outdoor Precinct/Landscape Allowance (\$1.5M)</li> </ul>	\$12.2
Phase 3 (+10 years)	<ul style="list-style-type: none"> <li>- Secondary Outdoor Sports Field</li> <li>- Outdoor Precinct/Landscape Allowance(\$0.5m)</li> </ul>	\$1.4	<ul style="list-style-type: none"> <li>- Secondary Outdoor Sports Field</li> <li>- Outdoor Precinct/Landscape Allowance(\$0.5M)</li> </ul>	\$1.4

Note: \* Capital Costs represent current cost estimates and do not include escalation beyond 2018 at this stage.

The capital cost implications of each of the presented development scenarios, in the first phase of development (ie 0-5 years) is summarised below:

**Scenario One:                   \$26.8 M**  
**Scenario Two:                 \$17.4 M**  
**Scenario Three:               \$13.2 M**



## 4. Business Feasibility

## 4.1 INTRODUCTION

Detailed business and financial models have been developed projecting the financial performance for the proposed development masterplan (Staged Development Scenario 1), as outlined in Section 3 of this report.

Likely operating results for Development Scenario 2 (Prioritising Indoor Community, Sport and Health & Wellness) and Scenario 3 (Prioritising Outdoor Sport) have also been developed, at a high level of analysis, and summarised at the later stages of the Section.

The masterplan, comprises the following priority facility components and scope. The priority components are proposed subject to favourable design, business & operational feasibility, acceptable and achievable, planning & development assessment & capital costs;

### **Indoor Community, Sport and Programme Spaces**

- 3 x Indoor Multi-Sport Courts (including 2 existing indoor courts)
- Spectator Seating (flexible temporary seating, up to 1,500 persons)
- 2-3 x Squash Courts
- Multi-Use Program Rooms/Health & Wellness Spaces
- Club Rooms/Meeting/Conference Facilities
- Entry, Café, Retail and Social Spaces
- Supporting Amenities

### **Outdoor Sports and Openspaces**

- 1 x Full Size Multi-Sport Playing Field (AFL/Cricket, 2 x Rectangular, Athletics)
- Spectator viewing areas (indoors, outdoor perimeter and mounded seating areas)
- 1-2 x Training/Modified Sports Playing Field
- 1-2 Outdoor Multi-Sports Courts (integrated with outdoor plaza spaces)
- Outdoor Openspace Areas – Playspaces, Outdoor plaza's, trails & linkages and greenspace
- Carparking and Access areas

This Section summarises the business and management assumptions and financial operating results for the masterplan (or Development Scenario One), with particular focus on the Indoor Sports facility components. The main reason for this, is these components have the highest capital cost, are the most complex in management and operations, and present the greatest financial risk to Council if the business and management objectives are not achieved.

The financial projections have been developed using financial operating models designed for community precincts comprising facility components such as sport, leisure, arts & culture, events and education.

The model assumes the facilities will be managed on a more commercially orientated basis than is generally the case for traditional local government models. The business operating model recognises the need for Council to move towards financial self-sufficiency so that more resources can be directed toward other much needed community initiatives and programmes.

The financial projections exclude grant income, sponsorship or other volunteer/NGO resourcing at this stage. The purpose for the non-inclusion of these items is to identify potential operating results without cross-government-community subsidies.

When reviewing the financial projections, it should be noted that the financial modelling is based on the nominated list of components, functional layout plans and a notional opening year of 2021. More detailed financial modelling should be completed once a final facility development master and staged development plan is determined, detailed concept designs completed and an opening date set.

The operating financial models for each option are intended to highlight projected operating performance only.

They exclude:

- GST, Council Rates & Charges & Taxes
- Specific Operating Arrangements (ie Management and/or Lease Fees)
- Whole of Life Costs including Depreciation, Asset Maintenance and Renewal Costs, Cost of capital (shown below the line).

These items can be included once the final facility development plan, resourcing and finance strategy and development timeframes are set.

## 4.2 BUSINESS STRUCTURE

The precinct will see an integrated development model inclusive of the following key components:

- Indoor Multi-Sport Courts
- Outdoor Multi-Sports Courts
- Health, wellness and community programming
- Social Spaces/Café/Retail
- Clubrooms/Function/Meeting Spaces

For the purposes of the operating financial modelling we have assumed:

- The precinct will be **actively managed** by a **single operator** (Council or contract operator) and will benefit from the inherent management efficiencies of that structure.
- Sports Clubs will be hirers/anchor tenants of the precinct, not operators, and have priority access to sports fields/courts and club/social facilities as agreed in a timeshare arrangement.
- It is envisaged, Sports Clubs will continue to be able to hold club functions/events and activities, within their agreed arrangements with Council, to raise revenues to support club operations aligned to current activities.

Council may determine at some point in the future, that some elements (eg. Health & Wellness) could be operated via sub-lease with a straight lease and/or revenue share arrangement in place with the sub-lessor. This decision would be made subject to a review of operational needs and financial implications, and subject to market interest, at the time of decision.

## 4.3 BUSINESS & MANAGEMENT ASSUMPTIONS

This section outlines the key business & management assumptions and operating results for Option One, base case scenario, over a 10 and 30-year period.

### (i) Operating Hours

The base case financial model uses the following core business hours for management and staff rosters:

- Monday to Friday: 10am to 10pm

- Saturdays: 10am to 6pm
- Sundays: 10am to 6pm

The hours vary across the main facility components and areas depending on programming and events.

These have been set up as the minimum hours of operation. The staffing rosters allow for duty managers to staff the centre from 30 minutes before and after opening hours.

This sees average of 84 hours per week, open all year round, operating all days except Public Holidays.

Note: It is recognised operational hours could be extended beyond those core operating hours, however additional staffing and operating costs beyond these hours, at current projected levels of usage do not justify extended hours at this stage.

**(ii) Program Pricing & Hire Charges**

Programming and hire charges for key activities and programs are summarised in the table below. Pricing is largely aligned to existing pricing for programmes and services in the local area, although include marginal increases for time development lags and recognises new facility and service offering.

It should be noted existing pricing is low compared to comparable facilities, programmes and services elsewhere in the State.

It is likely pricing could be increased for non-core programs.

INDOOR STADIUM	TARGET @ YEAR 1 (BASE CASE)*
Schools	\$15/hr
Sports Competition – Peak	\$35/hr
Sports Competition – Off-peak	\$25/hr
Sports Training – Peak	\$25/hr
Sports Training – Off-Peak	\$20/hr
OOSHC	\$5/hr per pp
Gymnastics	\$8/per session/pp
Commercial Programming	\$80/hr
Health & Wellness	\$6 per session/pp or \$35 MM
Dance/MMA	\$12 per session/pp

Note: \*Approximate

**(iii) Management/Staffing**

Staff and management allowances are based on operating hours, level of use and statutory requirements and programs offered in the new facilities. Salary rates are based on industry average salaries and are impacted by 2% wage growth, above CPI allowance annually.

Currently the financial model in Year 1 allows for 4.6 EFT positions (Effective full time employed) as follows:

- Centre Management/Overheads 1.5
- Indoor Courts 1.5
- Health & Wellness/Multi-Use Program 1.6

**(iv) Usage Targets**

This Section identifies estimated program usage for each facility component area.

Average programme participant usage is expected at 173,000 per annum @ year 3, at base case. This usage target excludes non-programme based participations (Eg. competition/spectator based event targets, club based social activity targets) as these participations are either secondary visits or expected to be captured within club business activities, and therefore do not have a direct impact on the Centre business operating model.

The following provides a summary of usage estimates and targets, at Year 3 of operations, or at estimated mature business operations. Usage growth is based on global inputs of demand with allowances for new business establishment and then business consolidation.

These usage assumptions have been checked and validated against existing Sports Club membership and usage data, National participation data and other reviewed Leisure Centre's & Sports Precinct Business Performance to provide an average base case of transactions.

Please Note: Peak times are from 5.00pm until close.

SPORT	TARGET @ YEAR 5	TEAMS	% GROWTH EXISTING PARTICIPATION LEVELS
<b>INDOOR SPORTS/ACTIVITIES</b>			
Basketball	420	50-60	35%
Netball	100	10-12	N/A
Futsal	100	10-12	51%
Badminton	100	20-30	-13%
Squash	45	N/A	0%
Gymnastics	50	N/A	50% Potential Market
Health/Fitness & Wellness	500	N/A	15% Potential Market
Mixed Martial Arts	50	N/A	55% Potential Market

SPORT	TARGET @ YEAR 5	TEAMS	% GROWTH EXISTING PARTICIPATION LEVELS
Dance	70	N/A	50% Potential Market
<b>SUB-TOTAL</b>	<b>1,435</b>		
<b>OUTDOOR SPORTS</b>			
AFL	310	9	35%
Cricket	60	3-4	N/A
Soccer	105	7-8	51%
Athletics	80	N/A	60%
<b>SUB-TOTAL</b>	<b>555</b>		

These membership and user targets see approximately 73,000 **indoor** sport participations per annum, as detailed in the following table and precinct facility occupancy rates in the order of:

- Indoor Sports Courts 56%
- Outdoor Sports Fields (winter) 63%  
 (Based on 9am – 10pm, 7 days)

In additional, commercial programming accounts for approximately 35% to 66% of programming dependent on the facility component being considered.

STADIUM	TARGET @ YEAR 3 (BASE CASE)
Basketball	22,000
Netball	7,000
Sport programs	10,000
Badminton	2,000
Gymnastics	3,000
Schools	18,000
OOSHC	9,000
<b>TOTAL</b>	<b>72,000</b>

**(v) Revenue Targets**

Based on the pricing and hire charges and usage targets the business is expected to generate annual revenues in of \$724,000 million by year 3, at base case, inclusive of the following key revenue streams:

REVENUE STREAM	TARGET @ YR 3
Indoor Sports Courts	\$290,000
Health & Wellness Programmes	\$260,000
Café & Merchandising	\$44,000
Dance & MMA	\$118,000
Functions/Meeting/Conferences	\$11,000

**Other Potential Revenues**

It is likely, that a future precinct could attract additional revenues from grants, sponsorship, philanthropic or non-government based sources. The business operating model currently excludes any revenues of this nature at this stage.

**(vi) Expense Assumptions**

The financial models have completed detailed expense assumptions based on industry average programme, management and staffing allowances and asset management allowances per square metre.

These have been checked and validated against existing operating expenses of the existing facilities.

**Operating expenses** are expected to approximate \$723,000 at year 3, for the indoor community and sports facilities based on the following main direct expense allowances.

Outdoor sports fields and club facilities are expected to cost an additional \$70,000 per annum, based on existing sports playing field maintenance standards and associated costs.

EXPENSE AREA	TARGET @ YR 3
Management & Staffing (incl. on-costs & development, CPI+2% pa increase)	\$400,000
Utilities (Incl. CPI+5% pa Increase)	\$50,000



Facility Presentation	\$25,000
Asset Management – Repairs/Maintenance	\$50,000
Administration (incl. M'keting, Office, Finance, Insurance, contract management etc)	\$60,000
Equipment Purchase/Leasing	\$85,000
Vehicle/Travel	\$10,000
Outdoor Sports Field & Club Facilities Expense Allowance	\$70,000

**Salary On Costs:** Assumes annual on costs of 20% on all salaries.

**Operating & Salary Increases:** Allows for annual salary increases of 2% above CPI impact, and energy expense increase of 5% above CPI impact.

**Pre-Opening Expenses:** \$15,000 pre-opening expenses are allowed for at this stage.

**(vii) Business Sensitivity**

Business sensitivity analysis has been completed on the base case (average) business model for a range of different scenarios including:

- 10% less use
- 10% more use

**(viii) Global Impacts**

The 10-year projections are developed using the following global impact assumptions:

**Business Growth:**

The financial models assume average business and usage in year three. These figures are impacted by reduced business and usage in year 1 20% less and Year 2 at 10% less (than year 3).

From year 5 onwards industry trends indicate leisure facilities decrease usage annually by 2% to 3%. This decline is related to declining facility standards as the facility ages and expected competitive market forces, but is usually arrested by new programme and facility additions, where the business could be expected to begin to grow again.

The long-range business model therefore allows for major refurbishments at Years 11 and 21, which sees a substantive business decline in that year as a result of programme disruption and facility closures.

The financial models therefore see the following business growth impacts over the first 10 years, which is repeated in 10 year cycles.

<b>Year</b>										
1	2	3	4	5	6	7	8	9	10	

80% 90% 100% 100% 100% 97% 97% 94% 94% 90%

### Price Growth/Increases

The annual entry fees price growth increases have been set based on existing fees and charges, and taking into account comparable programme and facility fees in the catchment. No real price growth is included, except in years 11 and 21 where substantial new facilities and programmes are expected to be added, which provides the opportunity for price increases. The entry fees are GST exclusive in the final model.

### Consumer Price Index (CPI)

CPI increases have been set in each year ranging from 2.5% to 3.0%.

### (ix) Other Whole of Life Cost Considerations

The 10-year financial analysis projections are developed using the following asset management, funding and investment assumptions:

#### Maintenance/Major Refurbishment

Industry trends indicate that these type of facilities and precincts usually require a capital improvement investment about every 7-10 years to ensure they are presented at a high standard. The high use of facilities and active wear and tear on such centres and precincts, and changing consumer preferences and trends, requires such investment.

As such, we have allowed in the budget an annual building asset maintenance budget of \$200,000 per annum (1% of initial construction cost) and for an asset renewal investment fund of \$200,000 per annum (1% of initial investment). This is recorded below the operating results bottom line.

#### Building and Plant Depreciation

The financial models for allow for building depreciation of \$400,000 per annum, based on straight line depreciation over an estimated asset life of 50 years. This is presented below the operational budget line.

At this stage FFE Depreciation has not be allowed for. These costs would be more accurately identified in a more detailed design, cost and business planning stage once fitout and plant and equipment are more defined.

#### Capital Loan Repayments

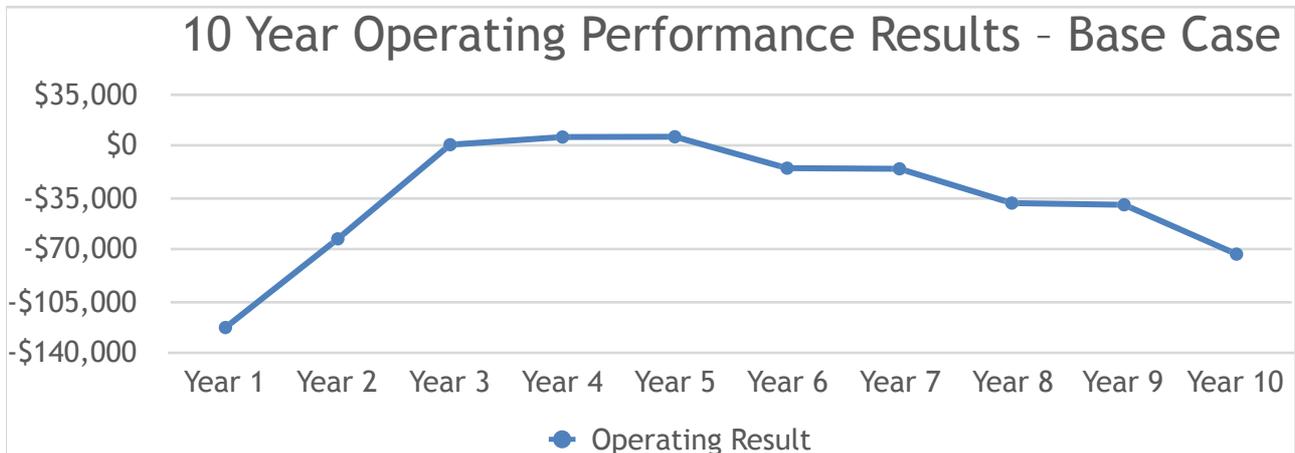
The financial models do not include capital financing costs. These costs would be more accurately identified in a more detailed design, cost and business planning stage and once a final financing strategy was identified.

## 4.4 OPERATING FINANCIAL PERFORMANCE RESULTS

Based on these assumptions and scenarios a likely next 10-year base financial operating results for the centre has been completed and is summarised in the table below.

Year	1	2	3	4	5	6	7	8	9	10	10 yr Avg.
<b>Revenue (\$,000)</b>	\$546	\$633	\$724	\$746	\$768	\$768	\$791	\$789	\$813	\$802	\$738
<b>Expenditure (\$,000)</b>	\$669	\$695	\$723	\$740	\$762	\$783	\$806	\$828	\$853	\$875	\$773
<b>Net Operating Profit/ (Loss) (\$,000)</b>	(\$123)	(\$63)	\$1	\$6	\$6	(\$15)	(\$15)	(\$39)	(\$40)	(\$73)	(\$35)
<b>Visitation ('000)</b>	147	165	183	183	183	178	178	172	172	165	173

The projections are graphically presented below:



The projections for the Indoor Community and Sports Facilities indicate:

- Revenue is expected to increase slightly annually ranging from \$546,000 in Year 1 to \$802,000 in Year 10.
- Expenditure is expected to increase annually ranging from \$669,000 in Year 1 to \$875,000 in Year 10.
- The Centre is expected to operate at an average loss of \$35,000 per annum for the 10 years, with individual year results ranging from operational loss of (\$123,000) in Year 1 to a small operating surplus of \$6,300 in Year 5, before the operating position begins to decline again, as the centre ages. Declining results can be expected to be arrested with renewal investment.
- Annual Centre visitations are expected to average around 173,000, gradually increasing over the period until year 5 when it is expected to decline as the Centre ages.

In addition, the Outdoor Sports Field Facilities are expected to be a further expense area, in the order of \$70,000 per annum.

Based on the 10-Year business projections, the annual average per annum indicators are:

Revenue:	\$738,000
Expenditure:	\$773,000
Nett Operating Profit/(Loss):	(\$35,000)
Visitations:	173,000 visits/year

In addition, the Outdoor Sports Field Facilities are expected to in the order of \$70,000 per annum.

These results indicate an approximate average operational financial performance similar to those experienced in other similar centres, with similar catchment populations and component mixes.

## 4.5 BUSINESS SENSITIVITIES

To assist in reviewing the business impacts if centre use is lower than projected in the base case business plan, business sensitivity usage impacts have been developed for the base business case being:

Optimistic Business Case: 10% increase price than the base case  
 Conservative Business Case: 10% less use than the base case

Summaries of the annual net operating profit/(loss) under the two business scenarios, compared to the base case are detailed below.

Please Note: These results exclude WOL allowances for capital depreciation, asset management & renewal.

YEARS	OPTIMISTIC CASE NET PROFIT/(LOSS) (\$,000)	BASE CASE NET PROFIT/(LOSS) (\$,000)	CONSERVATIVE CASE NET PROFIT/(LOSS) (\$,000)
1	(71)	(123)	(174)
2	(3)	(63)	(121)
3	69	1	(67)
4	76	6	(64)
5	78	6	(66)
6	57	(15)	(87)
7	59	(15)	(89)
8	35	(39)	(112)
9	37	(40)	(116)
10	2	(73)	(148)
<b>Avg. Per Annum</b>	34	(35)	(104)

A review of the business scenarios comparisons indicates the centre is likely to operate at profit, ranging from 10-year average of \$34,000 if 10% increased pricing/demand is achieved than the base case model, to \$104,000 if only 90% of Base Case pricing/demand is achieved.

Please Note: These results exclude the expected Outdoor Sports field expense, estimated at \$70,000 per annum.

## 4.6 LONG-RANGE PROJECTIONS

For the purposes of Whole of Life financial analysis, the team have prepared 30-year Operating budgets.

Over the 30-Year long-range projections operating results are expected to return operating surpluses of \$33,000 on average each year at base case. Sensitivity Analysis at +/- 10% pricing see these results range from a loss of (\$68,000) to a surplus of \$136,000 average per annum (excl. outdoor sports facility expenses).

The results, when compared to first 10-Year operating results, highlight price and demand restraint applied in the first ten years due to low base pricing. Pricing constraints are likely to ease over the longer term as facility contemporising occurs.

However, it must be noted long-range projections are far less reliable than first 10-Year results due to the discretionary and high changeability of customer interest, high exposure to regulatory environment and the competitive nature of the industry.

## 4.7 SCENARIO TWO AND THREE OPERATING RESULTS

The consultant team have prepared high level operating results for Development Scenario Two and Three, as a guide to the likely financial operating results for these scenarios, based on the detailed financial model developed for the masterplan (Development Scenario One) and the following key assumptions detailed below.

The projections only take into account the Phase One development at this stage – due to the uncertainty and long-time horizons of delivery of future phases. Further more detailed business and operational financial planning will need to be undertaken once the exact nature of the staged development components, timeframes and concept design is known.

### Scenario Two

Assumes a 10% decrease in community, health & wellness programming, due to the loss of potential additional programme space provided by the club facilities.

### Scenario Three

Assumes the Indoor Sports facilities will continue to operate as per existing Deloraine Sports Complex average operational results (based on past 3 year average of \$145,000 pa), as no new Multi-purpose Indoor Sports courts or substantial new multi-purpose program and health and wellness spaces have been added to allow for new uses, services offering or programming.

Assumes operating expenses of \$70,000 per annum for outdoor sports field and associated club facility operations.

Based on these assumptions the 10 year operational results are as follows:

Scenario 2	(\$68,000) pa
Scenario 3	(\$215,000) pa

Note: Results for Scenario 3 are before CPI and discounted cashflows are applied. Results exclude long-term maintenance and refurbishment, Depreciation or Capital Funding and Investment Costs.

## 4.8 SUMMARY OF SCENARIO OPERATING RESULTS

A summary of 10 Year average operating results for each scenario, at base case, is provided below:

Scenario 1	(\$35,000) pa, (\$105,000 including Outdoor Sports Field expense provision)
Scenario 2	(\$68,000) pa
Scenario 3	(\$145,000) pa (\$215,000 including Outdoor Sports Field expense provision)

When compared to current operating costs (ie avg. \$145,000 pa), Scenario One and Two result in improved financial operating results and see a far more diverse sports, leisure and community programming offer and levels of participation than Scenario Three, which will largely see the status quo.

## 4.9 WHOLE OF LIFE COST ANALYSIS

This section highlights the potential whole of life costs that could be expected for the proposed Deloraine Community and Sports Precinct, **phase one development only**, for the three development scenarios being considered. The purpose of identifying whole of life costs is to enable Council – the future asset owner of the proposed precinct to understand the full extent of financial obligation in operating and maintaining the venue. It will also enable full cost financial analysis to be completed to compare both options over the life of the asset.

Whole of life costs include the following components:

- Direct Operating Expenses
- Asset Management Costs
- Depreciation
- Capital Financing Costs
- Asset Development and Disposal Costs

With the exception of direct operating expenses, all other whole of life costs are not considered annual operating costs, and therefore recorded below the operating financial results bottom line.

For the purposes of this preliminary feasibility study we have not included any capital finance costs, acquisition or disposal costs in the financial models. These costs would be more accurately identified in a more detailed design, cost and business planning stage and once a capital financing strategy is identified. As such, at this stage it is assumed capital costs for the proposed precinct would be met through government capital reserves (Eg. either through State, Local Government or Federal Government and potentially via multi-lateral government funding arrangement)

As a guide to likely future non- operating expense, whole of life costs we have prepared the following whole of life cost estimates, based on the standard industry practice allowances identified.

COST AREA	INPUTS	ALLOWANCE	SCENARIO 1 \$'Million pa	SCENARIO 2 \$'Million pa	SCENARIO 3 \$'Million pa
CAPEX	CapEX Estimate (excl. land acquisition costs)	Construction Only	\$20	\$15.5	\$11.7
	<b>Total CapEx Costs</b>	<b>T o t a l Development Costs</b>	<b>\$26.8</b>	<b>\$17.4</b>	<b>\$13.2</b>
OPERATING	Operating Cost – Indoor	10 Year Base Case Avg. pa	(\$0.035)	(\$0.068)	(\$0.145)
	Operating Cost - Outdoor	Est.	(\$0.07)	- **	(\$0.07)
	M a i n t e n a n c e / M a j o r Refurbishment	2% of CapEx pa *	(\$0.4)	(\$0.3)	(\$0.23)
	<b>Total Operating Cost</b>		<b>(\$0.505)</b>	<b>(\$0.368)</b>	<b>(\$0.445)</b>
ACCOUNTING	Depreciation	50 Year Straight line	(\$0.536)	(\$0.348)	(\$0.264)
	Capital Funding Costs/ Divestment Costs/(Income)	Excl.***	-	-	-
		Sub-Total	\$1.041	\$0.716	\$0.709

Notes:

CapEx excludes cost of land acquisition. This has not been included as is not known at this stage.

Scenario 3 – Operating performance assumed as per existing, based on last 3 year average.

\*Maintenance/Major Refurbishment allowance has been set equivalent to standard industry asset depreciation rates of 50 years. It excludes existing building AM.

\*\* It should be noted this option excludes cost of outdoor facility provision, which are still born by Council, through existing provision.

\*\*\*Capital Funding and divestment strategy TBD.

The results indicate the full masterplan (Scenario One) is likely to result in the highest per annum WOL costs, based on first 10 Year Operating results.

However it must be noted, these results are based on:

- Phase One Development only. This means Scenario Two and Three WOL costs do not take into account potential future development phase's WOL costs, which are envisaged to be developed over the longer term as demand and funding availability allows.
- Options Two and Three are not providing for the full range of programmes and services (ie levels of service delivery) on offer through the full masterplan, and therefore levels of community activity and participation (ie social benefits).
- Scenario Two is likely to result in slightly higher total WOL costs (ie \$0.716M) to Council, than Scenario three, if the WOL costs for AFL facility provision at the existing location is taken into consideration.

## 4.10 REVIEW OF DEVELOPMENT SCENARIOS

This Section summarises the rationale, benefits and constraints of each development scenario. It includes consideration of:

- Priority community and sport needs

- Technical feasibility,
- Operational and WOL financial impacts,
- Capital funding availability
- Enabling Factors
- Risk Factors

The review summary is provided in the following table.

KEY CONSIDERATIONS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Priority Community Needs	<p>Meets the growth needs of indoor sport and immediate needs of outdoor sports.</p> <p>Maximises opportunities for a broad range of leisure, health &amp; wellness, community &amp; cultural activities.</p>	<p>Meets the growth needs of existing indoor sport (eg. basketball, netball, badminton) and provides opportunity for new and emerging sports, more commercially orientated programmes and services and events.</p> <p>Enables the immediate re-location of Squash from existing existing aging, sub-standard &amp; at-risk facilities (ie. flood plain risks).</p> <p>Enables the conversion of existing underutilised asset (due to poor design) to meet the contemporary needs of the community for indoor leisure, health &amp; wellness, community &amp; cultural activities.</p>	<p>Enables the immediate re-location of AFL from existing aging, sub-standard &amp; at-risk facilities (ie. flood plain risks). Provides appropriate quality facilities for AFL – men and women’s participants.</p> <p>Provides access to facilities for many other outdoor sports currently not played or represented in the area, including Cricket, Soccer, Rugby/ touch and Athletics, due to lack of facilities.</p>
Technical Feasibility	Meets construction staging requirements.	Meets construction staging requirements.	Meets construction staging requirements.
Operating and WOL Financial Impacts	<p>Maximises levels of participation and operating financial performance.</p> <p>Likely to result in best performing operating results, however higher WOL costs over first 10 Years operations.</p>	<p>Prioritises establishment of programmes and services to meet high growth sports and activities, maximise participant numbers, levels of participation and revenue yields.</p> <p>Likely to result in improved operating results, compared to Scenario 3 and existing situation, and slightly higher WOL costs, than scenario 3 over first 10 Years operations.</p>	<p>Reduces capacity to deliver new indoor programmes or services, therefore offers limited opportunity to increase levels of participation and revenue yields.</p> <p>This is likely to see financial operating performance aligned to status quo, and WOL costs only marginally better than Scenario 3.</p>
Capital Funding Feasibility	Preliminary capital cost is estimated at \$26.8 M	Preliminary capital cost is estimated at \$17.4 M	Preliminary capital cost is estimated at \$13.2 M

KEY CONSIDERATIONS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Enabling Factors	Requires immediate acquisition of additional land.	Delays requirement for land acquisition.	Requires immediate acquisition of additional land.
Key Risk Considerations	Key risks include: -Likelihood of attracting required capital funding --Ability to acquire land in short timeframes and at appropriate cost	Key risks include: -Likelihood of attracting required capital funding, phase one -Ability to attract funding to deliver future phases -Ability to acquire land to deliver future phases	Key risks include: -Likelihood of attracting required capital funding to deliver future phases -Ability to acquire land in short timeframes and at appropriate cost -Level of ongoing operational subsidy, particularly if future phases not delivered

Overall, the review of the key considerations benefits and risks indicates:

Scenario 1 - Offers the greatest level of participation benefits to the community in the short term (ie 10 Years) and best operating financial performance results, however, has higher overall WOL costs and level of risk with respect to funding attraction and land acquisition factors.

Scenario 2 – Offers the next greatest level of participation benefit to the community and operating financial performance results in the short term, however, has higher overall WOL costs, but has lower levels of risk, when compared to scenario one, mainly due to delayed need to acquire land to enable the development scenario to proceed.

Scenario 3 – Offers the least participation benefit to the community, has the least favourable operating financial performance results in the short term, however, has a lower overall WOL cost, and lower level of risk, mainly due to likelihood of attracting the capital funding levels required.



**5.**

**Appendices**

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## **APPENDIX 1 - DETAILED FACILITY BRIEF & COST PLAN**

A detailed facility Brief and Cost Plan is provided attached.

Functional space	Minimum dimensions/Standards	Proposed dimensions/Standards	area	No required	Total area	Adjacencies	Capacity / No. occupants	Other comments
	L x W x H	L x W x H	M2		M2			
<b>Indoor Sports Hall</b>								
Multi-Use Indoor Sports Courts	36.6 x 21.35 x 9 (Court+Min clearance)	40 x 21.35	854	2	1708	Public Entry and Amenities, Function/Hospitality Zones, Main Sports Change		Assumes existing courts remain. Consider options to increase size of existing courts to comply with current standards and new hall to 42 x 24 Meters length to accommodate Indoor Hockey and Futsal (x 4 courts).
Squash Courts	9.75 x 6.4 x 5.64 (Court Only)	12 x 7 x 6	84	3	252	off concourse, adjoining courts. Multi-Use space with MMA/Dance Studio Space		Consider Multi-use Options for Circus/ Gymnastics, Indoor Play Space, Table Tennis
Community Courts Spectator Seating (Min 250-300 pax)		300 x 0.75sqm pp	225	1	225	off concourse, adjoining courts	250 - 300 spectators	
Showcourt Spectator Seating	1,500 pp (Overcourt)	Allow 100 sqm	100	1	100	off concourse, adjoining courts	1,500	Retractable On-Court Seating. Allow for VIP seating areas courtside.
Storerooms	Recommended 12.5% Sports Hall Floor Area	Allow 5% Sport Court Area	100	4	400	adjoining courts		
First Aid			15	1	15			Includes Drug Testing/Medical
Court Office/Show Court Office			25	1	25	off concourse, adjoining meeting	3	Space to include tea area, storage, office equipment
				<b>Sub-Total</b>	<b>2725</b>			
<b>Programmes</b>								
Mixed Martial Arts/Dance Studio	14 x 14 x 7	15 x 15 x 7	0	1	0	accessible from concourse. Multi-use space with Squash		
Storerooms for MMA/Dance Studio			30	2	60			
High Performance/Functional Training Gym			250	1	250	accessible from concourse		
Office/Storeroom for HPGym			20	1	20			
Multi-Use Programmes - Health/Fitness/Wellness - Aerobics / Zumba			100	2	200	Adjacent/Divisible with Clubhouse/Mezzanine/Function Room Spaces		
Storeroom			20	1	20			
Office			20	1	20	accessible from concourse	3	
Storage - Admin			10	1	10	adjoining Office area		
				<b>Sub-Total</b>	<b>580</b>			
<b>Toilets/Change/Amenities</b>								
Indoor Home/Visitor Players Change/Toilets/Massage			40	2	80	off concourse, adjoining toilets		Assumes existing playing change. Based on 4 teams of 10 (5 + 5)
Outdoor Player Change/Toilets/Massage			40	4	160	adjoining changerooms		Based on 2 teams of 25
Referees Toilets/Changerooms			15	4	60	off concourse		Based on 8 x referees indoor sports courts, 6 x referee outdoor sports fields
Programmes/Club/Function Area Toilets			15	4	60	Adjoining Programmes/Club/Function areas		Included in First Aid
Public Toilets accessible			30	1	30	off concourse. Accessible Indoor/Outdoor		
Staff Amenities			20	1	20	Adjoining Office/Reception Area/Court Office/First Aid		
				<b>Sub-Total</b>	<b>410</b>			
<b>Club Social/Function Areas</b>								
Club/Social Facilities/Mezzanine Viewing/Corporate & Coaching areas			400	1	400	accessible from concourse, Spectator Seating		Divisible Spaces to allow for multiple user groups concurrently. Includes Game Day Support
Board Room/Meeting Rooms			60	1	60	accessible from function and meeting areas		
Outdoor Plaza/Social Spaces			0	0	0	accessible from concourse, Adjoining Mezzanine Viewing, Adjacent Programmes	100-200	Shared facility & multi-purpose space. Consider Additional Outdoor Deck Function/BBQ Space
Commercial Kitchen/Bar/Café			150	1	150	Link to Restaurant/Bar, Mezzanine Function Spaces/multi-purpose spaces, Café/Kiosk. Ability to service large events in Main Sports Hall.	400 pax	Check functional requirements - whether full commercial kitchen or to suit out-sourced prepared food for plating and serving
				<b>Sub-Total</b>	<b>610</b>			
<b>Front of House</b>								
Entry			50	1	50	accessible from concourse		
Foyer/Reception/Function/Memorabilia Display/Sponsor Acknowledgement			50	1	50	accessible from indoor sports hall concourse, Entry Foyer, Outdoor Sports Playing fields. Link to commercial kitchen.		Indoor Dining/Outdoor Dining. Indoor/Outdoor Servery
Café/Kiosk seating area			50	1	50	accessible from indoor sport court concourse, Entry Foyer		
Retail			50	1	50	accessible from indoor sports hall, café/kiosk, clubhouse/function and meeting areas		
Social Spaces/Kids Lounge/Play area			100	1	100			
Centre Admin/Sports Club Admin/Staff Room & Amenities			25	2	50	accessible from concourse, Entry Foyer		Possible Community, Youth & Health outreach services - Include in Gym area/Meeting/Function areas

		<b>Sub-Total</b>		<b>300</b>			
<b>Back of House</b>	Plant Rooms, Delivery/Loading Dock Area, Lifts/Circulation, Facility Maintenance/Presentation Area, Storage	5%		<b>231.25</b>	Accessible from Courts and concourse		
	Provision for circulation	5%		<b>95</b>			
		<b>Sub-Total</b>		<b>326.25</b>			
<b>Outdoor Sports Facilities</b>	Suggested area provision awaiting further details. TIS to be self-contained and autonomous, but part of overall development						
	AFL/Cricket	165 x 135 (exclude runoff)	180 x 145 (include 5 m run-off)	26,100	1	<b>26100</b>	
	Spectator Seating - Car		Allow 15 m around boundary	10,650	1	<b>10650</b>	In car spectator areas around boundary, circulation and embellishment
	Spectator Seating - Seating/Standing						Allow mounded seating adjacent clubhouse. Area Allowance included in spectator - car allowance
	Rectangular Field	105 x 68 (preferred)	115 x 78 (include 5m run-off)	8970	1	<b>8970</b>	
	Outdoor Multi-Sport Courts (Modified)		40 x 24 (min Futsal, including run-off)	1008	1	<b>1008</b>	Adjacent Indoor Courts
	Club House/Social/Function facilities		200 sq m	0	1	<b>0</b>	Modified Courts for Casual/Social/Training
	Sport Training Gym		200 sqm	0	1	<b>0</b>	Included in Club House/Function Area Allowances
	Outdoor BBQ/Social/Plaza Spaces		200 sqm	0	1	<b>0</b>	Included in Programme Area Allowances
	FOH/BOH/Circulation		20%	0	1	<b>0</b>	
	Storage/Grounds Shed			100	2	<b>200</b>	
		<b>Sub-Total</b>		<b>46928</b>			
<b>Area Total (Excluding Outdoor Sports Facilities)</b>				<b>4951.25</b>			
<b>Area Total (Including Outdoor Sports Facilities)</b>				<b>51879.25</b>			

PRELIMINARY CAPEX ESTIMATE	Sq M Rate/ Allowance	OPTION 1 and 2
Building Construction Rate	\$ 2,500.00	\$ 12,378,125.00
Demolition/Integration Allowance	5%	\$ 618,906.25
Sports Field Allowance (Including Lighting/scoreboard etc)	Allow	\$ 3,500,000.00
External Areas Allowance (Including Outdoor Sports Court)	Allow	\$ 2,000,000.00
FFE Allowance	\$ 300,000.00	\$ 300,000.00
Site works	\$ 2,608,000.00 say	\$ 2,750,000.00
sub-total		\$ 21,547,031.25
Professional & Contingency Allowance	20%	
<b>TOTAL CAPEX @ July 2019</b>		

TURNER & TOWNSEND COMMENTS		
\$ 12,378,125.00	new bldg wks	
\$ 200,000.00	lift / stair	
\$ 360,000.00	extra for upper floor	
\$ 618,906.25	demo	
\$ 3,500,000.00	sports fields	
\$ 2,000,000.00	ext areas	
\$ 900,000.00	retractable seat 1500	
\$ 3,028,000.00	site works	
\$ 1,608,952.19	Locality allowance	
<b>\$ 24,593,983.44</b>	<b>Subtotal</b>	
\$ 4,918,796.69	contingency 20%	
\$ 2,361,022.41	professional fees	
\$ 245,939.83	authority fees	
<b>\$ 32,119,742.37</b>		
\$ 963,592.27	escalation 12mth	
<b>\$ 33,083,334.64</b>	<b>TOTAL PROJECT COST</b>	

Site Works	ALLOWANCE			T&T
Sealed road and car parks - 300 cars plus stormwater, wheel stops, line marking and circulation	8000 sq.m	\$120/q.m.	\$ 960,000.00	\$ 1,280,000.00
Gravel roads - including stormwater	5000 sq.m.	\$80/sq.m.	\$ 400,000.00	\$ 400,000.00
Paths - gravel (no edging)	1800 sq.m.	\$60/sq.m.	\$ 108,000.00	\$ 108,000.00
Paths - paved	600 sq..m.	\$100/sq.m.	\$ 60,000.00	\$ 60,000.00
Entry pavements	3500 s.qm.	\$120/q.m.	\$ 420,000.00	\$ 700,000.00
Soft landscaping including site prep trees, shrubs, mulch, fertiliser (excluding topsoil) say	2000 sq.m.	\$40/sq.m.	\$ 80,000.00	\$ 80,000.00
Outdoor furniture including bins, seats, bike racks, gym equipment, lighting, play equipment	say		\$ 400,000.00	\$ 400,000.00
			\$ 2,428,000.00	\$ 3,028,000.00
			say \$ 2,750,000.00	

**DRP Working Group / MV Council  
Deloraine Recreation Precinct**

**Indicative Cost Plan**

QS REF: me  
Date: 10/11/2017

Function	Area m2	Rate \$/m2	Cost \$
<b>Building Works</b>			
Multi use indoor sports courts	1708	\$ 1,500	\$ 2,562,000
- Extra for showcourt	Allow		\$ 500,000
Squash courts	252	\$ 2,000	\$ 504,000
Community courts spectator seating	225	\$ 1,800	\$ 405,000
Showcourt spectator seating	100	\$ 1,800	\$ 180,000
Retractable seating 1500	Allow		\$ 900,000
Store rooms	400	\$ 1,500	\$ 600,000
First aid	15	\$ 2,400	\$ 36,000
Court office	25	\$ 2,400	\$ 60,000
Store rooms	60	\$ 2,000	\$ 120,000
High performance training gym	250	\$ 2,400	\$ 600,000
Office	20	\$ 2,400	\$ 48,000
Multi use program rooms	200	\$ 2,400	\$ 480,000
Store rooms	20	\$ 2,000	\$ 40,000
Office	20	\$ 2,400	\$ 48,000
Storage - admin	10	\$ 2,000	\$ 20,000
Indoor home / visitor players change	80	\$ 2,800	\$ 224,000
Outdoor players change	160	\$ 2,800	\$ 448,000
Referees	60	\$ 3,000	\$ 180,000
Program / club / function toilets	60	\$ 3,000	\$ 180,000
Public toilets	30	\$ 3,000	\$ 90,000
Staff Amenities	20	\$ 3,000	\$ 60,000
Club / social facilities / mezzanine viewing	400	\$ 2,500	\$ 1,000,000
Extra for upper floor	Allow		\$ 360,000
Board room / meeting room	60	\$ 2,500	\$ 150,000
Commercial kitchen / bar / café	150	\$ 2,500	\$ 375,000
- Extra for kitchen equipment	Allow		\$ 200,000
Entry foyer / reception	50	\$ 2,500	\$ 125,000
Café / kiosk seating area	50	\$ 2,500	\$ 125,000
- Extra for kitchen equipment	Allow		\$ 40,000
Retail	50	\$ 2,500	\$ 125,000
Social spaces / lounge	100	\$ 2,000	\$ 200,000
Centre admin	50	\$ 2,400	\$ 120,000
Plant rooms	231	\$ 2,000	\$ 462,500
Circulation	95	\$ 2,000	\$ 190,000
Demolition	Allow		\$ 618,906
Works to existing building to make compliant	Allow		\$ 100,000
Extra for lift / stair	Allow		\$ 200,000
Allow for entry canopy	Allow		\$ 100,000
<b>Total Building Works</b>	<b>4,951</b>	<b>\$ 2,580</b>	<b>\$ 12,776,406</b>
<b>External Works &amp; Services</b>			
Allow for site preparation / earthworks	Allow		\$ 298,000
Sealed road and carparks - 300	8000		\$ 1,280,000
Gravel roads incl stormwater	5000		\$ 400,000
Paths - gravel	1800		\$ 108,000
Paths - paved	600		\$ 60,000
Entry pavements	3500		\$ 700,000
Soft landscaping	2000		\$ 80,000
Outdoor furniture	Allow		\$ 400,000
Sports fields	Allow		\$ 3,500,000
External areas allowance incl outdoor sports court	Allow		\$ 2,000,000
Allowance for external services	Allow		\$ 1,090,000
<b>Total External Works &amp; Services</b>			<b>\$ 9,916,000</b>
<b>Construction Cost</b>			<b>\$ 22,692,406</b>
Locality Allowance	Allow		\$ 1,588,468
Contingency		20%	\$ 4,857,000
<b>Sub Total</b>			<b>\$ 6,445,468</b>
Professional Fee Allowance		8%	\$ 2,332,000
Authority Fees & Charges	Allow		\$ 243,000
Allow for substation contribution	Allow		\$ 100,000
FFE Allowance	Allow		\$ 300,000
<b>Sub Total</b>			<b>\$ 2,975,000</b>
Cost Escalation to tender	Allow 12 mths	3% pa	\$ 964,000
<b>Project Total</b>			<b>\$ 33,076,875</b>

**Exclusions:**

GST	Cost Escalation beyond October 2018
Upgrade or provision of authority services infrastructure external to the site	Office Equipment costs
Land, legal, marketing and finance costs	Public Art
Relocation / Decanting Costs	Asbestos & other hazardous materials removal
Staging Costs	Council internal costs
Adverse soil conditions incl. excavation in rock, contaminated soil, soft spot	Stormwater on site retention / detention system
Audio Visual requirements	Active IT and telephone equipment
Blinds, Curtains or Drapes	Planning professional fees and permit fees
Piling or Bored Pier foundations	
Diversion / relocation of existing inground services beyond allowance	

## **C&DS 3 9 JARDINE CRESCENT, PROSPECT VALE - SUBDIVISION**

### **1) Introduction**

This report considers application PA\18\0087 for Subdivision (staged - 6 lots) on land located at 9 Jardine Crescent, Prospect Vale CT169734/2.

### **2) Background**

#### **Applicant**

PDA Surveyors obo Eskleigh Foundation Incorporated.

#### **Planning Controls**

The subject land is controlled by the *Meander Valley Interim Planning Scheme 2013* (referred to in this report as the 'Scheme').

#### **Use & Development**

The proposal is to subdivide the land at 9 Jardine Crescent in Prospect Vale into 6 lots. Table 1 and Figure 1 below show the proposed lot layout and features. The lots will be created as a staged subdivision.

The land is relatively flat, with grass coverage. To the north of the subject lot is the Prospect Vale Market Place's car park. To the east and west, the surrounding land is used for housing. The property has frontage to Jardine Crescent.

<b>Lot</b>	<b>Area (m<sup>2</sup>)</b>	<b>Frontage (m)</b>	<b>Feature</b>
1	698	4	Internal lot
2	541	12.6	
3	567	14.1	
4	674	3	Internal lot – Right of way over access handle in favour of Lot 5
5	840	3	Internal lot – Right of way over access handle in favour of Lot 4
6	681	13	

Table 1: subdivision features



## **Site & Surrounds**

The subject land is located centrally in Prospect Vale.



Figure 3: aerial photo of surrounding land (Source: TheList)

## **Statutory Timeframes**

Date Received:	3 November 2017
Request for further information:	Not applicable
Information received:	Not applicable
Advertised:	18 November 2017
Closing date for representations:	4 December 2017
Extension of time granted:	6 December 2017
Extension of time expires:	17 January 2018
Decision due:	16 January 2018

### **3) Strategic/Annual Plan Conformance**

Council has a target under the Annual Plan to assess applications within statutory timeframes.

### **4) Policy Implications**

Not applicable

## **5) Statutory Requirements**

Council must process and determine the application in accordance with the *Land Use Planning Approval Act 1993 (LUPAA)* and its Planning Scheme. The application is made in accordance with Section 57 of LUPAA.

## **6) Risk Management**

Management of risk is inherent in the conditioning of the permit.

## **7) Consultation with State Government and other Authorities**

The application was referred to TasWater. A Submission to Planning Authority Notice (TWDA 2017/01767-MVC) was received on 13 November 2017 (attached document).

## **8) Community Consultation**

The application was advertised for the statutory 14-day period.

Five (5) representations were received (attached document). The representations are discussed in the assessment below.

## **9) Financial Impact**

Not applicable

## **10) Alternative Options**

Council can either approve the application with amended conditions or refuse the application.

## **11) Officers Comments**

### **Zone**

The subject property is located in the General Residential zone. The land surrounding the site is located in the General Residential and General Business zones.

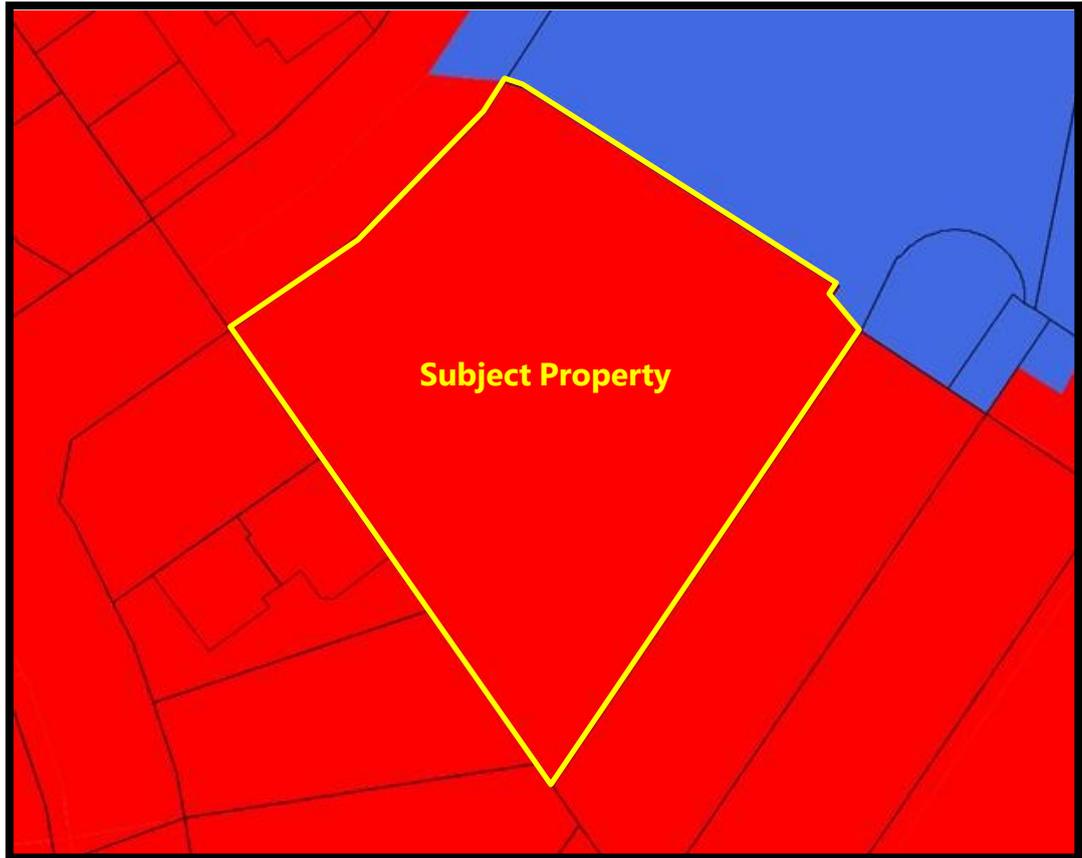


Figure 4: zone mapping

### **Use Class**

Table 8.2 of the Scheme, categorises the proposed use class as:

- Residential

Residential is specified in section 10.2 - Use Table as being No Permit Required. The No Permit Required status is dependent on the use and development meeting all of the applicable Acceptable Solutions in the planning scheme. In this instance:

- The use and development relies on Performance Criteria under the Planning Scheme.

### **Applicable Standards**

This assessment considers all applicable planning scheme standards.

In accordance with the statutory function of the State Template for Planning Schemes (Planning Directive 1), where use or development meets the Acceptable Solutions it complies with the planning scheme,

however it may be conditioned if considered necessary to better meet the objective of the applicable standard.

Where use or development relies on performance criteria, discretion is applied for that particular standard only. To determine whether discretion should be used to grant approval, the proposal must be considered against the objectives of the applicable standard and the requirements of Section 8.10.

A brief assessment against all applicable Acceptable Solutions of the General Residential zone and Codes is provided below. This is followed by a more detailed discussion of any applicable Performance Criteria and the objectives relevant to the particular discretion.

### **Compliance Assessment**

The following table is an assessment against the applicable standards of the Meander Valley Interim Planning Scheme 2013.

<b>General Residential Zone</b>			
Scheme Standard		Comment	Assessment
<b>10.3.1 Amenity</b>			
A1	If for permitted or no permit required uses.	Residential is a No Permit Required use class	Complies
A2	Commercial vehicles for discretionary uses must only operate between 7.00am and 7.00pm Monday to Friday and 8.00am to 6.00pm Saturday and Sunday.	Not applicable	
<b>10.4.15.1 Subdivision - General Suitability</b>			
A1	No Acceptable Solution	No Acceptable Solution	Relies on Performance Criteria
<b>10.4.15.2 Subdivision - Lot Area, Building Envelopes and Frontage</b>			
A1	Lots must: a) have a minimum area of at least 700m <sup>2</sup> which:	Lots 1, 2, 3, 4 & 6 are all less than 700m <sup>2</sup>	Relies on Performance Criteria

	<ul style="list-style-type: none"> <li>i) is capable of containing a rectangle measuring 10m by 15m; and</li> <li>ii) has new boundaries aligned from buildings that satisfy the relevant acceptable solutions for setbacks; or</li> <li>b) be required for public use by the Crown, an agency, or a corporation all the shares of which are held by Councils or a municipality; or</li> <li>c) for the provision of utilities; or</li> <li>d) for the consolidation of a lot with another lot with no additional titles created; or</li> <li>e) be to align existing titles with zone boundaries and no additional lots are created.</li> </ul>		
A2	Each lot must have a frontage of at least 4 metres.	Lots 4 & 5 have frontage less than 4m	Relies on Performance Criteria
<b>10.4.15.3 Provision of Services</b>			
A1	Each lot must be connected to a reticulated: <ul style="list-style-type: none"> <li>a) water supply; and</li> <li>b) sewerage system.</li> </ul>	All lots can be serviced by reticulated water and sewerage	Complies
A2	Each lot must be connected to a reticulated stormwater system.	Each lot can be serviced by stormwater	Complies
<b>10.4.15.4 Solar Orientation of Lots</b>			
A1	At least 50% of lots must have a long axis within the range of: <ul style="list-style-type: none"> <li>a) north 20 degrees west</li> </ul>	The proposed lot boundaries do not fit the requirement	Relies on Performance Criteria

	to north 30 degrees east; or b) east 20 degrees north to east 30 degrees south.		
A2	The long axis of residential lots less than 500m <sup>2</sup> must be within 30 degrees east and 20 degrees west of north.	Not applicable	
<b>10.4.15.5 Interaction, Safety and Security</b>			
A1	Subdivisions must not create any internal lots.	Lots 1, 4 & 5 are all internal lots	Relies on Performance Criteria
<b>10.4.15.6 Integrated Urban Landscape</b>			
A1	The subdivision must not create any new road, public open space or other reserves.	No new roads, public open space or other reserves is proposed	Complies
<b>10.4.15.7 Walking and Cycling Network</b>			
A1	The subdivision must not create any new road footpath or public open space.	No new roads, footpaths or public open space is proposed	Complies
<b>10.4.15.8 Neighbourhood Road Network</b>			
A1	The subdivision must not create any new road.	No new road is proposed	Complies

<b>Road and Railway Assets Code</b>			
Scheme Standard		Comment	Assessment
<b>E4.6.1 Use and road or rail infrastructure</b>			
A1	Sensitive use within 50m of a category 1 or 2 road with a speed limit of more than 60km/h, a railway or future road or railway, does not increase the annual average daily traffic movements by more than 10%.	Not applicable	
A2	For roads with a speed limit of 60km/h or less the use	Each lot will generate less	Complies

	must not generate more than 40 movements per day.	than 40 vehicle movements per day	
A3	For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic movements by more than 10%.	Not applicable	
<b>E4.7.2 Management of Road Accesses and Junctions</b>			
A1	For roads with a speed limit of 60km/h or less the development must include one access providing both entry and exit, or two accesses providing separate entry and exit.	Each lot has one access	Complies
A2	For roads with a speed limit of more than 60km/h the development must not include a new access or junction.	Not applicable	
<b>E4.7.4 Sight Distance at Accesses, Junctions and Level Crossings</b>			
A1	Sight distances at a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.7.4; and b) rail level crossings must comply with AS1742.7; or c) If the access is a temporary access, the written consent of the relevant authority has been obtained.	Sight distance is acceptable	Complies
<b>E10 Recreation and Open Space Code</b>			
Scheme Standard		Comment	Assessment
<b>E10.6.1 Provision of Public Open Space</b>			
A1	The application must: a) include consent in writing from the General	Written consent provided	Complies

	Manager that no land is required for public open space but instead there is to be a cash payment in lieu.		
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### **Performance Criteria**

<b>General Residential Zone</b>
10.4.15.1 Subdivision - General Suitability
<p><b>Objective</b></p> <p><i>The division and consolidation of estates and interests in land is to create lots that are consistent with the purpose of the General Residential Zone.</i></p>
<p><b>Performance Criteria P1</b></p> <p><i>Each new lot on a plan must be suitable for use and development in an arrangement that is consistent with the Zone Purpose, having regard to the combination of:</i></p> <ul style="list-style-type: none"> <li><i>a) slope, shape, orientation and topography of land;</i></li> <li><i>b) any established pattern of use and development;</i></li> <li><i>c) connection to the road network;</i></li> <li><i>d) availability of or likely requirements for utilities;</i></li> <li><i>e) any requirement to protect ecological, scientific, historic, cultural or aesthetic values; and</i></li> <li><i>f) potential exposure to natural hazards.</i></li> </ul>
<p><b>Comment:</b></p> <p>The zone purpose states:</p> <p><b>10.1 Zone Purpose</b></p> <p><b>10.1.1 Zone Purpose Statements</b></p> <p><i>10.1.1.1 To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.</i></p> <p><i>10.1.1.2 To provide for compatible non-residential uses that primarily serve the local community.</i></p> <p><i>10.1.1.3 Non-residential uses are not to be at a level that distorts the primacy of residential uses within the zones, or adversely affect residential amenity through noise, activity outside of business hours traffic generation and movement or other off site impacts.</i></p>

*10.1.1.4 To encourage residential development that respects the neighbourhood character and provides a high standard of residential amenity.*

**10.1.2 Local Area Objectives**

*Prospect Vale*

- a) Prospect Vale will be maintained as a key centre of urban expansion. Where areas currently zoned General Residential adjoin the Particular Purpose Zone, development is to provide for the long term strategic outcomes in the design of urban environment;*
- b) Promote opportunities to alter the urban environment to make more efficient use of alternative modes of transport.*

**10.1.3 Desired Future Character Statements**

*Dwellings are to maintain as the predominant form of development with some higher densities encouraged near services and the business area. Some redevelopment sites may also be appropriate for higher density development.*

*Typical residential and non residential development is to be detached, rarely exceeding two storeys and be setback from the street and property boundaries.*

The application is for a subdivision only. Though the subdivision is for residential purposes, the exact form of the future residential use was not provided and is not part of this application.

The land is relatively flat, with grass coverage. The land has frontage to Jardine Crescent and each lot has access to Jardine Crescent. Land use to the east, south and west is residential (either single dwelling or multiple dwellings). All lots have the ability to connect to services.

The property is not heritage listed.

The land is mapped as being within the Salinity Risk overlay. The subdivision plan shows all lots being connected to Council's stormwater system.

The proposed lots are smaller than the surrounding titles and internal lots are not a common feature of the surrounding area. However, the lot sizes are consistent with the pattern of high density housing such as in strata

developments. Strata development is a common feature of the surrounding area.

There are a number of services available within the local area. The Prospect Vale Market Place is to the north. A regular bus service is available on Westbury Road. Childcare is available in Stuart Avenue. Local parks are located at Wenlock Way, Las Vegas Drive and Chris Street. The availability of these services supports high density residential development.

As such, the proposed subdivision is consistent with the Objective and Performance Criteria.

#### 10.4.15.2 Subdivision - Lot Area, Building Envelopes and Frontage

##### **Objective**

*To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, private open space, vehicle access and parking, easements and site features.*

##### **Performance Criteria P1**

*Each lot for residential use must provide sufficient useable area and dimensions to allow for:*

- a) a dwelling to be erected in a convenient and hazard-free location; and*
- b) on-site parking and manoeuvrability; and*
- c) adequate private open space*

**Comment:**

The Acceptable Solution for lot area is 700m<sup>2</sup>. Five of the six proposed lots are below 700m<sup>2</sup> (see Table 2 below).

<b>Lot</b>	<b>Lot area m<sup>2</sup></b>
1	695
2	541
3	567
4	674
5	840
6	681

Table 2: lot area

In consideration of each lot being suitable for a future residential use (single dwelling) the following features were assessed:

1. Usable area for a single dwelling;
2. Space for car parking/manoeuvrability; and
3. Private open space.

**Usable Area for a single dwelling**

The assessment on usable space is based on a 10m x 15m dwelling and its possible compliance with the Acceptable Solution for site coverage and building envelope.

<b>Lot</b>	<b>Site coverage (Acceptable Solution is no greater than 50%)</b>
1	26.8%
2	27%
3	26.4%
4	26.7%
5	20.6%
6	22%

Table 3: showing site coverage for each lot for a 10m x 15m single dwelling

As such, all lots have sufficient site area to be able to potentially comply with the site coverage standards.

To comply with the Building Envelope the front lots must be able to contain the 10m x 15m building with at least a 4m rear setback, 1.5m side setback and a 4.5m setback. Lots 2, 3 & 6 can comply with these standards.

For the rear lots, the setback standards are a 4m rear setback, a 4.5m

setback from the shared boundary with the front lots and 1.5m side setback. Lots 1, 4 & 5 can comply with these standards.

NOTE: proposed easements were considered as part of the assessment.

**Space for car parking/manoeuvrability**

The standard for a single dwelling is two car parking spaces. These spaces can be in tandem. For two parking spaces, there is no requirement for vehicles to be able to enter and exit in a forward direction. Each lot has sufficient space for two car parking spaces.

**Private open space**

Each lot has sufficient area to provide for private open space with a 4m dimension and an area of at least 24m<sup>2</sup>. In addition, the land has a gentle slope, suitable for private open space.

As such, the proposed subdivision is consistent with the Objective and Performance Criteria.

**Performance Criteria P2**

*Each lot must have appropriate, permanent access by a Right of Carriageway registered over all relevant titles.*

**Comment:**

Lots 4 & 5 are internal lots. Each lot has an access strip width of 3m with a length of 37.6m for Lot 4 and 39.2m for Lot 5. The standard is a width of 4m with a passing bay every 30m. The plan shows overlapping Rights-of-Way over these access strips in favour of both lots.

The Performance Criteria allows for the consideration of a Right-of-Way. The Rights-of-Way provide a mechanism to meet the Acceptable Solution.

As such, the proposed subdivision is consistent with the Objective and Performance Criteria.

**10.4.15.4 Solar Orientation of Lots**

**Objective**

*To provide for solar orientation of lots and solar access for future dwellings.*

**Performance Criteria P1**

*Dimensions of lots must provide adequate solar access, having regard to the likely dwelling size and the relationship of each lot to the road.*

**Comment:**

Each lot has the potential for a dwelling to receive adequate solar access.

As such, the proposed subdivision is consistent with the Objective and Performance Criteria.

#### **10.4.15.5 Interaction, Safety and Security**

##### **Objective**

*To provide a lot layout that contributes to community social interaction, personal safety and property security.*

##### **Performance Criteria P1**

*Subdivisions that create internal lots must provide for adequate levels of visibility and surveillance.*

##### **Comment:**

The proposed subdivision has 3 internal lots. Each internal lot has visibility via the access strips to Jardine Crescent. Furthermore, the lots are surrounded by residential properties and a busy car parking area, which provide a level of surveillance.

As such, the proposed lot layout is consistent with the Objective and Performance Criteria.

#### **Representations**

Five (5) representations were received (attached documents). A summary of the representations is as follows:

- number of crossovers, traffic safety, impact on traffic movement, parking on street, alternative solution provided.

##### **Comment:**

Council's Director Infrastructure Services provided the following comment:

*The proposed 6 lot subdivision is located on the eastern side of Jardine Crescent and adjacent the southern boundary of the Prospect Vale Market Place car park. The speed zone applicable to this section of Jardine Crescent is 50km/hr. The Australian Standard sight distance requirement for the proposed residential accesses is 40m in this speed zone. From inspection on site the required sight distance is achievable.*

*The Jardine Crescent link from the market place through to Las Vegas Drive was constructed in 2012 and opened to traffic in early*

*2013. The road width is 8.8m, which is marginally less than the current urban road section for a local through road of 8.9m. Jardine Crescent could be considered to be an urban link road under the definition of the Local Government Road Hierarchy which allows for an average annual daily traffic (AADT) volume of 1,000 to 3,000 vehicles per day including heavy vehicle movements. The most recent traffic count in Jardine Crescent was undertaken in July 2014 and indicated an AADT of 905 with 4% commercial vehicles.*

*The proposed positioning of driveways as shown on the Plan of Subdivision is not taken to be dimensionally accurate and it will be a requirement that accesses are constructed in accordance with the LGAT Standard drawings.*

*The proposed intensification of development and increase in driveways and traffic is considered to be typical with the nature of other recent development in the Prospect Vale area. It is considered that the proposed new accesses and traffic to and from the proposed allotments, on the basis of single dwellings and low speed environment, will not unreasonably impact on the safety or efficiency of the road network.*

The application is for a subdivision only. Council is unaware of any proposed future development considerations for the lots. Any future planning application will consider on-site car parking as part of the assessment process.

Council can install traffic calming measures on its road network at any time, if it considered necessary.

No further action required.

### **Conclusion**

In conclusion, it is considered that the application for Use and Development for a Subdivision (staged - 6 lots) is acceptable in the General Residential zone and is an efficient use of land in close proximity to services.

**AUTHOR:** Leanne Rabjohns  
TOWN PLANNER

## **12) Recommendation**

***It is recommended that the application for Use and Development for Subdivision (staged - 6 lots) on land located at 9 Jardine Crescent, Prospect Vale CT 169734/2 by PDA Surveyors obo Eskleigh Foundation Inc, requiring the following discretions:***

- Clause 10.4.15.1 - General Suitability
- Clause 10.4.15.2 - Lot Area, Building Envelopes and Frontage
- Clause 10.4.15.4 - Solar Orientation of Lots
- Clause 10.4.15.5 - Interaction, Safety and Security

***be APPROVED, generally in accordance with the endorsed plans:***

- a) **PDA Surveyors – Plan of Subdivision – PDA Reference: L17153-P05;**

***and subject to the following conditions:***

- 1. Covenants or similar restrictive controls must not be included on or otherwise imposed on the titles to the lots created by the subdivision, permitted by this permit unless:**
  - a) **Such covenants or controls are expressly authorised by the terms of this permit; or**
  - b) **Such covenants or similar controls are expressly authorised by the consent in writing of Council.**
  - c) **Such covenants or similar controls are submitted for and receive written approval by Council prior to submission of a Plan of Survey and associated title documentation is submitted to Council for sealing.**
- 2. The driveway crossovers are to be constructed in accordance with LGAT Standard Drawing TSD-R09-V1 and to the satisfaction of Council's Director Infrastructure Services.**
- 3. All lots must be connected to Council's stormwater system, to the satisfaction of Council's Director Infrastructure Services.**
- 4. Prior to the sealing of the final plan of survey, the following must be completed to the satisfaction of Council:**

- a) **The developer must pay Council \$17,700.00, a sum equivalent to 5% of the unimproved value of the approved lots, as a Public Open Space contribution.**
  - b) **The driveway crossovers are to be completed, as per Condition 2.**
  - c) **All lots are to be connected to Council's stormwater system, as per Condition 3.**
- 5. The development must be in accordance with the Submission to Planning Authority Notice issued by TasWater (TWDA No 2017/01767-MVC attached).**

**Note:**

- 1. Prior to the construction of the crossovers, a Driveway Crossover Application Form (enclosed) must be completed and approved by Council's Road Authority. All enquiries should be directed to Council's Technical Officer on 6393 5312.**
- 2. Any other proposed development and/or use, including amendments to this proposal, may require a separate planning application and assessment against the Planning Scheme by Council. All enquiries can be directed to Council's Community and Development Services on 6393 5320 or via email: [mail@mvc.tas.gov.au](mailto:mail@mvc.tas.gov.au).**
3. This permit takes effect after:
  - a) The 14 day appeal period expires; or
  - b) Any appeal to the Resource Management and Planning Appeal Tribunal is abandoned or determined; or.
  - c) Any other required approvals under this or any other Act are granted.
4. A planning appeal may be instituted by lodging a notice of appeal with the Registrar of the Resource Management and Planning Appeal Tribunal. A planning appeal may be instituted within 14 days of the date the Corporation serves notice of the decision on the applicant. For more information see the Resource Management and Planning Appeal Tribunal website [www.rmpat.tas.gov.au](http://www.rmpat.tas.gov.au).

5. If an applicant is the only person with a right of appeal pursuant to section 61 of the Land Use Planning and Approvals Act 1993 and wishes to commence the use or development for which the permit has been granted within that 14 day period, the Council must be so notified in writing. A copy of Council's Notice to Waive Right of Appeal is attached.
6. This permit is valid for two (2) years only from the date of approval and will thereafter lapse if the development is not substantially commenced. An extension may be granted if a request is received.
7. In accordance with the legislation, all permits issued by the permit authority are public documents. Members of the public will be able to view this permit (which includes the endorsed documents) on request, at the Council Office.
8. If any Aboriginal relics are uncovered during works;
  - a) All works are to cease within a delineated area sufficient to protect the unearthed and other possible relics from destruction,
  - b) The presence of a relic is to be reported to Aboriginal Heritage Tasmania Phone: (03) 6233 6613 or 1300 135 513 (ask for Aboriginal Heritage Tasmania Fax: (03) 6233 5555 Email: [aboriginal@heritage.tas.gov.au](mailto:aboriginal@heritage.tas.gov.au)); and
  - c) The relevant approval processes will apply with state and federal government agencies.

## **DECISION:**

LAUNCESTON

J.W. Dent, OAM, B. SURV. (Tas.), M.SSSI. (Director)  
M.B. Reid, B. GEOM.(HONS) (Tas.), M.SSSI M.AIPM (Associate)

HOBART

C.M. Terry, B. SURV. (Tas.), M.SSSI. (Director)  
H. Clement, B. SURV. (Tas.), M.SSSI (Director)  
M.S.G. Denholm, B. GEOM. (Tas.), M.SSSI (Director)  
A.M. Peacock, B. APP. SC. (SURV), M.SSSI. (Consultant)  
M. McQueen, B.E., M.I.E. AUST., C.P.ENG. (Associate)  
D. Panton, B.E. M.I.E. AUST., C.P.ENG. (Consultant)  
L.H. Kiely, Ad. Dip. Civil Eng, Cert IV I.T., (Associate)  
A. Collins, Ad. Dip. Surv & Map, (Associate)

KINGSTON

A.P. (Lex) McIndoe, B. SURV. (Tas.), M.SSSI. (Director)

BURNIE/DEVONPORT

A.J. Hudson, B. SURV. (Tas.), M.SSSI. (Director)  
A.W. Eberhardt, B. GEOM. (Tas.), M.SSSI (Director)



# PDA Surveyors

ABN 71 217 806 325

## Surveying, Engineering & Planning

PO Box 284 (3/23 Brisbane Street)  
Launceston Tasmania, 7250  
Phone (03) 6331 4099

ABN 71 217 806 325  
Fax (03) 6334 3098  
Email: pda.ltn@pda.com.au  
www.pda.com.au

Our Ref: 17153

1<sup>st</sup> November, 2017.

Meander Valley Council  
PO Box 102  
WESTBURY TAS 7303

Attention: Mrs J. Richardson

Dear Jan,

**RE: SUBDIVISION – ESKLEIGH FOUNDATION INCORPORATED – 9 JARDINE CRESCENT, PROSPECT VALE.**

We submit herewith on behalf of Eskleigh Foundation Incorporated a subdivision to subdivide six lots in stages from the land they own at 9 Jardine Crescent.

We will address the provisions of the Meander Valley Planning Scheme as it relates to this subdivision.

**10.4.15.1 General Suitability**

Each of the lots on the plan is suitable for use and development in the General Residential Zone and none of the matters listed in the Performance Criteria provide any constraints to development.

**10.4.15.2 Lot Area, Building Envelopes and Frontage**

The Performance Criteria applies as all lots are under the 700m<sup>2</sup> minimum lot size. As the land is gently sloping and has no existing development on it a dwelling can be erected in a convenient location to ensure that onsite parking and manoeuvrability and adequate private open space can be provided. Lot 1 meets Acceptable Solution A2. Lots 4 and 5 meet the performance criteria as each lot has a 3.0 metre frontage but will provide mutual rights-of-way for Lots 4 and 5 over each of the other lots to enable the total 6.0 metre wide access strip to be utilised for Lots 4 and 5.

**10.4.15.3 Provision of Services**

Acceptable Solution A1 is met as we have shown how a water supply and sewerage system can be provided to each lot. Acceptable Solution A2 is met as we have shown on the plan how a reticulated stormwater system can be provided to each lot.

.../2...

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OFFICES ALSO AT:

- 16 Emu Bay Road, Burnie, 7320
- 63 Don Road, Devonport, 7310

- (03) 6431 4400
- (03) 6423 6875

- 127 Bathurst Street, Hobart, 7000
- 6 Freeman Street, Kingston, 7050
- 8/16 Main Road, Huonville, 7109

- (03) 6234 3217
- (03) 6229 2131
- (03) 6264 1277

#### 10.4.15.4 Solar Orientation of Lots

Performance Criteria P1 applies to all lots as they are outside the solar orientation window. The blocks are all over 500m<sup>2</sup> and Lots 1 and 2 have the carpark on the northern side, Lot 3 has the driveway for Lot 1 on the northern side as does Lot 6 with the driveway for Lots 4 and 5. Lot 4 is a larger block and because of the services easement on its northern side it will be able to have adequate solar access. Lot 5 is a larger block and can therefore be provided with adequate solar access.

#### 10.4.15.5 Interaction, Safety and Security

The performance criteria apply for this subdivision and these lots provide adequate levels of visibility and surveillance.

10.4.15.6 Integrated Urban Landscape; 10.4.15.7 Walking and Safety Network; 10.4.15.8 Neighbourhood Road Network do not apply for this subdivision.

The Codes that apply to this subdivision follow;

#### 4.0 Road and Railway Assets Code

The Acceptable Solution in Clause 4.7.2 Management of Road Accesses and Junctions is met in that each lot will only have only access to a road of 50kmh or less. As the Council is the Road Authority can you please confirm that these accesses are acceptable to the Road Authority.

#### 10.0 Open Space and Recreation Code

In this case we do not propose providing any Open Space area for Council and we will therefore need to rely on the 5% contribution for Public Open Space. Could the General Manager please indicate that no land is required for Public Open Space but instead there is to be a cash payment in lieu in accordance with Clause 10.6.1 Acceptable Solution A1.

As far as we can determine these are the only Codes that will apply to this application. Please advise us if you require anything else.

We enclose the following to enable you to assess the application;

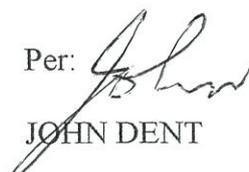
- 3 copies of the Proposal Plan.
- Copy of title.
- Completed Development Application form.

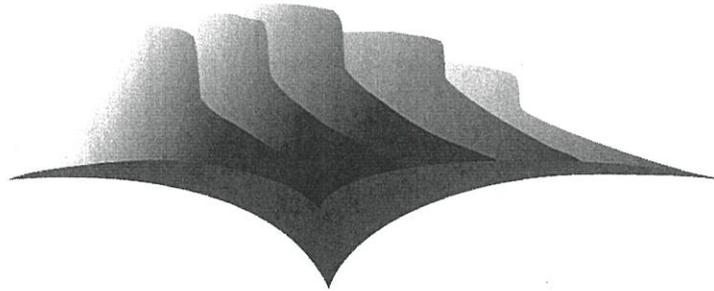
Could you please invoice Eskleigh Foundation Inc., c/o john.dent@pda.com.au for any fees associated with this application and we will arrange for those to be paid direct by our client to your Council.

Please get in touch if you require anything further.

Yours faithfully

PDA Surveyors

Per:   
JOHN DENT



# Meander Valley Council

W O R K I N G T O G E T H E R

## Public Open Space contribution

In accordance with Clause E10.0 of the Meander Valley Interim Planning Scheme 2013 the General Manager gives consent that no land is required for public open space but instead there is to be a cash payment in lieu for PA\18\0087 Subdivision (6 lots) at 9 Jardine Crescent, Prospect Vale (CT 169734/2).

Signed:

Martin Gill  
**GENERAL MANAGER**

8 November 2017



## Submission to Planning Authority Notice

Council Planning Permit No.	PA\18\0087	Council notice date	8/11/2017
<b>TasWater details</b>			
TasWater Reference No.	TWDA 2017/01767-MVC	Date of response	13/11/2017
TasWater Contact	Anthony Cengia	Phone No.	(03) 6237 8243
<b>Response issued to</b>			
Council name	MEANDER VALLEY COUNCIL		
Contact details	planning@mvc.tas.gov.au		
<b>Development details</b>			
Address	9 JARDINE CR, PROSPECT VALE	Property ID (PID)	3430831
Description of development	Subdivision of 6 lots		
<b>Schedule of drawings/documents</b>			
	Prepared by	Drawing/document No.	Revision No. Date of Issue
PDA		Plan of Subdivision L17153-P04	11/09/2017
<b>Conditions</b>			
<p><b>SUBMISSION TO PLANNING AUTHORITY NOTICE OF PLANNING APPLICATION REFERRAL</b></p> <p>Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:</p> <p><b>CONNECTIONS, METERING &amp; BACKFLOW</b></p> <ol style="list-style-type: none"> <li>1. A suitably sized water supply with metered connections / sewerage system and connections to each lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.</li> <li>2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.</li> <li>3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.</li> </ol> <p><b>ASSET CREATION &amp; INFRASTRUCTURE WORKS</b></p> <ol style="list-style-type: none"> <li>4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.</li> <li>5. Prior to applying for a Permit to Construct new TasWater infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements to TasWater's satisfaction.</li> <li>6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.</li> <li>7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.</li> <li>8. Prior to the issue of a Consent to Register a Legal Document all additions, extensions, alterations or</li> </ol>			

upgrades to TasWater's infrastructure required to service the development are to be constructed at the expense of the developer to the satisfaction of TasWater.

9. After testing to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
10. At practical completion of the water and sewerage works and prior to TasWater issuing a Consent to a Register Legal Document the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
  - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
  - b. A request for a joint on-site inspection with TasWater's authorised representative must be made;
  - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
  - d. As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
11. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.

#### **FINAL PLANS, EASEMENTS & ENDORSEMENTS**

14. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater and the certificate must be submitted to the Council as evidence of compliance with these conditions when application for sealing is made.
15. Pipeline easements, to TasWater's satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater's standard pipeline easement conditions.

#### **DEVELOPMENT ASSESSMENT FEES**

16. The applicant or landowner as the case may be, must pay a development assessment and Consent to Register a Legal Document fee to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date they are paid to TasWater, as follows:
  - a. \$479.09 for development assessment; and
  - b. \$226.94 for Consent to Register a Legal Document

The payment is required within 30 days of the issue of an invoice by TasWater.

17. In the event Council approves a staging plan, a Consent to Register a Legal Document fee for each stage, must be paid commensurate with the number of Equivalent Tenements in each stage, as approved by Council.

### Advice

#### General

For information on TasWater development standards, please visit <http://www.taswater.com.au/Development/Development-Standards>

For application forms please visit <http://www.taswater.com.au/Development/Forms>

#### Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

- A permit is required to work within TasWater’s easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater
- TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit [www.taswater.com.au/Development/Service-location](http://www.taswater.com.au/Development/Service-location) for a list of companies
- TasWater will locate residential water stop taps free of charge
- Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

### Declaration

The drawings/documents and conditions stated above constitute TasWater’s Submission to Planning Authority Notice.

#### Authorised by



**Jason Taylor**  
Development Assessment Manager

### TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au



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ROBYN + DALE CROLE

1/18 LAS VEGAS DRIVE

PROSPECT VALE

TAS 7250

General Manager - 5800/81/19

29.11.17

Meander Valley Council

Re Application for Planning Approval of 9 Jardine Cres

Dear Sir,

Our concern is the extra driveway entrances into such a short space in Jardine Cres., considering the amount of cars already in the new flats opposite + the extra thruw traffic to + from Woolworths car park.

We would also like to bring to your notice that we have a wood heater and use it all during the cold weather. We use seasoned dry wood + have lived here for 18 years

Yours sincerely

Dale + Robyn Crole.

Mr Martin Gill  
General Manager, Meander Valley Council

4 December 2017

Index No.		20612	
Doc No.			
RCVD	04 DEC 2017		MVC
Action Officer	LR	Dept.	CDS
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This representation refers to PA/18/0087 for 6 Lot Subdivision at 9 Jardine Cres. Prospect Vale for the Eskleigh Foundation.

While I am very pleased to have Eskleigh residents living at No9, my objections relate, first to the number of entrances and secondly with traffic; safety and parking .

By seeking the modification of the internal configuration of the 6 Lots, I believe that with ONE entrance or just TWO, rather than the proposed THREE entrances would greatly improve safety.

With this proposal the entrance for Lot 2 is not only close to the PMP car park corner but only 4.5m from the 7.2m entrance for Lots 1&3 and they appear to be almost directly opposite the Avila entrance. Access and Egress for these 3 entrances from both sides of Jardine Cres. have the potential to jeopardise safety.

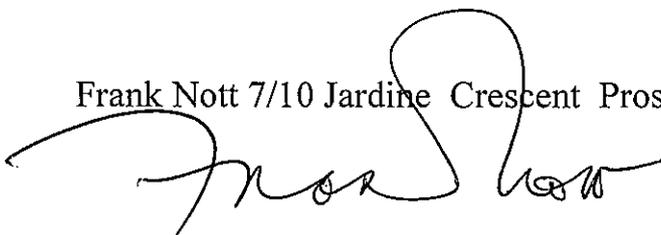
It should also be noted that the 8 residences in Avila are serviced by one 4m driveway, yet with just 6 Lots the proposal at No9 is for 3 entrances and driveways covering 21.6m. from a Jardine Cres frontage of 50.6m! I am also led to believe that an earlier plan for this site was for 8 Lots using a single entrance.

With increasing traffic movements from the Supermarket car park and those turning left into Jardine Cres. in addition to the through traffic from Bimbimbi Ave to Las Vegas Dve .all road users will need to be far more vigilant on the western end of the Jardine Cres.

How much Parking is proposed within the new development and will this cater for Eskleigh visitors? If there is overflow for visitor parking will this be accommodated by parking in Jardine Cres?

With cars potentially being parked on both sides of the Crescent and with the curved nature of a Crescent then general traffic movements and visibility from the entrances would become issues.

Frank Nott 7/10 Jardine Crescent Prospect Vale



General Manager  
 Meander Valley Council  
 PO Box 102 Westbury 7303.  
 Mr Martin Gill

Index No. 20612			
Doc No.			
RCVD	04 DEC 2017	MVC	
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3 December 2017

Representation from residents at Avila, 10 Jardine Cres. Prospect Vale relating to the proposed development by PDA / Eskleigh Foundation at 9 Jardine Cres. PA/18/0087

We would welcome having Eskleigh ,who cater for people in our community with varying levels of physical and intellectual disabilities living in our neighbourhood. Our concerns relate only to the THREE entrances in the proposed development and associated TRAFFIC & SAFETY ISSUES.

Currently our residents have some anxiety entering and leaving Avila at 10 Jardine Cres. This is with the current traffic movements from Prospect Market Place car park turning into Jardine Cres in addition to through traffic from Bimbimbi Ave to Las Vegas Dve. Fewer entrances would improve safety for vehicles and pedestrians.

This would be further impacted with 3 additional entrances in addition to the fact that the proposed first entrance is close to the Car Park entrance and almost directly opposite the Avila gates!

If the proposed development could preferably be reduced to a SINGLE or TWO entrances by adjusting the internal configuration of the 6 Lots it would allay many of our traffic safety concerns.

Acknowledging that there could be issues relating to parking along the western end of Jardine Cres. when there is an excess of visitors from Eskleigh.

Finally, Visibility (line of sight) in Jardine Cres. is of concern for our residents when entering or more so when leaving Avila, however while still a problem on the proposed Subdivision side of Jardine Cres. it would be greater on the Avila side where it is a 'tighter curve'.

Please find attached the Names, Addresses and Signatures of the Avila residents at 10 Jardine Crescent supporting this Representation. This Representation is signed by every resident at Avila as at 3 Dec.

We, the undersigned residents of Avila  
 support the Representation:

<u>NAME</u>	<u>ADDRESS</u>	<u>SIGNATURE</u>	<u>DATE</u>
JOAN NOTT	7/10 JARDINE CRES.	Joan A. Nott	3/12/17
LEE M WILLIAMS	1/10 JARDINE CRES.	Lee M Williams	3/12/17
MICHAEL MERCIER	1/10 JARDINE CRESCENT	Michael Mercier	3/12/17
KAREN CLARK	2/10 Jardine Cres.	K Clark	3/12/17
Karen Matthew	6/10 Jardine Cres	Karen Matthew	3/12/17
FRANK NOTT	7/10 Jardine Cres.	Frank Nott	3/12/17
Justin Ockerby	5/10 Jardine Cres.	J. Ockerby	3/12/17
Melissa Harris	5/10 Jardine Cres	Melissa Harris	3/12/17
LYNDON MENEGON	8/10 JARDINE CRES	Lyndon Menegon	3/12/17
GAIL MENEGON	8/10 JARDINE CRES	Gail Menegon	3/12/17



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Doc No.			
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**PA/18/0087 - Subdivision**

27/11/2017

RE: THE DEVELOPMENT BY  
'ESKLEIGH FOUNDATION' AT 9  
JARDINE CRESCENT. PA/18/0087

THE FOLLOWING PROBLEMS MAY ARISE

1) WITH THE INTENDED EXTRA ENTRANCES ON TO JARDINE CRESCENT, FOR THE NEW SIX UNITS (PLUS VISITOR PARKING)

2) PLUS THE EXTRA CAR TRAFFIC, FROM THE 20 ODD "AVILA" UNITS, ENTERING INTO JARDINE CRESCENT.

3) ALSO THE EXTRA TRAFFIC FROM THE SUPERMARKET CAR PARK AND THE CHILDCARE CENTRE IN STUART AVENUE.

PLUS THE THROUGH TRAFFIC FROM LAS VEGAS DRIVE TO BIMBIMBI AVENUE AND STUART AVENUE.

CHAOS REIGNS



4) WE NOW HAVE HOONS DRIVING  
ALONG JARDINE CRESCENT.

SPEED HUMPS ARE BADLY  
NEEDED, IN JARDINE CRESCENT,  
TO KEEP TRAFFIC IN ORDER,  
AND ALSO, TO STOP THE HOONS,  
BEFORE AN ACCIDENT  
HAPPENS, AND PROPERTY IS  
DAMAGED

JACQUELINE KILBY  
(WHOSE PROPERTY IS VERY  
NEAR TO THE NEW  
DEVELOPMENT.)

(TELEPHONE . 63701274)

## Beth Williams

---

**From:** Mark Weiss <mark@stratatas.com.au>  
**Sent:** Monday, 4 December 2017 3:18 PM  
**To:** Planning @ Meander Valley Council  
**Cc:** macovic@bigpond.com; karenanneclark@hotmail.com; Paulmunnn@gmail.com; klmn.burton@bigpond.com; Justin\_ockerby@hotmail.com; karenmatthews73@hotmail.com; dgray@vosfamilyoffice.com.au; frnott@bigpond.com  
**Subject:** Jardine Crescent Development- Objection PA/18/0087  
**Attachments:** img-Z04151458-0001.pdf

To the General Manager,

Please accept this objection to Planning Application (CT:169734/2) PA/18/0087  
As per the document the Body Corporate for Avila Townhouses express their support for the Eskleigh Foundation Inc. in their necessary community work, however believe that multiple driveways within close proximity to other commercial and residential lots, would create unnecessary risk of accidents, injuries, and impede traffic flow. Please contact for additional information, if necessary.

Kind regards

Mark Weiss  
Strata Manager



**2016 SCA (TAS) Strata Management Business of the Year**  
**Member Strata Community Australia (TAS)**



8/45 Cameron Street, Launceston, TAS 7250  
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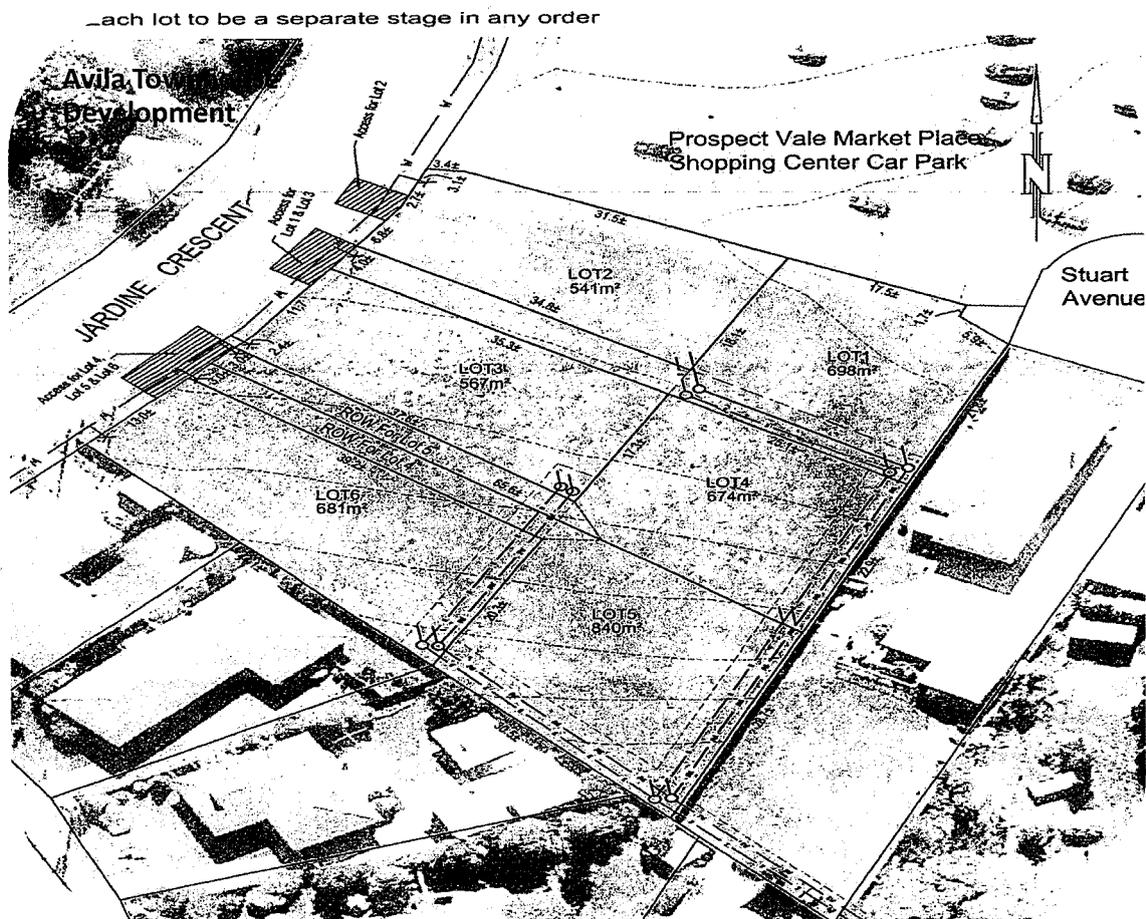
## Public Submission on Behalf Avila Townhouses SC: 172407

Please accept this objection to Planning Application CT:169734/2 9 Jardine Crescent, Prospect, prepared by Mark Waiss, Strata Manager, Stratatas, on behalf of the Body Corporate of SC: 172407.

**Proposal:** Subdivision (staged – 6 Lots) - general suitability, lot area, building envelope, frontage, solar orientation, internal lots

It is our understanding that the proposal encompasses 6 individual lots for the purpose of residential living. As the development proponent is Eskleigh Foundation Inc., it would be reasonable to consider that the development (CT:169734/2) may provide assisted living, or provisions for disability residential care.

**Complainant Location:** Avila Townhouses SC: 172407, located at 10 Jardine Crescent, are a staged development currently with eight contemporary townhouses, with additional townhouses in construction. Avila Townhouses are located directly opposite the proposed CT:169734/2 development.



### 1.0 Avila Townhouse proximity to Application CT:169734/2

**Reasons for Objection:**

**10.4.15.2 Lot Area, Building Envelopes and Frontage, 4.0 Road and Railway Assets Code**

We submit that the plan provided does not adequately address issue of traffic management, for both vehicular and pedestrian safety. The proposed plan utilises an outdated aerial image that is not indicative of the subsequent development of Avila Townhouses, and location of their entrance.

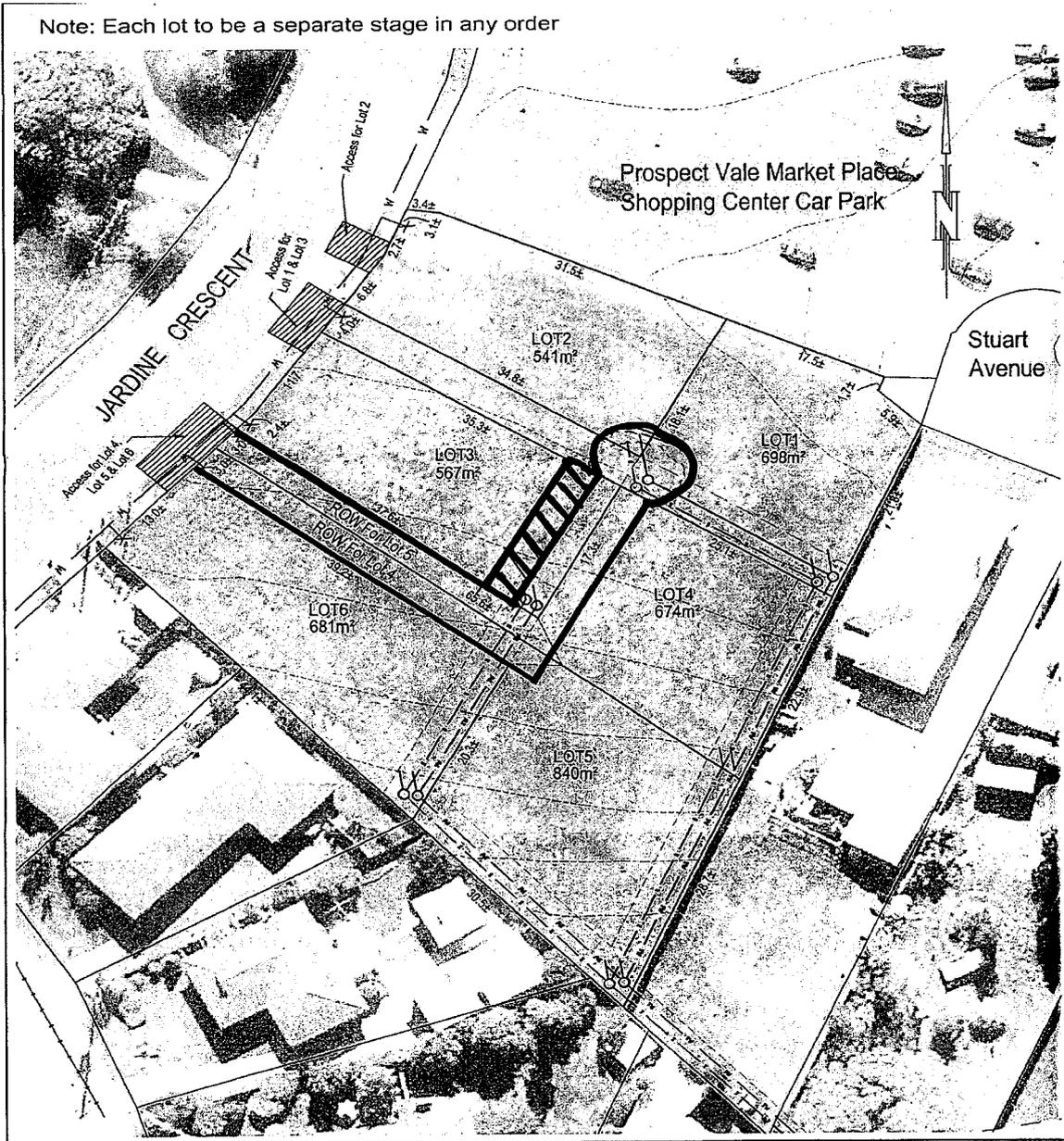
9 Jardine Crescent is located with boundaries to Prospect Vale Market Place Shopping Centre Car Park, five private residences, and frontage to Jardine Crescent. Due the high density of commercial, and residential properties, the area experiences high vehicular traffic from local residents, patrons of the Shopping Centre, locality of Child Care Centre in Stuart Avenue, and utilisation of Jardine Crescent for access to Country Club Drive, and the Country Club Casino.

The application CT: 169734/2, indicates provision for 1 single, 1 double, and 1 triple width driveways to service the 6 proposed blocks. This equates in excess of 40% of 9 Jardine Crescent road frontage. The curvature of Jardine Crescent reduces traffic visibility, and due to the likelihood of boundary fences to be erected on Lots 2, and 6, would further impede visibility for pedestrians, and vehicles exiting the prospect Vale Market Place Shopping Centre. In addition, excessive driveways create a traffic hazard for those vehicles wishing to enter/ exit the residential properties of Jardine Crescent. The necessity for vehicles entering these driveways to stop and wait for clear road would interrupt the flow of traffic, and provide potential for regular accidents.

Whilst the proposals driveways exit onto Jardine Crescent, which has a 50kmh speed limit, the concentration of driveways, and resulting impediment to traffic flow, does not adequately address this issue, we submit that a consolidation of the proposed entrances would minimise traffic interruption, and create safer outcomes.

I have attached an alternative draft, for the purpose of providing an example which may adequately service the development with one driveway, and in addition, allocates visitor parking, should the development be utilised for aged, or disability assisted residential care. . The alternative example provided, creates a development of internal blocks creating greater privacy and security for potential residents. I concede that this alternative provided is not to scale, and has no consideration to easements, or other building regulation impediments.

Note: Each lot to be a separate stage in any order



2.0 Example of alternative design, consolidating access/egress to one point, servicing all lots

In closing, I wish to re-iterate that the Body Corporate supports and congratulates the Eskleigh Foundation's contribution to the community, however objects to the design of Jardine Crescent road access. Should you require additional information, or clarification, do not hesitate to contact.

Kind regards



Mark Weiss

Strata Manager



**2016 SCA (TAS) Strata Management Business of the Year**  
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## **C&DS 4 46A BEEFEATER STREET WITH DRAINAGE WORKS THROUGH 33 TOWER HILL STREET, 38 WEST GODERICH STREET AND 35 MORIARTY STREET, DELORAINE – MULTIPLE DWELLINGS**

### **1) Introduction**

This report considers application PA\18\0064 for Multiple Dwellings (7 units) on land located at 46a Beefeater Street (CT 31888/3) with drainage works through 33 Tower Hill Street (CT 118654/2), 38 West Goderich Street (CT 118655/1) and 35 Moriarty Street (CT 32226/1), Deloraine.

### **2) Background**

#### **Applicant**

Rebecca Green & Associates

#### **Planning Controls**

The subject land is controlled by the *Meander Valley Interim Planning Scheme 2013* (referred to in this report as the 'Scheme').

#### **Use & Development**

The proposal is to construct 7 units at 46a Beefeater Street in Deloraine. To accommodate the proposal, drainage works are proposed through neighbouring properties at 33 Tower Hill Street (sewer), 38 West Goderich Street (sewer) and 35 Moriarty Street (stormwater), Deloraine.

Units 1, 2, 3, 6 & 7 have identical floor plans – being four bedroom, single storey units with a floor area of 88m<sup>2</sup>. Unit 4 is a four bedroom, single storey unit with a covered deck and a floor area of 138.8m<sup>2</sup>. Unit 5 is a four bedroom, single storey unit with a floor area of 72m<sup>2</sup>. All units have a dedicated private open space with a northerly aspect.

The application includes the demolition of an existing building (see Figure 1).

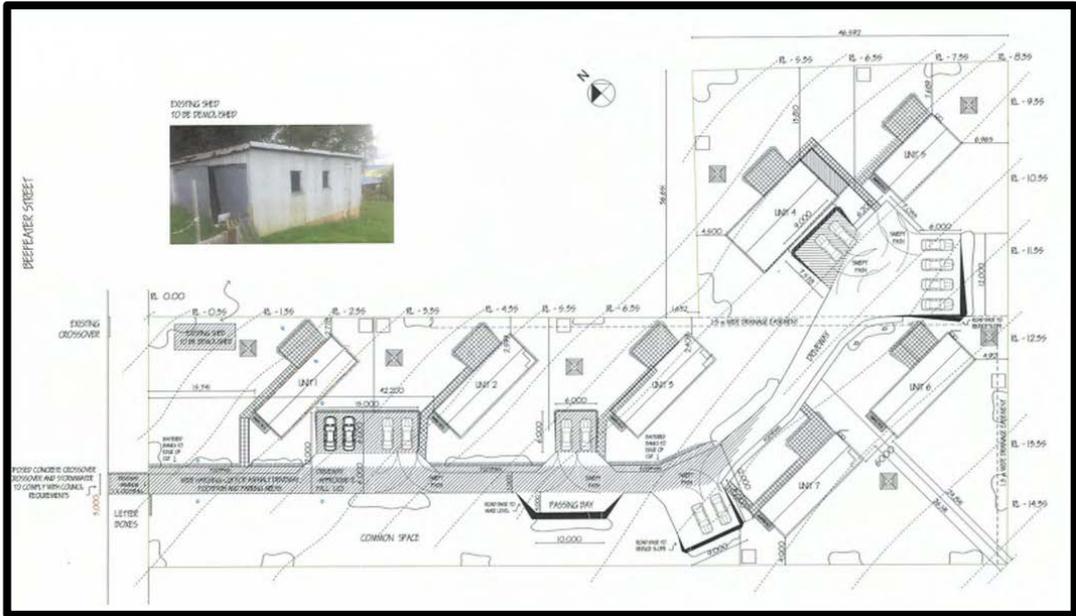


Figure 1: proposed site plan (source: Adorn Drafting) - detailed plans attached



Photo 1: aerial view of subject and surrounding land



Photos 2-5: view from Beefeater Street



Photo 6: showing proposed location of stormwater services through 35 Moriarty Street



Photo 7: showing proposed location of sewer services through 33 Tower Hill Street

### **Site & Surrounds**

The property at 46a Beefeater Street is located within the township of Deloraine. The land has frontage onto Beefeater Street. The land slopes down from the road.

The property is vacant, except for a small unused building. The proposal includes the demolition of this building. The land is surrounded by housing (either single dwellings or multiple dwellings) and a TasNetwork workshop. Land to the south (35 Moriarty Street) contains 14 multiple dwellings.

### **Statutory Timeframes**

Date Received:	17 October 2017
Request for further information:	27 October 2017
Information received:	14 November 2017
Advertised:	25 November 2017
Closing date for representations:	11 December 2017
Extension of time granted:	30 November 2017
Extension of time expires:	17 January 2018
Decision due:	16 January 2018

### **3) Strategic/Annual Plan Conformance**

Council has a target under the Annual Plan to assess applications within statutory timeframes.

### **4) Policy Implications**

Not applicable.

### **5) Statutory Requirements**

Council must process and determine the application in accordance with the *Land Use Planning Approval Act 1993 (LUPAA)* and its Planning Scheme. The application is made in accordance with Section 57 of LUPAA.

### **6) Risk Management**

Management of risk is inherent in the conditioning of the permit.

### **7) Consultation with State Government and other Authorities**

The application was referred to TasWater. A Submission to Planning Authority Notice (TWDA 2017/01667-MVC) was received on 20 October 2017 (attached document).

## 8) Community Consultation

The application was advertised for the statutory 14-day period.

Eleven (11) representations were received during the advertising period (attached documents). A further two (2) representations were received after the advertising period closed. The representations are discussed in the assessment below.

## 9) Financial Impact

Not applicable

## 10) Alternative Options

Council can either approve the application with amended conditions or refuse the application.

## 11) Officers Comments

### Zone

The main subject property is located in the General Residential zone. The associated properties are also located within the General Residential zone. The land surrounding the site is located in the General Residential and Rural Resource zones.

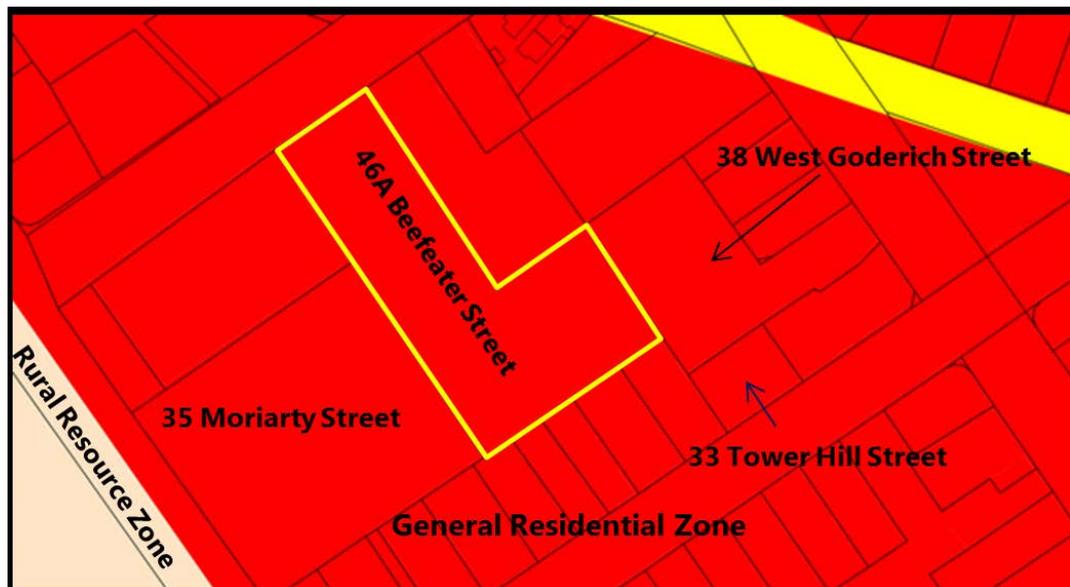


Figure 3: zone map

## **Use Class**

Table 8.2 of the Scheme, categorises the proposed use class as:

- Residential (multiple dwelling)

Residential is specified in section 10.2 - Use Table as being Permitted. The Permitted status is dependent on the use and development meeting all of the applicable Acceptable Solutions in the planning scheme. In this instance:

- The use and development relies on Performance Criteria under the Planning Scheme.

## **Applicable Standards**

This assessment considers all applicable planning scheme standards.

In accordance with the statutory function of the State Template for Planning Schemes (Planning Directive 1), where use or development meets the Acceptable Solutions it complies with the planning scheme, however it may be conditioned if considered necessary to better meet the objective of the applicable standard.

Where use or development relies on performance criteria, discretion is applied for that particular standard only. To determine whether discretion should be used to grant approval, the proposal must be considered against the objectives of the applicable standard and the requirements of Section 8.10.

A brief assessment against all applicable Acceptable Solutions of the General Residential zone and Codes is provided below. This is followed by a more detailed discussion of any applicable Performance Criteria and the objectives relevant to the particular discretion.

## **Compliance Assessment**

The following table is an assessment against the applicable standards of the Meander Valley Interim Planning Scheme 2013.

<b>General Residential Zone</b>			
Scheme Standard		Comment	Assessment
<b>10.3.1 Amenity</b>			
A1	If for permitted or no permit required uses.	Multiple dwellings are a Permitted Use Class	Complies

A2	Commercial vehicles for discretionary uses must only operate between 7.00am and 7.00pm Monday to Friday and 8.00am to 6.00pm Saturday and Sunday.	Not applicable	
<b>10.4.1 Residential density for multiple dwellings</b>			
A1	Multiple dwellings must have a site area per dwelling of not less than: a) 325m <sup>2</sup> ; or b) in accordance with a density area.	<ul style="list-style-type: none"> <li>The land area is 6330m<sup>2</sup></li> <li>As such, the land area per unit is 904.3m<sup>2</sup></li> </ul>	Complies
<b>10.4.2 Setbacks and building envelope for all dwellings</b>			
A1	Unless within a building area, a dwelling, excluding protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6m into the frontage setback, must have a setback from a frontage that is:  (a) 4.5m from the primary frontage or, if the setback from the primary frontage is less than 4.5 m, not less than the setback of any existing dwelling on the site; or  (b) 3m from a non-primary frontage, or if the setback is less than 3 m, not less than the setback of any existing dwelling on the site; or  (c) if for a vacant site with existing dwellings on adjoining sites, not	The front setback of Unit 1 is 15.2m	Complies

	<p>more than the greater, or less than the lesser setback of the dwellings on the adjoining sites; or</p> <p>(d) in accordance Table 10.4.2.</p>		
A2	<p>A garage or carport must have a setback from a primary frontage of at least:</p> <p>(a) 5.5m, or alternatively 1m behind the façade of the dwelling; or</p> <p>(b) the same as the dwelling façade, if the dwelling has floor area above the garage or carport; or</p> <p>(c) 1m, if the slope is greater than 1 in 5 for a distance of 10m from the frontage.</p>	Not applicable	
A3	<p>A dwelling, excluding outbuildings with a building height of not more than 2.4m and protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6m horizontally beyond the building envelope, must:</p> <p>(a) be contained within a building envelope determined by:</p> <p>(i) a distance equal to the frontage setback or, for an internal lot, a distance of 4.5m from the rear</p>	The buildings fit within the Building Envelope	Complies

	<p>boundary of a lot with an adjoining frontage; and</p> <p>(ii) projecting a line at an angle of 45 degrees from the horizontal at a height of 3m above natural ground level at the side boundaries and a distance of 4m from the rear boundary to a building height of not more than 8.5m above natural ground level; and</p> <p>(b) only have a setback within 1.5m of a side boundary if the dwelling:</p> <p>(i) does not extend beyond an existing building built on or within 0.2m of the boundary of the adjoining lot; or</p> <p>(ii) does not exceed a total length of 9m or one-third the length of the side boundary (whichever is the lesser).</p>		
<b>10.4.3 Site coverage and private open space for all dwellings</b>			
A1	<p>Dwellings must have:</p> <p>(a) a site coverage of not more than 50% (excluding eaves up to 0.6m); and</p> <p>(b) 60m<sup>2</sup> for multiple</p>	<ul style="list-style-type: none"> <li>• The site coverage of buildings is 10%</li> <li>• Each unit has an area of</li> </ul>	Complies

	<p>dwelling, unless the dwelling has a finished floor level that is entirely more than 1.8m above the finished ground level; and</p> <p>(c) a site area of which at least 25% of the site area is free from impervious surfaces.</p>	<p>private open space greater than 60m<sup>2</sup></p> <ul style="list-style-type: none"> <li>• Total site coverage (including driveways/ parking spaces) is 25%</li> </ul>	
A2	<p>A dwelling must have an area of private open space that:</p> <p>(a) is in one location and is at least:</p> <p>(i) 24m<sup>2</sup>; or</p> <p>(ii) 12m<sup>2</sup>, for multiple dwellings above ground floor level; and</p> <p>(b) has a minimum horizontal dimension of:</p> <p>(i) 4m; or</p> <p>(ii) 2m, for multiple dwellings above ground floor level; and</p> <p>(c) is directly accessible from, and adjacent to, a habitable room (other than a bedroom); and</p> <p>(d) is not located to the south, south-east or south-west of the dwelling, unless the area receives at least 3 hours of sunlight to 50% of the area between 9.00am and 3.00pm on the 21<sup>st</sup> June; and</p> <p>(e) is located between the</p>	<p>Each unit has private open space that complies with the standard</p>	<p>Complies</p>

	<p>dwelling and the frontage only if the frontage is orientated between 30 degrees west of north and 30 degrees east of north; and</p> <p>(f) has a gradient not steeper than 1 in 10; and</p> <p>(g) is not used for vehicle access or parking.</p>		
<b>10.4.4 Sunlight and overshadowing for all dwellings</b>			
A1	A dwelling must have at least one habitable room (other than a bedroom) in which there is a window that faces between 30 degrees west of north and 30 degrees east of north.	All units have windows that comply with the standard	Complies
A2	<p>Multiple dwellings to the north of a habitable room window (other than a bedroom) of another dwelling on the same site, which window faces between 30 degrees west of north and 30 degrees east of north, must be in accordance with (a) or (b), unless excluded by (c):</p> <p>(a) The multiple dwelling is contained within a line projecting:</p> <p>(i) 3 m from the window; and</p> <p>(ii) vertically to a height of 3 m and then at an angle of 45 degrees.</p> <p>(b) Sunlight to the</p>	All units are greater than 3m apart	Complies

	<p>habitable room is not reduced to less than 3 hours between 9.00 am and 3.00 pm on 21<sup>st</sup> June.</p> <p>(c) That part, of a multiple dwelling, consisting of:</p> <p>(i) an outbuilding with a building height no more than 2.4 m; or</p> <p>(ii) protrusions (such as eaves, steps, and awnings) that extend no more than 0.6 m horizontally from the multiple dwelling.</p>		
A3	<p>Multiple dwellings, that to the north of the private open space of another dwelling on the same site, must be in accordance with (a) or (b), unless excluded by (c):</p> <p>(a) The multiple dwelling is contained within a line projecting:</p> <p>(i) 3 m from the northern edge of the private open space; and</p> <p>(ii) vertically to a height of 3 m and then at an angle of 45 degrees.</p> <p>(b) Sunlight to 50% of the private open space is not reduced to less than 3 hours between 9.00 am and 3.00 pm on 21<sup>st</sup> June.</p>	All units comply with the standard	Complies

	<p>(c) That part, of a multiple dwelling, consisting of:</p> <ul style="list-style-type: none"> <li>(i) an outbuilding with a building height no more than 2.4 m; or</li> <li>(ii) protrusions (such as eaves, steps, and awnings) that extend no more than 0.6 m horizontally from the multiple dwelling.</li> </ul>		
<b>10.4.6 Privacy for all dwellings</b>			
A1	<p>A balcony, deck, roof terrace, parking space, or carport, that has a finished surface or floor level more than 1m above natural ground level, must have a permanently fixed screen at least 1.7m above the finished surface or floor level, with a uniform transparency of no more than 25%, along the sides facing a:</p> <ul style="list-style-type: none"> <li>(a) side boundary, unless there is a setback of at least 3m; and</li> <li>(b) rear boundary, unless there is a setback of at least 4m; and</li> <li>(c) dwelling on the same site, unless there is a setback of at least 6m: <ul style="list-style-type: none"> <li>(i) from a window or glazed door, to a habitable room; or</li> <li>(ii) from a balcony, deck, roof terrace or the private open space.</li> </ul> </li> </ul>	Not applicable	

A2	<p>A window or glazed door, to a habitable room that has a floor level more than 1 m above the natural ground level, must be in accordance with (a), unless it is in accordance with (b):</p> <p>(a) The window or glazed door:</p> <ul style="list-style-type: none"> <li>(i) is at least 3 m from a side boundary; and</li> <li>(ii) is at least 4m from a rear boundary; and</li> <li>(iii) for a multiple dwelling, is at least 6m from a window or glazed door to a habitable room, of another dwelling on the same site; and</li> <li>(iv) for a multiple dwelling, is at least 6m from the private open space of another dwelling on the same site.</li> </ul> <p>(b) The window or glazed door:</p> <ul style="list-style-type: none"> <li>(i) is offset in the horizontal plane, at least 1.5 m from the edge of a window or glazed door to a habitable room of another dwelling; or</li> <li>(ii) has a sill height or fixed obscure glazing at least 1.7 m above the floor level; or</li> </ul>	Not applicable	

	(iii) has a permanently fixed external screen at least 1.7 m above floor level with a uniform transparency not more than 25%.		
A3	<p>For multiple dwellings, a shared driveway or parking space must be separated from a window or glazed door to a habitable room by a horizontal distance of at least:</p> <p>(a) 2.5m; or  (b) 1m if:</p> <p>(i) separated by a screen of at least 1.7m height; or  (ii) the window or glazed door has a sill height or fixed obscure glazing at least 1.7m above the shared driveway or parking space.</p>	<ul style="list-style-type: none"> <li>• Visitor car parking near Unit 4 is located 1.5m away from a bathroom window (not habitable room)</li> <li>• All units comply with the standard</li> </ul>	Complies

### Road and Railway Assets Code

Scheme Standard	Comment	Assessment
<b>E4.6.1 Use and road or rail infrastructure</b>		
A1	Sensitive use within 50m of a category 1 or 2 road with a speed limit of more than 60km/h, a railway or future road or railway, does not increase the annual average daily traffic movements by more than 10%.	Not applicable
A2	For roads with a speed limit of 60km/h or less the use	The proposed unit development Relies on Performance

	must not generate more than 40 movements per day.	will generate more than 40 vehicle movements total	Criteria
A3	For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic movements by more than 10%.	Not applicable	

### Car Parking and Sustainable Transport Code

Scheme Standard	Comment	Assessment
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#### 6.6.1 Car Parking Numbers

A1	The number of car parking spaces must not be less than the requirements of: c) Table E6.1; or d) a parking precinct plan.	The site plan shows two car parking spaces per unit and three visitor car parking spaces	Complies
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#### E6.7.1 Construction of Car Parking Spaces and Access Strips

A1	All car parking, access strips manoeuvring and circulation spaces must be:  d) formed to an adequate level and drained; and e) except for a single dwelling, provided with an impervious all weather seal; and f) except for a single dwelling, line marked or provided with other clear physical means to delineate car spaces.	<ul style="list-style-type: none"> <li>The proposed internal driveway is formed and drained</li> <li>It is noted the proposed property drainage system relies on connection to Council's public drainage network via adjoining property with no benefitting easement</li> <li>Therefore details of the</li> </ul>	Complies
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		<p>outfall connection point for the car parking and driveway access is required to be approved by the Director Infrastructure Services before commencing any works</p>	
<p><b>E6.7.2 Design and Layout of Car Parking</b></p>			
A1	<p>A1.1 Where providing for 4 or more spaces, parking areas (other than for parking located in garages and carports for dwellings in the General Residential Zone) must be located behind the building line; and</p> <p>A1.2 Within the General Residential Zone, provision for turning must not be located within the front setback for residential buildings or multiple dwellings.</p>	<ul style="list-style-type: none"> <li>• The car parking spaces are located behind the building line</li> <li>• There is no turning area to the front of the building line</li> </ul>	Complies
A2	<p>A2.1 Car parking and manoeuvring space must:</p> <ul style="list-style-type: none"> <li>e) have a gradient of 10% or less; and</li> <li>f) for more than 4 cars, enter and exit the site in a forward direction;</li> </ul>	<ul style="list-style-type: none"> <li>• Vehicles can enter and exit the property in a forward direction</li> <li>• The slope of the car parking and manoeuvring</li> </ul>	Relies on Performance criteria

	<p>and</p> <p>g) have access width not less than and not 10% greater than Table E6.2; and</p> <p>h) have a width of access and manoeuvring space to parking spaces not less than Table E6.3 where:</p> <p>(iv) there are three or more spaces; and</p> <p>(v) where parking is more than 30m from the road; or</p> <p>(vi) the sole vehicle access is to a category 1, 2, 3 or 4 road; and</p> <p>A2.2</p> <p>The layout of car spaces and access ways must be designed in accordance with <i>Australian Standard AS 2890.1</i>.</p>	<p>space is 10%</p> <ul style="list-style-type: none"> <li>• The dimensions of the parking spaces are 6m x 3m and the sweep path width is 6m</li> <li>• The standard width of an access servicing 17 car parking spaces is 4.5m for the initial 7m from the road carriageway and 3m thereafter passing bays are required every 30m</li> <li>• The plans show a 3m wide access crossover and 3m wide internal driveway, with a passing bay setback at 53.6m</li> <li>• The plans conflict with the TIA which recommends a 6m wide crossover</li> </ul>	
<b>E6.7.3 Car Parking Access, Safety and Security</b>			
A1	Car parking areas with greater than 20 parking	Not applicable	

	spaces must be: a) secured and lit so that unauthorised persons cannot enter or; b) visible from buildings on or adjacent to the site at times when parking occurs.		
<b>E6.8.1 Pedestrian Walkways</b>			
A1	Pedestrian access must be provided for in accordance with Table E6.5.	<ul style="list-style-type: none"> <li>The plan shows a 1m wide footpath adjacent to the internal driveway</li> <li>The surface height is marginally higher than the driveway surface</li> </ul>	Relies on Performance Criteria

### **Performance Criteria**

<b>Road and Railway Assets Code</b>
E4.6.1 Use and road or rail infrastructure
<p><b>Objective</b></p> <p><i>To ensure that the safety and efficiency of road and rail infrastructure is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.</i></p>
<p><b>Performance Criteria P2</b></p> <p><i>For roads with a speed limit of 60km/h or less, the level of use, number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.</i></p>
<p><b>Comment:</b></p> <p>Council's Director Infrastructure Services provided the following: <i>The proposed location of the access to the unit development is considered to be acceptable. A minimum width of 4.5m would be</i></p>

*required for the access, however, it is noted that the traffic impact assessment recommends an access width of 6m. The final design details for the access will be determined by the Infrastructure Department in consultation with the applicant's engineers during the review and approval of engineering drawings should a planning permit be approved for the proposed development.*

*The proposed use of the access is noted as being around 63 vehicle movements per day which would result in an increase of traffic on Beefeater Street of around 31%. This is considered to be a significant increase to the existing daily traffic volumes which are approximately 200 vehicles per day (data Nov.2017). For a daily traffic volume of up to 300 vehicles per day, the preferred standard road cross section requires an overall pavement width of 6.5m. The current pavement width is 5m. With the significant increase in traffic volumes over existing, and the current narrow pavement, the level of safety for road users is considered to be adversely impacted. This would be mitigated through road works between the proposed property access and Emu Bay Road to provide a minimum pavement width of 6.5m.*

Based on the above information, the existing seal width of Beefeater Street does not meet Council's standards for traffic numbers up to 300 vehicles per day. An upgrade of Beefeater Street was not included in Council's current Capital Works Program. Without an upgrade, the increase in traffic movements is considered incompatible with the current road conditions. As such, the proposal does not meet the Performance Criteria for an acceptable level of safety for all road users, including pedestrians and cyclists.

<b>Car Parking and Sustainable Transport Code</b>
E6.7.2 Design and Layout of Car parking
<p><b>Objective</b></p> <p><i>To ensure that car parking and manoeuvring space are designed and laid out to an appropriate standard.</i></p>
<p><b>Performance Criteria P2</b></p> <p><i>Car parking and manoeuvring space must:</i></p> <p>a) <i>be convenient, safe and efficient to use having regard to matters such as slope, dimensions, layout and the expected number and type of vehicles; and</i></p>

b) *provide adequate space to turn within the site unless reversing from the site would not adversely affect the safety and convenience of users and passing traffic.*

**Comment:**

The standard width of an access servicing 17 car parking spaces is 4.5m for the initial 7m from the road carriageway and 3m thereafter. Passing bays are required every 30m. The plans show a 3m wide access crossover and a 3m wide internal driveway, with a passing bay setback at 53.6m. It is noted that the Traffic Impact Assessment recommends a 6m wide crossover.

Council's Director Infrastructure Services provided the following:

*A minimum width of 4.5m would be required for the access, however, it is noted that the traffic impact assessment recommends an access width of 6m. The final design details for the access will be determined by the Infrastructure Department in consultation with the applicant's engineers during the review and approval of engineering drawings should a planning permit be approved for the proposed development.*

The site plan shows ample space to accommodate a 4.5m wide internal driveway for the initial 7m. In addition, a passing bay could be accommodated to comply with the standard. Based on the requirements within the TIA for a crossover width, the following conditions are recommended:

- 1. Amended site plan showing width of the first 7m of the internal driveway being at least 4.5m and a passing bay every 30m, to the satisfaction of Council's Town Planner.**

**Car Parking and Sustainable Transport Code**

E6.8.1 Pedestrian Walkways

**Objective**

*To ensure pedestrian safety is considered in development*

**Performance Criteria P1**

*Safe pedestrian access must be provided within car park and between the entrances to buildings and the road.*

**Comment:**

The site plan shows a 1m wide footpath adjacent to the internal driveway. The path is delineated by a variance in surface height and provides access to Beefeater Street.

The site plan shows pathways from Units 1, 2, 3 & 7 linking to the footpath. Units 4, 5 & 6 show pathways linking to the end car parking area, with the footpath in close proximity.

As such, the development is consistent with the Objective.

### **Representations**

Thirteen (13) representations were received in total (attached documents). Eleven representations were received during the advertising period. A further two representations were received after the advertising period closed. These two representations have been considered, as the matters raised are similar to the other representations. A summary of the representations is as follows:

#### Visitor Accommodation

A common theme of the representations is that this application for multiple dwelling is actually for Visitor Accommodation. This application is for multiple dwellings, which is classified as Residential. A previous application on the land (PA\17\0062) was for Visitor Accommodation. Residential and Visitor Accommodation are defined separately in the planning scheme.

Residential is defined as:

*use of land for self-contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.*

Visitor Accommodation is defined as:

*use of land for providing short or medium term accommodation for persons away from their normal place of residence. Examples include a backpackers hostel, bed and breakfast establishment, camping and caravan park, holiday cabin, holiday unit, motel, overnight camping area, residential hotel and serviced apartment.*

Both uses provide for accommodation. However, the main difference between Residential and Visitor Accommodation is the length of stay and whether it is their normal place of residence.

#### Amenity

As the proposed multiple dwellings are for residential use, the application complies with the amenity standards. Being located in an urban environment, residential noise is not considered unreasonable.

The style of the buildings (ex-Brighton Detention Centre Buildings), loss of views and devaluing of adjoining land are not matters that are addressed in the planning scheme or LUPAA. As such, they cannot be considered through the planning process.

The application does not include external lighting.

Noise during the demolition and construction phase (i.e. hours of operation) can be managed by the provisions of the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2014*.

The number of persons residing in each multiple dwelling, again, is not a matter that is addressed in the planning scheme or LUPAA. As such, they cannot be considered through the planning process.

#### Width of driveway

This matter has been addressed above in Performance Criteria.

#### Setback distances

All the units met the setback distance standard to a boundary. There is no standard for a setback distance for private open space. It is common for residential private open space to be located adjacent to a boundary. In this instance, the development complies with the applicable privacy provisions.

#### Gradient of internal driveway

The gradient of the internal driveway is 13.5%. The Australian Standard (AS/NZS 2890.1) for internal driveways is 25%. Transitional grades are only needed for a grade change of 18%. As such, the gradient of the internal driveway complies with the standard.

#### Traffic

This matter has been addressed above in Performance Criteria.

#### Multiple dwelling definition

Multiple Dwelling is defined in the scheme *as 2 or more dwellings on a site*.

The scheme also defines a *Dwelling* as a building, or part of a building, used as a self-contained residence and which includes food preparation facilities, a bath or shower, laundry facilities, a toilet and sink, and any outbuilding and works normally forming part of a dwelling. It is noted that each unit provides a kitchen, bathroom and laundry facilities, in addition to a lounge room and bedrooms. As such, each unit complies with the definition of a dwelling.

#### Zone Purpose

Multiple dwellings are a Permitted (with permit) use class. The Zone Purpose statement can only be considered where the purpose had been expressly incorporated into the applicable standard. In this instance, there is no trigger to consider the zone purpose in the assessment process.

#### **Conclusion**

In conclusion, it is considered that the application for Use and Development for Multiple dwellings (7 units) should be refused. The use and development will increase traffic numbers which is incompatible with the current road conditions.

**AUTHOR:** Leanne Rabjohns  
TOWN PLANNER

#### **12) Recommendation**

***It is recommended that the application for Use and Development for Multiple dwellings (7 units) on land located at 46a Beefeater Street (CT 31888/3) with drainage works through 33 Tower Hill Street (CT 118654/2), 38 West Goderich Street (CT 118655/1) and 35 Moriarty Street (CT 32226/1), Deloraine by Rebecca Green & Associates be REFUSED, for the following reason:***

- a) The safety and efficiency of Beefeater Street is significantly reduced by the increased vehicle movements associated with the use.***

## **DECISION**

# Planning Submission

Use and Construction of 7 New Dwellings

46A Beefeater Street, Deloraine

Andrew Terry

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Appendix A: Certificates of Title

Appendix B: Site Plans, Floor Plans and Elevations

Appendix C: Traffic Assessment – IPD Consulting

Appendix D: Preliminary Stormwater Review – IPD Consulting

## 1. Executive Summary

### 1.1 Proposal Overview

This submission is prepared on behalf of Mr Andrew Terry, in support of a proposal for the use and development of 7 dwelling units at 46A Beefeater Street, Deloraine.

The owners of the subject land are Geoffrey and Judy Terry. This application is made with the knowledge of the land owners.

Drainage over 33 Tower Hill Street, 38 West Goderich Street and 35 Moriarty Street is also proposed by the development. This application is made with the knowledge of the land owners. Each owner was notified in writing 27<sup>th</sup> September 2017.

This application is made under Section 57 of the *Land Use Planning and Approvals Act 1993*, which provides for the submission of an application for a discretionary planning permit. The proposal has been prepared in accordance with the provisions of the Meander Valley Interim Planning Scheme 2013 and the objectives of the *Land Use Planning and Approvals Act 1993*.

The proposal is summarised as:

- Use and Development of 7 new dwellings, and is illustrated in plans, provided at Appendix B.

## 2. Subject Land and Locality

### 2.1 Subject Land Description

The subject site is comprised in Certificate of Title Volume 31888 Folio 3. The registered owners of the site are Geoffrey John Terry and Judy Gail Terry. A copy of the title is contained in Appendix A.

The subject land has an area of 6330 square metres and has road frontage to Beefeater Street. The site is vacant land.

### 2.2 Locality Description



Figure 1: Locality Map

The subject site is located within the Deloraine township. The site is surrounded by residential allotments, containing single and multiple dwellings with an Aurora Energy site located to the northeast.

Drainage is proposed over CT 118654/2, CT 118655/1 and CT 32226/1.

### **2.3 Access and Movement**

One existing vehicular access point to Beefeater Street is present, it is proposed to have a relocated access approximately central to the frontage, with the existing access to be decommissioned and removed.

### **2.4 Services**

The subject site is located within the township of Deloraine; it is provided with reticulated sewerage, water, sewerage and stormwater, power and communications supplies.

### **2.5 Heritage**

The subject site is not identified to be of heritage significance.

### **2.6 Flora and Fauna**

The site is located within the developed area of the Deloraine township and does not support any remnant native vegetation and hence, any habitat of threatened species. A search of the Natural Values Atlas has revealed no recorded species on the subject site.

## **3. Proposal**

### **3.1 Development Proposal**

The proposal is for the construction of 7 dwellings with three various floor plans.

## **4. Planning Assessment**

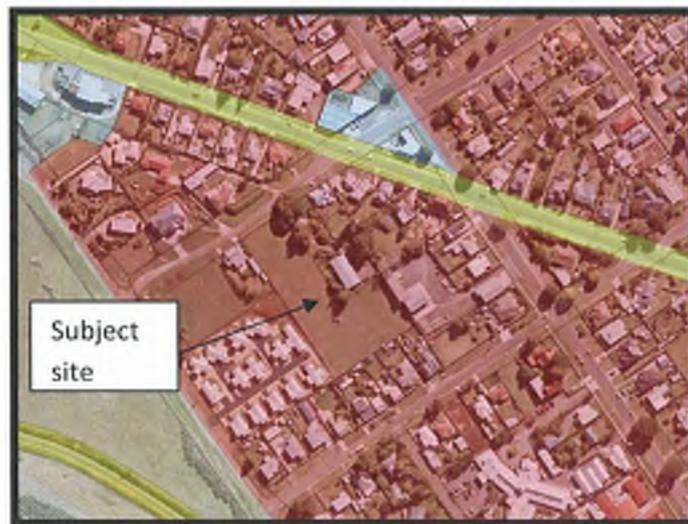
### **4.1 Meander Valley Interim Planning Scheme 2013**

The subject site is zoned General Residential within the Meander Valley Interim Planning Scheme 2013.

Dwelling Type 1 will be constructed for unit 5. Unit 5 will be single storey. The unit is to contain the four bedrooms, with laundry/bathroom and open plan kitchen, dining and living. The total floor area is 72m<sup>2</sup>. Unit 5 will have a wall height of 2.7 and be no greater than 4.0m above natural ground level.

Dwelling Type 2 will be constructed for unit 4. Unit 4 will be single storey. The unit is to contain the four bedrooms, computer room, with laundry/toilet, bathroom and open plan kitchen, dining and living as well as a timber deck. The total floor area is 138.8m<sup>2</sup>. Unit 4 will have a wall height of 2.7 and be no greater than 4.4m above natural ground level.

Dwelling Type 3 will be constructed for units 1, 2, 3, 6 and 7. Units 1, 2, 3, 6 and 7 will all be single storey. Each unit is to contain the four bedrooms, computer room, sitting room, with laundry/toilet, bathroom and open plan kitchen, dining and living. The total floor area is 88m<sup>2</sup>. Each unit will have a wall height of 2.7 and be no greater than 4.0m above natural ground level.



**Figure 2: Zoning Map**

(Cream = Rural Resource Zone, Red = General Residential Zone, Yellow = Utilities Zone)

## 10 General Residential Zone

### 10.1 Zone Purpose

**10.1.1.1 To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.**

**10.1.1.2 To provide for compatible non-residential uses that primarily serve the local community.**

**10.1.1.3 Non-residential uses area not to be at a level that distorts the primacy of residential uses within the zones, or adversely affect residential amenity through noise, activity outside of business hours, traffic generation and movement or other off site impacts.**

**10.1.1.4 To encourage residential development that respects the neighbourhood character and provides a high standard of residential amenity.**

*Proposal Response*

The proposal furthers the purpose of the zone. The proposal respects the character of the area by proposing dwellings that provide for a range of dwelling types at suburban densities. The design of the dwellings provides an appropriate response to the streetscape character and contributes to high levels of residential amenity, particularly within the development itself.

**10.2 Use Table**

The proposed use best fits the use class of **Residential** of which is a Permitted use within the General Residential Zone, as the proposal is for a multiple dwelling.

Residential as defined by the Scheme means:

“use of land for self contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.”

**10.3 Use Standards**

**10.3.1 Amenity**

<b>Objective</b>		
To ensure that all non-residential uses do not cause an unreasonable loss of amenity to adjoin and nearby residential uses.		
<b>Acceptable Solution</b>	<b>Performance Criteria</b>	<b>Proposal Response</b>
A1 If for permitted or no permit required uses.	P1 The use must not cause or be likely to cause an environmental nuisance through emissions including noise and traffic movement, smoke, odour, dust and illumination.	A1 <i>The proposed use is permitted. Acceptable solution met.</i>
A2 Commercial vehicles for discretionary uses must only operate between 7.00am and 7.00pm Monday to Friday and 8.00am to 6.00pm Saturday and Sunday.	P2 Commercial vehicle movements for discretionary uses must not unreasonably impact on the amenity of occupants of adjoining and nearby dwellings.	A2 <i>Not applicable, the proposal is a permitted use.</i>

**10.3.2 Residential Character – Discretionary Uses**

<b>Objective</b>
To ensure that discretionary uses support:

a) <input type="checkbox"/> The visual character of the area; and b) <input type="checkbox"/> The local area objectives, if any.		
Acceptable Solution	Performance Criteria	Proposal Response
A1 Commercial vehicles for discretionary uses must be parked within the boundary of the property.	P1 No performance criteria.	A1 Not applicable, the proposal is a permitted use.
A2 Goods or material storage for discretionary uses must not be stored outside in locations visible from adjacent properties, the road or public land.	P2 No performance criteria.	A2 Not applicable, the proposal is a permitted use.

## 10.4 Development Standards

### 10.4.1 Residential density for multiple dwellings.

<b>Objective:</b> To provide for suburban densities for multiple dwellings that: (a) <input type="checkbox"/> make efficient use of suburban land for housing; and (b) <input type="checkbox"/> optimise the use of infrastructure and community services.		
Acceptable Solutions	Performance Criteria	Proposal Response
A1 Multiple dwellings must have a site area per dwelling of not less than: (a) 325m <sup>2</sup> ; or (b) If within a density area specified in Table 10.4.1 below and shown on the planning scheme maps, that specified for the density area.	P1 Multiple dwellings must only have a site area per dwelling that is less than 325m <sup>2</sup> , or that specified for the applicable density area in Table 10.4.1, if the development will not exceed the capacity of infrastructure services and: (a) Is compatible with the density of the surrounding area; or (b) Provides for a significant social or community housing benefit and is in accordance with at least one of the following: (i) the site is wholly or partially within 400m walking distance of a public transport stop; (ii) the site is wholly or partially within 400m walking distance of a business, commercial, urban mixed use, village or inner residential zone.	A1 The proposal complies with A1 (a). The subject site has an area of 6330m <sup>2</sup> , this equates to 1 dwelling per 904.28m <sup>2</sup> . The development is compatible with the density of the surrounding area.

#### 10.4.2 Setbacks and building envelope for all dwellings

**Objective:**

To control the siting and scale of dwellings to:

- (a) Provide reasonably consistent separation between dwellings on adjacent sites and a dwelling and its frontage; and
- (b) Assist in the attenuation of traffic noise or any other detrimental impacts from roads with high traffic volumes; and
- (c) Provide consistency in the apparent scale, bulk, massing and proportion of dwellings; and
- (d) Provide separation between dwellings on adjacent sites to provide reasonable opportunity for daylight and sunlight to enter habitable rooms and private open space.

Acceptable Solution	Performance Criteria	Proposal Response
<p>A1 Unless within a building area, a dwelling, excluding protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6m into the frontage setback, must have a setback from a frontage that is:</p> <ul style="list-style-type: none"> <li>(a) If the frontage is a primary frontage, at least 4.5m, or, if the setback from the primary frontage is less than 4.5m, not less than the setback, from the primary frontage, of any existing dwelling on the site; or</li> <li>(b) If the frontage is not a primary frontage, at least 3m, or, if the setback from the frontage is less than 3m, not less than the setback, from a frontage that is not a primary frontage, of any existing dwelling on the site; or</li> <li>(c) If for a vacant site with existing dwellings on adjoining sites on the same street, not more than the greater, or less than the lesser, setback for the equivalent frontage of the dwellings on the adjoining sites on the same street; or</li> <li>(d) If the development is on</li> </ul>	<p>P1 A dwelling must:</p> <ul style="list-style-type: none"> <li>(a) Have a setback from a frontage that is compatible with the existing dwellings in the street, taking into account any topographical constraints; and</li> <li>(b) If abutting a road identified in Table 10.4.2, include additional design elements that assist in attenuating traffic noise or any other detrimental impacts associated with proximity to the road.</li> </ul>	<p>A1 a) <i>The proposal complies with the acceptable solution for all dwellings being greater than 4.5m from the primary frontage.</i></p>

<p>land that abuts a road specified in Tables 10.4.2, at least that specified for the road.</p>		
<p>A2 A garage or carport must have a setback from a primary frontage of at least:</p> <ul style="list-style-type: none"> <li>(a) 5.5m, or alternatively 1m behind the façade of the dwelling; or</li> <li>(b) The same as the dwelling façade, if a portion of the dwelling gross floor area is located above the garage or carport; or</li> <li>(c) 1m, if the natural ground level slopes up or down at a gradient steeper than 1 in 5 for a distance of 10m from the frontage.</li> </ul>	<p>P2 A garage or carport must have a setback from a primary frontage that is compatible with the existing garages or carports in the street, taking into account any topographical constraints.</p>	<p><i>A2 Not applicable, no garages or carports are proposed as part of this application.</i></p>
<p>A3 A dwelling, excluding outbuildings with a building height of not more than 2.4m and protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6m horizontally beyond the building envelope, must:</p> <ul style="list-style-type: none"> <li>(a) Be contained within a building envelope (refer to Diagrams 10.4.2A, 10.4.2B, 10.4.2C and 10.4.2D) determined by: <ul style="list-style-type: none"> <li>(i) A distance equal to the frontage setback or, for an internal lot, a distance of 4.5m from the rear boundary of a lot with an adjoining frontage; and</li> <li>(ii) Projecting a line at an angle of 45 degrees from the horizontal at a height of 3m above natural ground level at the side</li> </ul> </li> </ul>	<p>P3 The siting and scale of a dwelling must:</p> <ul style="list-style-type: none"> <li>(a) Not cause unreasonable loss of amenity by: <ul style="list-style-type: none"> <li>(i) Reduction in sunlight to a habitable room (other than a bedroom) of a dwelling on an adjoining lot; or</li> <li>(ii) Overshadowing the private open space of a dwelling on an adjoining lot; or</li> <li>(iii) Overshadowing of an adjoining vacant lot; or</li> <li>(iv) Visual impacts caused by the apparent scale, bulk or</li> </ul> </li> </ul>	<p><i>A3 All dwellings are wholly contained within the prescribed building envelope, and hence meet all side and rear setback requirements.</i></p>

<p>boundaries and a distance of 4m from the rear boundary to a building height of not more than 8.5m above natural ground level; and</p> <p>(b) Only have a setback within 1.5m of a side boundary if the dwelling:</p> <p>(i) Does not extend beyond an existing building built on or within 0.2m of the boundary of the adjoining lot; or</p> <p>(ii) Does not exceed a total length of 9m or one-third the length of the side boundary (whichever is the lesser).</p>	<p>proportions of the dwelling when viewed from an adjoining lot; and</p> <p>(b) Provide separation between dwellings on adjoining lots that is compatible with that prevailing in the surrounding area.</p>
--	--

#### 10.4.3 Site coverage and private open space for all dwellings

##### Objective

##### To provide:

- (a) For outdoor recreation and the operational needs of the residents; and
- (b) Opportunities for the planting of gardens and landscaping; and
- (c) Private open space that is integrated with the living areas of the dwelling; and
- (d) Private open space that has access to sunlight.

Acceptable Solution	Performance Criteria	Proposal Response
<p>A1 Dwellings must have:</p> <p>(a) A site coverage of not more than 50% (excluding eaves up to 0.6m); and</p> <p>(b) For multiple dwellings, a total area of private open space of not less than 60m<sup>2</sup> associated with each dwelling, unless the dwelling has a finished floor level that is entirely more than 1.8m above the</p>	<p>P1 Dwellings must have:</p> <p>(a) Private open space that is of a size and dimensions that are appropriate for the size of the dwelling and is able to accommodate:</p> <p>(i) Outdoor recreational space consistent with the projected requirements of the occupants and, for multiple dwellings, take into</p>	<p>A1 a) The proposal complies for the entire lot. With a total area of 6330m<sup>2</sup>, the site coverage is less than 50%, which complies.</p> <p>A1 b) The proposal complies for dwellings 1-7. Each dwelling is provided with at least 60m<sup>2</sup> of private open space associated with each dwelling.</p>

<p>finished ground level (excluding a garage, carport or entry foyer); and</p> <p>(c) A site area of which at least 25% of the site area is free from impervious surfaces.</p>	<p>account any communal open space provided for this purpose within the development; and</p> <p>(ii) Operational needs, such as clothes drying and storage; and</p> <p>(b) Reasonable space for the planting of gardens and landscaping.</p>	<p>A1 c) <i>The proposal complies for the entire lot. The proposal leaves at least 25% as pervious area.</i></p>
<p>A2 A dwelling must have an area of private open space that:</p> <p>(a) Is in one location and is at least:</p> <p>(i) 24m<sup>2</sup>; or</p> <p>(ii) 12m<sup>2</sup>, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8m above the finished ground level (excluding a garage, carport or entry foyer); and</p> <p>(b) Has a minimum horizontal dimension of:</p> <p>(i) 4m; or</p> <p>(ii) 2m, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8m above the finished ground level (excluding a garage, carport or entry foyer);</p>	<p>P2 A dwelling must have private open space that:</p> <p>(a) Includes an area that is capable of serving as an extension of the dwelling for outdoor relaxation, dining, entertaining and children's play and that is:</p> <p>(i) conveniently located in relation to a living area of the dwelling; and</p> <p>(ii) orientated to take advantage of sunlight.</p>	<p>A2 <i>The proposal complies with the acceptable solution for all dwellings. Each dwelling provides for at least 24m<sup>2</sup> of private open space in one location with a minimum horizontal dimension of 4 metres. Each dwelling provides access to each respective private open space from and adjacent to a habitable room and is not located to the south, south-east or southwest of the respective dwelling.</i></p>

- and
- (c) Is directly accessible from, and adjacent to, a habitable room (other than a bedroom); and
  - (d) Is not located to the south, south-east or south-west of the dwelling, unless the area receives at least 3 hours of sunlight to 50% of the area between 9.00am and 3.00pm on the 21<sup>st</sup> June; and
  - (e) Is located between the dwelling and the frontage only if the frontage is orientated between 30 degrees west of north and 30 degrees east of north; and
  - (f) Has a gradient not steeper than 1 in 10; and
  - (g) Is not used for vehicle access and parking.

#### 10.4.4 Sunlight and overshadowing for all dwellings

**Objective: To provide:**

- (a) The opportunity for sunlight to enter habitable rooms (other than bedrooms) of dwellings; and
- (b) Separation between dwellings on the same site to provide reasonable opportunity for daylight and sunlight to enter habitable rooms and private open space.

Acceptable Solution	Performance Criteria	Proposal Response
A1 A dwelling must have at least one habitable room (other than a bedroom) in which there is a window that faces between 30 degrees west of north and 30 degrees east of north (see Diagram 10.4.4A).	P1 A dwelling must be sited and designed so as to allow sunlight to enter at least one habitable room (other than a bedroom).	A1 The proposal complies with the acceptable solution. The living room window of all dwellings face between 30 degrees west of north and 30 degrees east of north.
A2 A multiple dwelling that is to the north of a window of a habitable room (other than a bedroom) of another dwelling on the same site, which window faces between 30 degrees west	P2 A multiple dwelling must be designed and sited to not cause unreasonable loss of amenity by overshadowing a window of a habitable room (other than a bedroom), of	A2 The proposal complies with the acceptable solution. Each multiple dwelling that is to the north of a window of a habitable room of another dwelling on the site, which

of north and 30 degrees east of north (see diagram 10.4.4A), must be in accordance with (a) and (b), unless excluded by (c):

- (a) The multiple dwelling is contained within a line projecting (see Diagram 10.4.4B):
  - (i) at a distance of 3m from the window; and
  - (ii) vertically to a height of 3 m above natural ground level and then at an angle of 45 degrees from the horizontal.
- (b) The multiple dwelling does not cause the habitable room to receive less than 3 hours of sunlight between 9.00am and 3.00pm on 21<sup>st</sup> June.
- (c) That part, of a multiple dwelling, consisting of:
  - (i) an outbuilding with a building height no more than 2.4m; or
  - (ii) protrusions (such as eaves, steps, and awnings) that extend no more than 0.6m horizontally from the multiple dwelling.

another dwelling on the same site, that faces between 30 degrees west of north and 30 degrees east of north (see Diagram 10.4.4A).

*window faces between 30 degrees west of north and 30 degrees east of north is at least a distance of 3 metres from the window and does not cause the habitable room to receive less than 3 hours of sunlight in accordance with (b).*

A3 A multiple dwelling, that is to the north of the private open space, of another dwelling on the same site, required in accordance with A2 or P2 of subclause 10.4.3, must be in accordance with (a) or (b), unless excluded by (c):

- (a) The multiple dwelling is contained within a line projecting (see Diagram 10.4.4C):
  - (i) at a distance of 3m from the northern edge of the private open space; and
  - (ii) vertically to a height of 3m above natural

P3 A multiple dwelling must be designed and sited to not cause unreasonable loss of amenity by overshadowing the private open space, of another dwelling on the same site, required in accordance with A2 or P2 of subclause 10.4.3.

*A3 The proposal complies with the acceptable solution. The dwellings located to the north do not cause 50% of the private open space to receive less than 3 hours of sunlight between 9.00am and 3.00pm on 21<sup>st</sup> June.*

- ground level and then at an angle of 45 degrees from the horizontal.
- (b) The multiple dwelling does not cause 50% of the private open space to receive less than 3 hours of sunlight between 9.00am and 3.00pm on 21<sup>st</sup> June.
  - (c) That part, of a multiple dwelling, consisting of:
    - (i) an outbuilding with a building height no more than 2.4m; or
    - (ii) protrusions (such as eaves, steps, and awnings) that extend no more than 0.6m horizontally from the multiple dwelling.

#### 10.4.5 Width of openings for garages and carports for all dwellings

##### Objective

To reduce the potential for garage or carport openings to dominate the primary frontage.

Acceptable Solution	Performance Criteria	Proposal Response
A1 A garage or carport within 12m of a primary frontage (whether the garage or carport is free-standing or part of the dwelling) must have a total width of openings facing the primary frontage of not more than 6m or half the width of the frontage (whichever is the lesser).	P1 A garage or carport must be designed to minimise the width of its openings that are visible from the street, so as to reduce the potential for the openings of a garage or carport to dominate the primary frontage.	A1 <i>Not applicable, no garage or carport is proposed.</i>

#### 10.4.6 Privacy for all dwellings

##### Objective

To provide reasonable opportunity for privacy for dwellings.

Acceptable Solution	Performance Criteria	Proposal Response
A1 A balcony, deck, roof terrace, parking space, or carport (whether freestanding or part of the dwelling), that has a finished surface or floor level more than	P1 A balcony, deck, roof terrace, parking space or carport (whether freestanding or part of the dwelling) that has a finished surface or floor	A1 <i>The proposal complies with the acceptable solution. No balconies, decks, roof terraces, parking spaces or carports are proposed that have a finished</i>

1m above natural ground level must have a permanently fixed screen to a height of at least 1.7m above the finished surface or floor level, with a uniform transparency of no more than 25%, along the sides facing a:

- (a) Side boundary, unless the balcony, deck, roof terrace, parking space, or carport has a setback of at least 3m from the side boundary; and
- (b) Rear boundary, unless the balcony, deck, roof terrace, parking space, or carport has a setback of at least 4m from the rear boundary; and
- (c) Dwelling on the same site, unless the balcony, deck, roof terrace, parking space, or carport is at least 6m:
  - (i) from a window or glazed door, to a habitable room of the other dwelling on the same site; or
  - (ii) from a balcony, deck, roof terrace or the private open space, of the other dwelling on the same site.

level more than 1m above natural ground level, must be screened, or otherwise designed, to minimise overlooking of:

- (a) A dwelling on an adjoining lot or its private open space; or
- (b) Another dwelling on the same site or its private open space; or
- (c) An adjoining vacant residential lot.

*surface or floor level more than 1m above natural ground level.*

<p>A2 A window or glazed door, to a habitable room, or a dwelling, that has a floor level more than 1m above the natural ground level, must be in accordance with (a), unless it is in accordance with (b):</p> <ul style="list-style-type: none"> <li>(a) The window or glazed door:           <ul style="list-style-type: none"> <li>(i) is to have a setback of at least 3m from a side boundary; and</li> <li>(ii) is to have a setback of at least 4m from a rear boundary; and</li> <li>(iii) If the dwelling is a multiple</li> </ul> </li> </ul>	<p>P2 A window or glazed door, to a habitable room of dwelling, that has a floor level more than 1m above the natural ground level, must be screened, or otherwise located or designed, to minimise direct views to:</p> <ul style="list-style-type: none"> <li>(a) Window or glazed door, to a habitable room of another dwelling; and</li> <li>(b) The private open space of another dwelling; and</li> <li>(c) An adjoining vacant residential lot.</li> </ul>	<p><i>A2 The proposal complies with the dwellings being setback at least 3m from the side boundary of the site, 4m from the rear boundary of the site and 6m from the private open space of a dwelling on the same site.</i></p>
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<p>dwelling, is to be at least 6m from a window or glazed door, to a habitable room, of another dwelling on the same site; and</p> <p>(iv) If the dwelling is a multiple dwelling, is to be at least 6m from the private open space of another dwelling on the same site.</p> <p>(b) The window or glazed door:</p> <p>(i) is to be offset, in the horizontal plane, at least 1.5m from the edge of a window or glazed door, to a habitable room of another dwelling; or</p> <p>(ii) is to have a sill height of at least 1.7m above the floor level or has fixed obscure glazing extending to a height of at least 1.7m above the floor level; or</p> <p>iii) Is to have a permanently fixed external screen for the full length of the window or glazed door, to a height of at least 1.7m above floor level, with a uniform transparency of not more than 25%.</p>		
<p>A3 A shared driveway or parking space (excluding a parking space allocated to that dwelling) must be separated from a window, or glazed door, to a habitable room of a multiple dwelling by a horizontal distance of at least:</p>	<p>P3 A shared driveway or parking space (excluding a parking space allocated to that dwelling), must be screened, or otherwise located or designed, to minimise detrimental impacts</p>	<p>A3 <i>The proposal complies with the acceptable solution, the shared driveways are separated from a window, or glazed door, to a habitable room of a multiple dwelling by at least 2.5 metres.</i></p>

<p>(a) 2.5m; or (b) 1m if: (i) it is separated by a screen of at least 1.7m in height; or (ii) the window, or glazed door, to a habitable room has a sill height of at least 1.7m above the shared driveway or parking space, or has fixed obscure glazing extending to a height of at least 1.7m above the floor level.</p>	<p>of vehicle noise or vehicle light intrusion to a habitable room of a multiple dwelling.</p>
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**10.4.7 Frontage fences for all dwellings**

**Objective:**  
To control the height and transparency of frontage fences to:

- (a) Provide adequate privacy and security for residents; and
- (b) Allow the potential for mutual passive surveillance between the road and the dwelling; and
- (c) Provide reasonably consistent height and transparency.

Acceptable Solution	Performance Criteria	Proposal Response
<p>A1 A fence (including a free-standing wall) within 4.5m of a frontage must have a height above natural ground level of not more than:</p> <ul style="list-style-type: none"> <li>(a) 1.2m if the fence is solid; or</li> <li>(b) 1.8m, if any part of the fence that is within 4.5m of a primary frontage has openings above a height of 1.2m which provide a uniform transparency of not less than 30% (excluding any posts or uprights).</li> </ul>	<p>P1 A fence (including a free-standing wall) within 4.5m of a frontage must:</p> <ul style="list-style-type: none"> <li>(a) Provide for the security and privacy of residents, while allowing for mutual passive surveillance between the road and the dwelling; and</li> <li>(b) Be compatible with the height and transparency of fences in the street, taking into account the:               <ul style="list-style-type: none"> <li>(i) topography of the site; and</li> <li>(ii) traffic volumes on the adjoining road.</li> </ul> </li> </ul>	<p>A1 Not applicable, no front fence is proposed as part of this application.</p>

**10.4.8 Waste storage for multiple dwellings**

**Objective**

To provide for the storage of waste and recycling bins for multiple dwellings.

Acceptable Solutions	Performance Criteria	Proposal Response
<p>A1</p> <p>A multiple dwelling must have a storage area, for waste and recycling bins, that is an area of at least 1.5m<sup>2</sup> per dwelling and is within one of the following locations:</p> <p>(a) In an area for the exclusive use of each dwelling, excluding the area in front of the dwelling; or</p> <p>(b) In a communal storage area with an impervious surface that:</p> <p>(i) has a setback of at least 4.5m from a frontage; and</p> <p>(ii) is at least 5.5m from any dwelling; and</p> <p>(iii) Is screened from the frontage and any dwelling by a wall to a height Is screened from the frontage of at least 1.2m above the finished surface level of the storage area.</p>	<p>P1</p> <p>A multiple dwelling development must provide storage, for waste and recycling bins, that is:</p> <p>(a) Capable of storing the number of bins required for the site; and</p> <p>(b) Screened from the frontage and dwellings; and</p> <p>(c) Is the storage area is a communal storage area, separated from dwellings on the site to minimise impacts caused by odours and noise.</p>	<p>A1 The proposal complies with the acceptable solution. Each multiple dwelling is provided with a storage area of at least 1.5m<sup>2</sup> per dwelling and is within an area for the exclusive use of each dwelling.</p>

#### 10.4.9 Storage for multiple dwellings

##### Objective

To provide adequate storage facilities for each multiple dwelling.

Acceptable Solutions	Performance Criteria	Proposal Response
<p>A1</p> <p>Each dwelling must have access to at least 6 cubic metres of secure storage space.</p>	<p>P1</p> <p>Each multiple dwelling must provide storage suitable to the reasonable needs of residents.</p>	<p>A1 The proposal complies with the acceptable solution. Each multiple dwelling is provided with a storage shed 2m x 2m x 2.4m high.</p>

#### 10.4.10 Common Property for multiple dwellings

##### Objective

To ensure that communal open space, car parking, access areas and site facilities for multiple dwellings are easily identified.

Acceptable Solutions	Performance Criteria	Proposal Response
A1 Development for multiple dwellings must clearly delineate public, communal and private areas such as: a) Driveways; and b) Site services, bin areas and any waste collection points.	P1 No performance criteria.	A1 The proposal complies with the acceptable solution. The site plan provides, delineates private and communal areas.

#### 10.4.11 Outbuildings for multiple dwellings

##### Objective

To ensure:

- a) That outbuildings do not detract from the amenity or established neighbourhood character; and
- b) That dwellings remain the dominant built form within an area; and
- c) Earthworks are appropriate to the site and respect the amenity of neighbouring properties.

Acceptable Solutions	Performance Criteria	Proposal Response
A1 Outbuildings for each multiple dwelling must have a: a) Combined gross floor area not exceeding 45m <sup>2</sup> .	P1 Outbuildings for each multiple dwelling must be designed and located having regard to: a) Visual impact on the streetscape; and b) Compatibility with the size and location of outbuildings in the neighbourhood.	A1 The proposal complies with the acceptable solution. Each multiple dwelling is provided with a storage shed 2m x 2m x 2.4m high.

#### 10.4.12 Site Services for multiple dwellings

##### Objective

To ensure that:

- a) Site services for multiple dwellings can be installed and easily maintained; and
- b) Site facilities for multiple dwellings are accessible, adequate and attractive.

Acceptable Solutions	Performance Criteria	Proposal Response
A1.1 Provision for mailboxes must be made at the frontage.	P1 Sufficient space (including easements where required) for mail services must be provided for each	A1 The proposal complies with the acceptable solution. Provision for mailboxes

multiple dwelling.	<i>is made at the frontage, as demonstrated by the Site Plan.</i>
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10.4.13-10.4.14 – Not applicable.

10.4.15 – Not applicable, proposal is not a subdivision.

**4.2 Other Planning Considerations**

**E1 Bushfire Code** – Not applicable, the proposed use is not considered to be a vulnerable use as defined within the Bushfire Code.

**E2 Potentially Contaminated Land Code** – Not applicable, the subject site is not potentially contaminated land.

**E3 Landslip Code** – Not applicable. The subject site is not located within any proclaimed landslip zones, nor any overlay subject to the Planning Scheme.

**E4 Road and Railway Assets Code** – Applicable.

**E4.6.1 Use and road or rail infrastructure**

**Objective**

To ensure that the safety and efficiency of road and rail infrastructure is not reduced by the creation of new accesses and junctions or increased use of existing accesses and junctions.

Acceptable Solution	Performance Criteria	Proposal Response
A1 Sensitive use on or within 50m of a category 1 or 2 road, in an area subject to a speed limit of more than 60km/h, a railway or future road or railway, must not result in an increase to the annual average daily traffic (AADT) movements to or from the site by more than 10%.	P1 Sensitive use on or within 50m of a category 1 or 2 road, in an area subject to a speed limit of more than 60km/h, a railway or future road or railway must demonstrate that the safe and efficient operation of the infrastructure will not be detrimentally affected.	A1 <i>Not applicable as the proposed use is not on or within 50 metres of a Category 1 or 2 road.</i>
A2 For roads with a speed limit of 60km/h or less the use must not generate more than a total of 40 vehicle entry and exit movements per day.	P2 For roads with a speed limit of 60km/h or less, the level of use, number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians	P2 <i>A Traffic Impact Assessment contained at Appendix C to this submission considers the requirements are met, with the safe access deemed acceptable.</i>

	and cyclists.	
A3 For roads with a speed limit of more than 60km/h the use must not increase the annual average daily traffic (AADT) movements at the existing access or junction by more than 10%.	<p>P3 For limited access roads and roads with a speed limit of more than 60km/h:</p> <ul style="list-style-type: none"> <li>a) Access to a category 1 road or limited access road must only be via an existing access or junction or the use or development must provide a significant social and economic benefit to the State or region; and</li> <li>b) Any increase in use of an existing access or junction or development of a new access or junction to a limited access road or a category 1, 2 or 3 road must be for a use that is dependent on the site for its unique locational attributes and an alternate site or access to a category 4 or 5 road is not practicable; and</li> <li>c) An access or junction which is increased in use or is a new access or junction must be designed and located to maintain an adequate level of safety and efficiency for all road users.</li> </ul>	A3 Not applicable.

#### E4.7 Development Standards

**E4.7.1 Development on and adjacent to Existing and Future Arterial Roads and Railways – not applicable, no new roads will be created.**

#### 4.7.2 Management of Road Accesses and Junctions

##### Objective

To ensure that the safety and efficiency of roads is not reduced by the creation of new accesses and

junctions or increased use of existing accesses and junctions.

Acceptable Solution	Performance Criteria	Proposal Response
A1 For roads with a speed limit or 60km/h or less the development must include only one access providing both entry and exit, or two accesses providing separate entry and exit.	P1 For roads with a speed limit or 60km/h or less, the number, location, layout and design of accesses and junctions must maintain an acceptable level of safety for all road users, including pedestrians and cyclists.	A1 One new access providing for both entry and exit is to be utilised by the proposal.
A2 For roads with a speed limit of more than 60km/h the development must not include a new access or junction.	<p>P2 For limited access roads and roads with a speed limit of more than 60km/h:</p> <ul style="list-style-type: none"> <li>a) Access to a category 1 road or limited access road must only be via an existing access or junction or the development must provide a significant social and economic benefit to the State or region; and</li> <li>b) Any increase in use of an existing access or junction or development of a new access or junction to a limited access road or a category 1, 2 or 3 road must be dependent on the site for its unique resources, characteristics or locational attributes and an alternate site or access to a category 4 or 5 road is not practicable; and</li> <li>c) An access or junction which is increased in use or is a new access or junction must be designed and located to maintain an adequate level of safety and efficiency for all road</li> </ul>	A2 Not applicable.

users.

**E4.7.3 Management of Rail Level Crossings – Not applicable.**

**E4.7.4 Sight Distance at Accesses, Junctions and Level Crossings**

**Objective**

To ensure that use and development involving or adjacent to accesses, junctions and level crossings allows sufficient sight distance between vehicles and between vehicles and trains to enable safe movement of traffic.

Acceptable Solution	Performance Criteria	Proposal Response
<p>A1 Sight distances at:</p> <ul style="list-style-type: none"> <li>a) An access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.6.4; and</li> <li>b) Rail level crossings must comply with <i>AS1742.7 Manual of uniform traffic control devices – Railway crossings</i>, Standards Association of Australia; or</li> <li>c) If the access is a temporary access, the written consent of the relevant authority has been obtained.</li> </ul>	<p>P1 The design, layout and location of an access, junction or rail level crossing must provide adequate sight distances to ensure the safe movement of vehicles.</p>	<p>A1 <i>The SISD exceeds the distance shown in Table E4.6.4. The proposal will create a new access whilst the existing access will be decommissioned and removed.</i></p>

**E5 Flood Prone Areas Code – Not applicable.**

**E6 Car Parking and Sustainable Transport Code**

**Table E6.1: Parking Space Requirements**

Use	Parking Requirement		
	Vehicle	Bicycle	Required
Residential	2 spaces per dwelling	No requirement set	14 spaces
Visitor Parking	1 dedicated space per 4 dwellings		2 spaces

*Proposal Response*

The proposal provides for 17 spaces, within the proposed car parking area within the site. The capacity of this area and the site in general is capable of accommodating well in excess of the required parking spaces as demonstrated by the proposal site plan.

**E6.6 Use Standards**

**E6.6.1 Car Parking Numbers**

Objective		
To ensure that an appropriate level of car parking is provided to service use.		
Acceptable Solutions	Performance Criteria	Proposal Response
<p>A1 The number of car parking spaces must not be less than the requirements of:</p> <ul style="list-style-type: none"> <li>a) Table E6.1; or</li> <li>b) A parking precinct plan contained in Table E6.6: Precinct Parking Plans (except for dwellings in the General Residential Zone).</li> </ul>	<p>P1 The number of car parking spaces provided must have regard to:</p> <ul style="list-style-type: none"> <li>a) The provisions of any relevant location specific car parking plan; and</li> <li>b) The availability of public car parking spaces within reasonable walking distance; and</li> <li>c) Any reduction in demand due to sharing of spaces by multiple uses either because of variations in peak demand or by efficiencies gained by consolidation; and</li> <li>d) The availability and frequency of public transport within reasonable walking distance of the site; and</li> <li>e) Site constraints such as existing buildings, slope, drainage, vegetation and landscaping; and</li> <li>f) The availability, accessibility and safety of on-road parking, having regard to the nature of the</li> </ul>	<p><i>A1 The proposal complies with the acceptable solution. The proposal provides a minimum capacity of 17 spaces for the uses.</i></p>

- roads, traffic management and other uses in the vicinity; and
- g) An empirical assessment of the car parking demand; and
- h) The effect on streetscape, amenity and vehicle, pedestrian and cycle safety and convenience; and
- i) The recommendations of a traffic impact assessment prepared for the proposal; and
- j) Any heritage values of the site; and
- k) For residential buildings and multiple dwellings, whether parking is adequate to meet the needs of the residents having regard to:
  - i) The size of the dwelling and the number of bedrooms; and
  - ii) The pattern of parking in the locality; and
  - iii) Any existing structure on the land.

**E6.7 Development Standards**

**E6.7.1 Construction of Car Parking Spaces and Access Strips**

**Objective**

To ensure that car parking spaces and access strips are constructed to an appropriate standard.

Acceptable Solutions	Performance Criteria	Proposal Response
A1 All car parking, access strips manoeuvring and circulation spaces	P1 All car parking, access strips manoeuvring and	A1 With appropriate conditions contained in an

<p>must be:</p> <ul style="list-style-type: none"> <li>a) Formed to an adequate level and drained; and</li> <li>b) Except for a single dwelling, provided with an impervious all weather seal; and</li> <li>c) Except for a single dwelling, line marked or provided with other clear physical means to delineate car spaces.</li> </ul>	<p>circulation spaces must be readily identifiable and constructed to ensure that they are useable in all weather conditions.</p>	<p><i>approval, the proposal is considered to comply with the Acceptable Solution.</i></p>
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**E6.7.2 Design and Layout of Parking Areas**

Objective		
To ensure that parking areas are designed and laid out to an appropriate standard.		
Acceptable Solutions	Performance Criteria	Proposal Response
<p>A1.1 Where providing for 4 or more spaces, parking areas (other than for parking located in garages and carports for dwellings in the General Residential Zone) must be located behind the building line; and</p> <p>A1.2 Within the general residential zone, provision for turning must not be located within the front setback for residential buildings or multiple dwellings.</p>	<p>P1 The location of car parking and manoeuvring spaces must not be detrimental to the streetscape or the amenity of the surrounding areas, having regard to:</p> <ul style="list-style-type: none"> <li>a) The layout of the site and the location of existing buildings; and</li> <li>b) Views into the site from the road and adjoining public spaces; and</li> <li>c) The ability to access the site and the rear of buildings; and</li> <li>d) The layout of car parking in the vicinity; and</li> <li>e) The level of landscaping proposed for the car parking.</li> </ul>	<p><i>A1.1 The car parking proposed is located behind the building line.</i></p> <p><i>A1.2 Provision for turning is not located within the front setback.</i></p>
<p>A2.1 Car parking and manoeuvring</p>	<p>P2 Car parking and</p>	<p><i>A2 The car park will be designed with minimal</i></p>

<p>space must:</p> <ul style="list-style-type: none"> <li>a) Have a gradient of 10% or less; and</li> <li>b) Where providing for more than 4 cars, provide for vehicles to enter and exit the site in a forward direction; and</li> <li>c) Have a width of vehicular access no less than prescribed in Table E6.2; and</li> <li>d) Have a combined width of access and manoeuvring space adjacent to parking spaces not less than as prescribed in Table E6.3 where any of the following apply: <ul style="list-style-type: none"> <li>i) There are three or more car parking spaces; and</li> <li>ii) Where parking is more than 30m driving distance from the road; or</li> <li>iii) Where the sole vehicle access is to a category 1,2,3 or 4 road; and</li> </ul> </li> </ul> <p>A2.2 The layout of car spaces and access ways must be designed in accordance with <i>Australian Standards AS 2890.1 – 2004 Parking Facilities, Part 1: Off Road Car Parking</i>.</p>	<p>manoeuvring space must:</p> <ul style="list-style-type: none"> <li>a) Be convenient, safe and efficient to use having regard to matters such as slope, dimensions, layout and the expected number and type of vehicles; and</li> <li>b) Provide adequate space to turn within the site unless reversing from the site would not adversely affect the safety and convenience of users and passing traffic.</li> </ul>	<p><i>crossfall and vehicles will enter and exit in a forward motion. Refer to the Traffic Assessment, contained at Appendix C to this submission for additional details.</i></p>
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**E6.7.3 Parking for Persons with a Disability**

**Objective**

To ensure adequate parking for persons with a disability.

Acceptable Solutions	Performance Criteria	Proposal Response
A1 All spaces designated for use by persons with a disability must be located closest to the main entry	P1 No performance criteria.	A1 Not applicable – residential use.

point to the building.		
A2 One of every 20 parking spaces or part thereof must be constructed and designated for use by persons with disabilities in accordance with <i>Australian Standards AS/NZ 2890.6 2009.</i>	P2 No performance criteria.	A2 <i>Not applicable – residential use.</i>

#### E6.7.4 Loading and Unloading of Vehicles, Drop-off and Pickup

Objective		
To ensure adequate access for people and goods delivery and collection and to prevent loss of amenity and adverse impacts on traffic flows.		
Acceptable Solutions	Performance Criteria	Proposal Response
A1 For retail, commercial, industrial, service industry or warehouse or storage uses:  a) At least one loading bay must be provided in accordance with Table E6.4; and  b) Loading and bus bays and access strips must be designed in accordance with Australian Standard AS/NZS 2890.3 2002 for the type of vehicles that will use that site.	P1 For retail, commercial, industrial, service industry or warehouse or storage uses, adequate space must be provided for loading and unloading the type of vehicles associated with delivering and collecting people and goods where these are expected on a regular basis.	A1 <i>Not applicable.</i>

#### E6.8 Provisions for Sustainable Transport

##### E6.8.1 Pedestrian Walkways

Objective		
To ensure pedestrian safety is considered in development.		
Acceptable Solutions	Performance Criteria	Proposal Response
A1 Pedestrian access must be provided in accordance with Table E6.5.	P1 Safe pedestrian access must be provided within car park and between entrances to buildings and the road.	A1 <i>Pedestrian access throughout the development as appropriate.</i>

**E7 Scenic Management Code** – Not applicable.

**E8 Biodiversity Code** – Not applicable. No vegetation except grass is to be removed as part of the development of the site.

**E9.0 Water Quality Code** – Not applicable.

**E10 Recreation and Open Space Code** – Not applicable, the proposal is not for a subdivision.

**E11 Environmental Impacts and Attenuation Code** - Not applicable.

**E12 Airports Impact Management Code** - Not applicable.

**E13 Heritage Code** – Not applicable.

**E14 Signage Code** – Not applicable.

**E15 Karst Management Code** – Not applicable.

**E16 Urban Salinity Code** – Not applicable.

#### **4.3 State Policies**

##### **4.3.1 State Coastal Policy 1996**

The State Coastal Policy was created under the *State Policies and Projects Act 1993*. This Policy applies to the Coastal Zone, which is defined as the area within State waters and all areas within one kilometre of the coast.

##### *Proposal Response*

The subject site is located not within one kilometre from the coast, meaning that the provisions of the State Coastal Policy 1996 do not apply.

##### **4.3.2 State Policy on Water Quality Management 1997**

This Policy applies to all surface waters, including coastal waters, and ground waters, other than:

- i. Privately owned waters that are not accessible to the public and are not connected to, or flow directly into, waters that are accessible to the public; or
- ii. Waters in any tank, pipe or cistern.

The purpose of the Policy is to achieve the sustainable management of Tasmania's surface water and groundwater resources by protecting or enhancing their qualities while allowing for sustainable development in accordance with the objectives of Tasmania's Resource Management and Planning System (Schedule 1 of the *State Policies and Projects Act 1993*).

The objectives of this Policy are to:

1. *Focus water quality management on the achievement of water quality objectives which will maintain or enhance water quality and further the objectives of Tasmania's Resource Management and Planning System;*
2. *Ensure that diffuse source and point source pollution does not prejudice the achievement of water quality objectives and that pollutants discharged to waterways are reduced as far as is reasonable and practical by the use of best practice environmental management;*
3. *Ensure that efficient and effective water quality monitoring programs are carried out and that the responsibility for monitoring is shared by those who use and benefit from the resource, including polluters, who should bear an appropriate share of the costs arising from their activities, water resource managers and the community;*
4. *Facilitate and promote integrated catchment management through the achievement of objectives (1) to (3) above; and*
5. *Apply the precautionary principle to Part 4 of this Policy.*

#### *Proposal Response*

The proposal involves collection and discharge of stormwater via Council's reticulated stormwater system. The objectives of this Policy will therefore be managed in this residential environment.

The proposal is consistent with the policy.

#### **4.3.3 State Policy on Protection of Agricultural Land 2009**

The subject site is Class E land meaning that that site is not prime agricultural land.

The proposal is unlikely to impact on adjacent agricultural use. As such, the proposal does not conflict with the objectives of this Policy.

#### **4.4 Land Use Planning and Approvals Act 1993**

The *Land Use Planning and Approvals Act 1993* provides objectives for all development considered under this Act. The proposal has been considered against the objectives of this Act. The proposal has been prepared to be consistent with the provisions of the Meander Valley Interim Planning Scheme 2013. The proposal is therefore considered to be consistent with the objectives of the Act.

#### 4.5 National Environment Protection Measures

A series of National Environment Protection Measures (NEPMs) have been established by the National Environment Protection Council. These measures are:

- Ambient air quality;
- National pollutant inventory;
- Movement of controlled waste;
- Use packaging materials;
- Assessment of site contamination; and
- Diesel vehicle emissions.

#### *Proposal Response*

It is considered that the NEPMs are not relevant to the proposed development.

## 5. Conclusion

The proposal is for use and development of 7 new dwellings at 46A Beefeater Street, Deloraine.

The proposal complies with the development standards prescribed by the Scheme, and can be approved under the Meander Valley Interim Planning Scheme 2013. This application is therefore made due to the use and development pursuant to Section 57 of the *Land Use Planning and Approvals Act 1993*.

The proposal is consistent with the relevant State and local policies, Planning Scheme objectives and considerations and objectives of the *Land Use Planning and Approvals Act 1993*. It is therefore recommended that the proposal be considered for planning approval.

Author	Version	Date
Rebecca Green	2	12 November 2017

## Appendix A: Certificates of Title

SEARCH OF TORRENS TITLE

VOLUME 31888	FOLIO 3
EDITION 3	DATE OF ISSUE 03-Nov-2011

SEARCH DATE : 26-Sep-2016

SEARCH TIME : 12.58 PM

DESCRIPTION OF LAND

Town of DELORAINE  
 Lot 3 on Sealed Plan 31888  
 Formerly Lots 1 and 2 on Sealed Plan No. 31888  
 Derivation : Part of 9A-1R-9Ps. A. Robertson Purchaser.  
 Prior CT 4419/13

SCHEDULE 1

C483054 TRANSFER to GEOFFREY JOHN TERRY and JUDY GAIL TERRY  
 Registered 12-Mar-2004 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any  
 BURDENING EASEMENT: Right of Drainage [appurtenant to Lots 1,  
 2 and 3 on S.P. No. 6704) over the Drainage Easement  
 1.50 metres wide shown on the said Sealed Plan as  
 passing through the said land within described  
 D33794 MORTGAGE to Australia and New Zealand Banking Group  
 Limited Registered 03-Nov-2011 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



SEARCH OF TORRENS TITLE

VOLUME 32226	FOLIO 1
EDITION 5	DATE OF ISSUE 01-Mar-2015

SEARCH DATE : 29-Nov-2016  
SEARCH TIME : 02.08 PM

DESCRIPTION OF LAND

Town of DELORAINE  
Lot 1 on Diagram 32226  
Being the land described in Conveyance No. 33/326  
Excepting thereout Lot 2 on Sealed Plan No. 31888  
Derivation : Part of 9A-1R-9Ps. A. Robertson Purchaser  
Prior CT 4419/14

SCHEDULE 1

M220418 TRANSFER to ST MARKS HOMES INC Registered  
31-Mar-2009 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any  
BURDENING EASEMENT: Right of Drainage [appurtenant to Lots 1,  
2 and 3 on Sealed Plan No. 6704) over the Drainage  
Easement 1.50 metres wide shown on the said Diagram  
No. 32226  
C800177 AGREEMENT pursuant to Section 71 of the Land Use  
Planning and Approvals Act 1993 Registered  
12-Jun-2007 at noon  
D141405 MORTGAGE to Australia and New Zealand Banking Group  
Limited Registered 07-Oct-2014 at noon  
D106303 MORTGAGE to The Crown Registered 01-May-2015 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



SEARCH OF TORRENS TITLE

VOLUME 118654	FOLIO 2
EDITION 5	DATE OF ISSUE 01-Nov-2010

SEARCH DATE : 21-Mar-2017

SEARCH TIME : 10.11 PM

DESCRIPTION OF LAND

Town of DELORAINÉ

Lot 2 on Sealed Plan 118654

Derivation : Part of Lot 39834 Gtd to Hydro Electric Commission

Prior CT 244118/1

SCHEDULE 1

(C70699) M306441 LOIS MARY CUNNINGHAM Registered

01-Nov-2010 at 12.01 PM

SCHEDULE 2

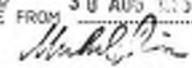
Reservations and conditions in the Crown Grant if any

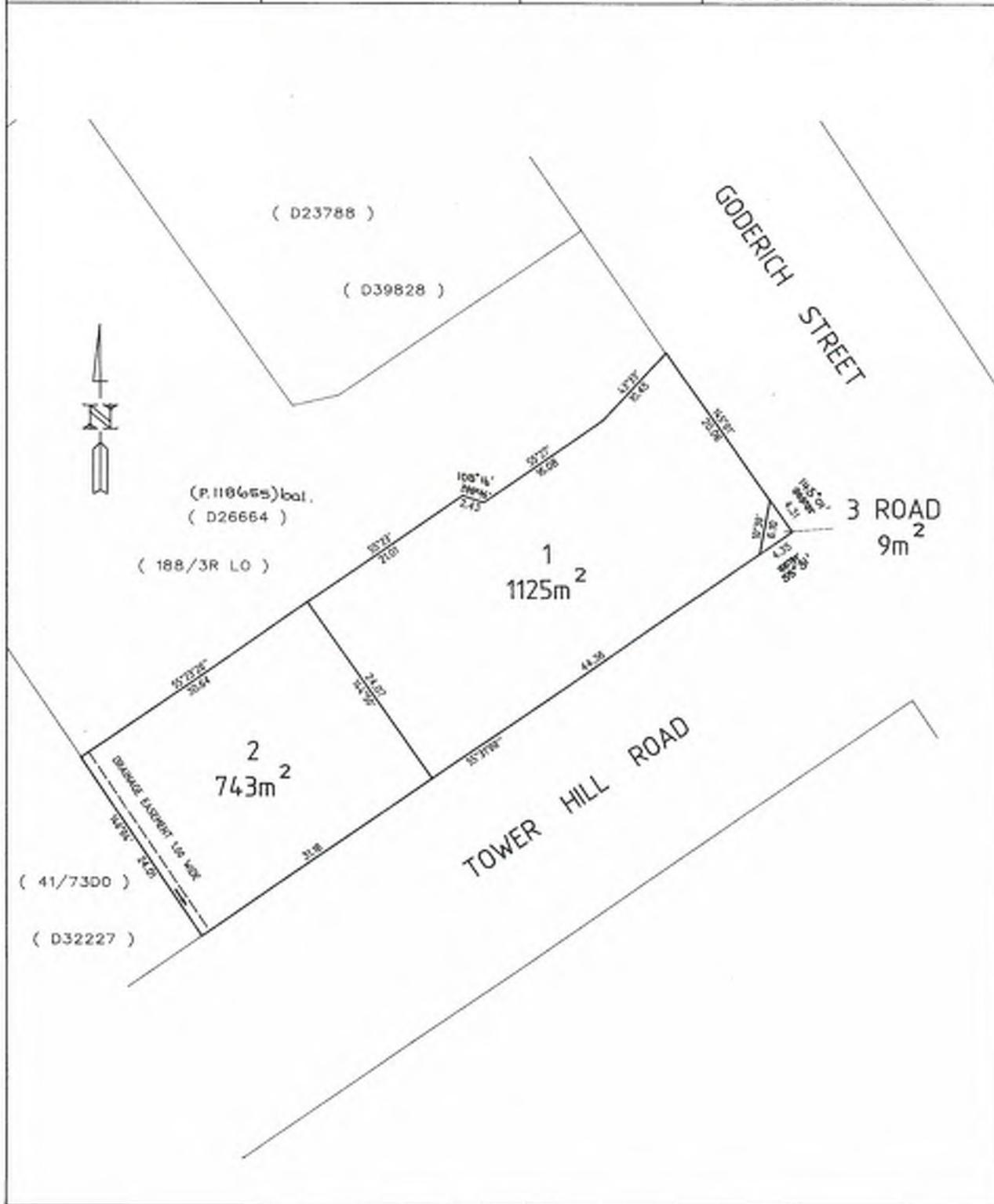
SP 118654 EASEMENTS in Schedule of Easements

SP 118654 FENCING COVENANT in Schedule of Easements

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER HYDRO ELECTRIC COMMISSION  FOLIO REFERENCE CT 24418/1  GRANTEE PART WHOLE OF LOT 39834 GRANTED TO THE HYDRO ELECTRIC COMMISSION		<b>PLAN OF SURVEY</b> BY SURVEYOR GEORGE F JAKINS  LOCATION TOWN OF DELORAINÉ  SCALE 1: 400    LENGTHS IN METRES		REGISTERED NUMBER  <b>SP 118654</b>  APPROVED EFFECTIVE FROM 30 AUG 2015  Recorder of Titles
MAPSHEET MUNICIPAL CODE No. 121	LAST UPI No. 4504760	LAST PLAN No. D 26664	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	



SEARCH OF TORRENS TITLE

VOLUME 118655	FOLIO 1
EDITION 2	DATE OF ISSUE 01-Feb-1999

SEARCH DATE : 21-Mar-2017

SEARCH TIME : 10.14 PM

DESCRIPTION OF LAND

Town of DELORAINE

Lot 1 on Plan 118655

Derivation : Part of Lot 39834 Gtd to Hydro Electric Commission

Prior CT 244118/1

SCHEDULE 1

C141264 AURORA ENERGY PTY LTD Registered 01-Feb-1999 at noon

SCHEDULE 2

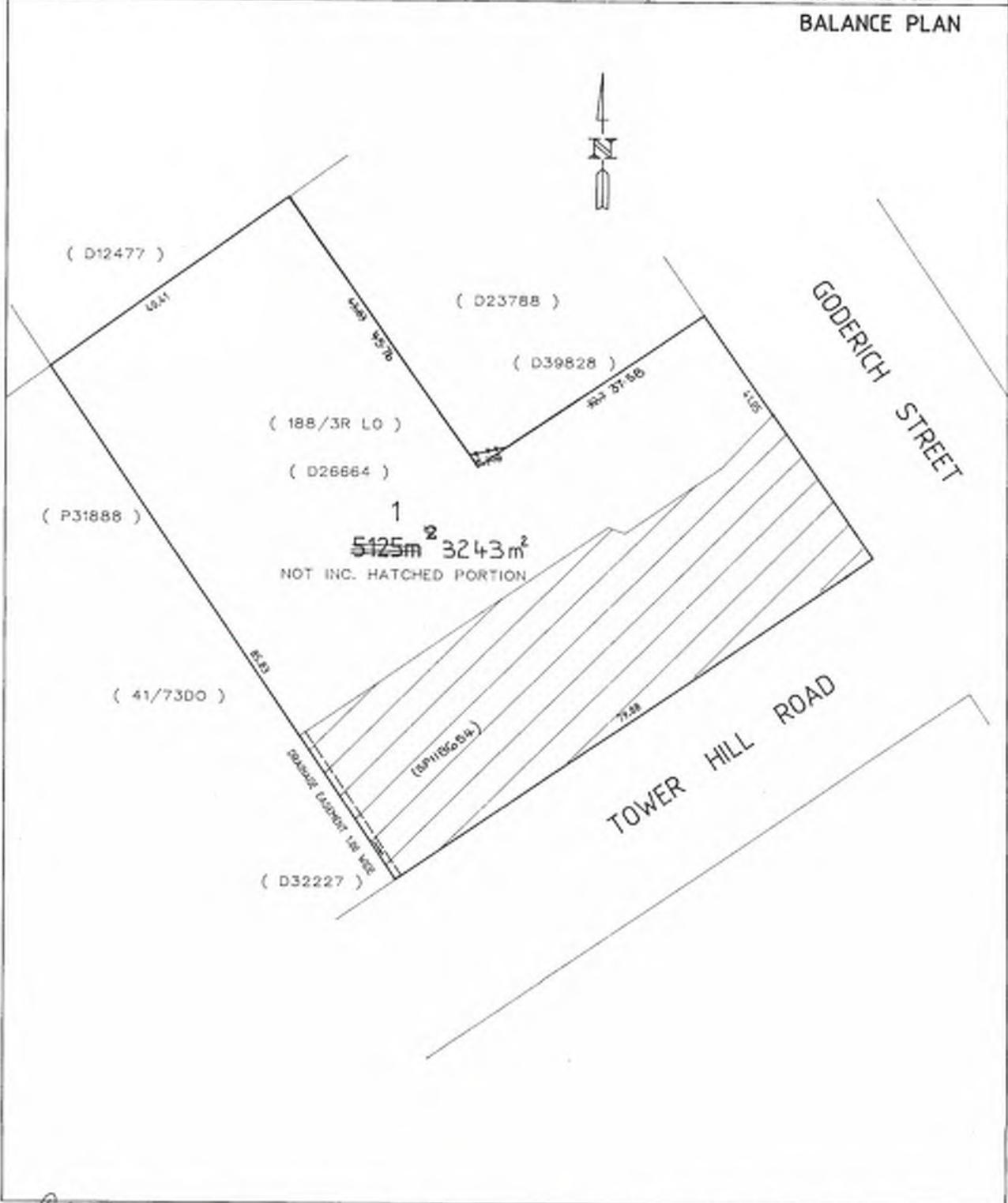
Reservations and conditions in the Crown Grant if any

SP 118654 BENEFITING EASEMENT: Right of Drainage over the  
drainage easement 1.00 wide shown on Plan No. 118655

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER HYDRO ELECTRIC COMMISSION		PLAN OF TITLE		REGISTERED NUMBER
FOLIO REFERENCE CT 246118/1				LOCATION TOWN OF DELORAINE
GRANTEE PART WHOLE OF LOT 39834 GRANTED TO THE HYDRO ELECTRIC COMMISSION		FIRST SURVEY PLAN No. <del>982266</del> D. 26664	APPROVED 11 AUG 2005	
		COMPILED BY G.F. JAKINS	<i>Michael</i> Recorder of Titles	
		SCALE 1: 500	LENGTHS IN METRES	
MAPSHEET MUNICIPAL CODE No. 121	LAST LPI No. 450470	LAST PLAN No. D 26664	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN	



25-8-95

## Appendix B: Site Plan, Floor Plans and Elevations

## DRAWING SCHEDULE

DWG	-SHEET 1	COVER SHEET
DWG	-SHEET 2	FULL SITE PLAN
DWG	-SHEET 3	SITE PLAN UNITS 1 AND 2
DWG	-SHEET 4	SITE PLAN UNITS 3,6 AND 7
DWG	-SHEET 5	SITE PLAN UNITS 4 AND 5
DWG	-SHEET 6	FLOOR PLAN
DWG	-SHEET 7	FLOOR PLAN UNITS 4 AND 5
DWG	-SHEET 8	ELEVATIONS
DWG	-SHEET 9	ELEVATIONS
DWG	-SHEET 10	DRIVEWAY SECTIONS
DWG	-SHEET 11	DRAINAGE PLAN
DWG	-SHEET 12	LANDSCAPE PLAN
DWG	-SHEET 13	SITE ELEVATION
DWG	-SHEET 14	SITE ELEVATION

ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK.  
 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS.  
 ALL TIMBER TO BE TREATED TO MEET THE REQUIREMENTS OF THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS.  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

ADORN DRAFTING

PH: 0415 255 160  
 11/11/17 stephen@adorn.com.au

STEPHEN LAWES  
 CC-4667 J  
 CATEGORY AWP 1  
 18/ A TANK RISE  
 18/08/08, 13/0

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 5 BEEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	COVER SHEET
DATE	14/11/2017
SHEET	Page 677
DWG 420	SHEET 1 OF 14

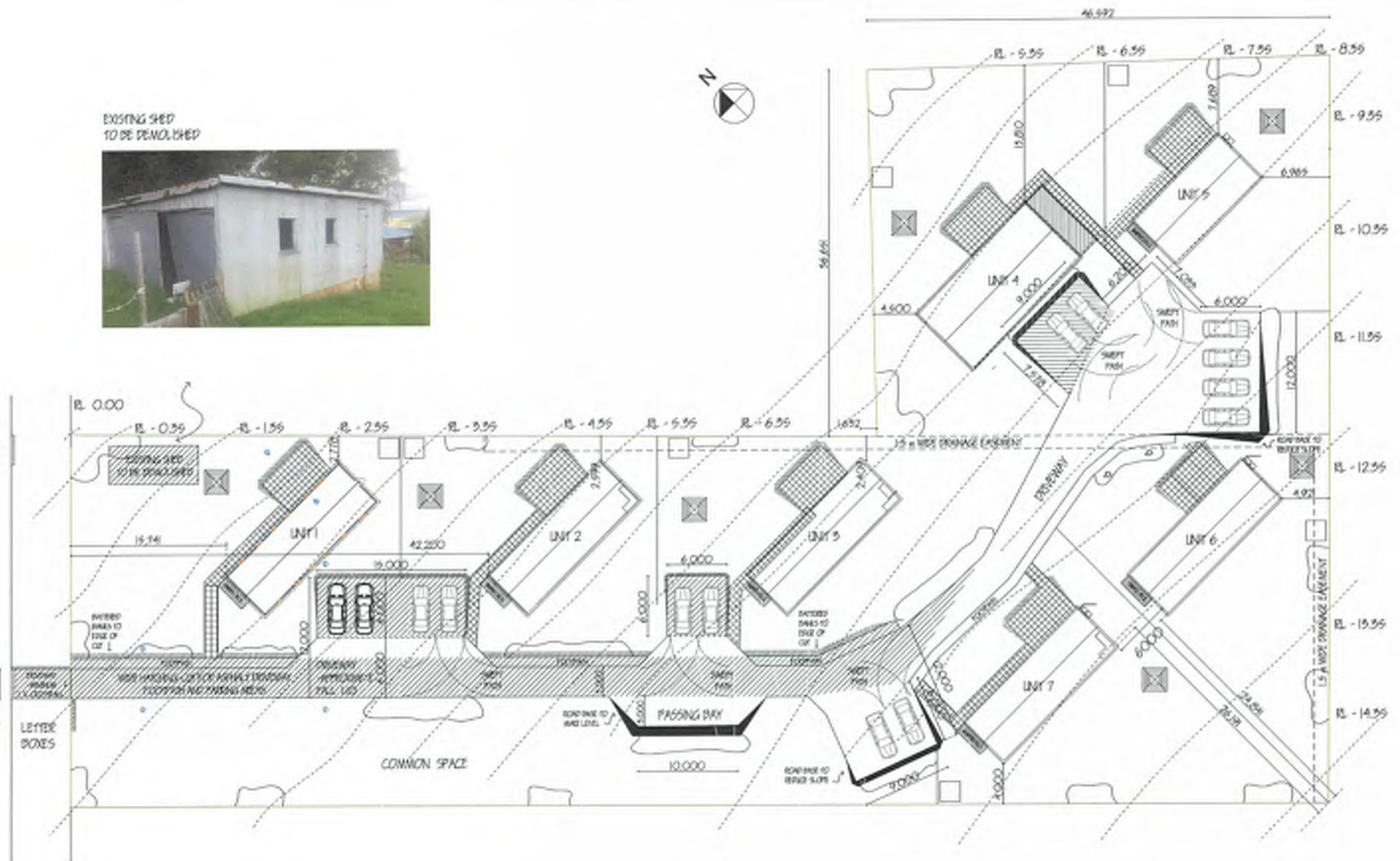
C&DS4

BEEFEATER STREET

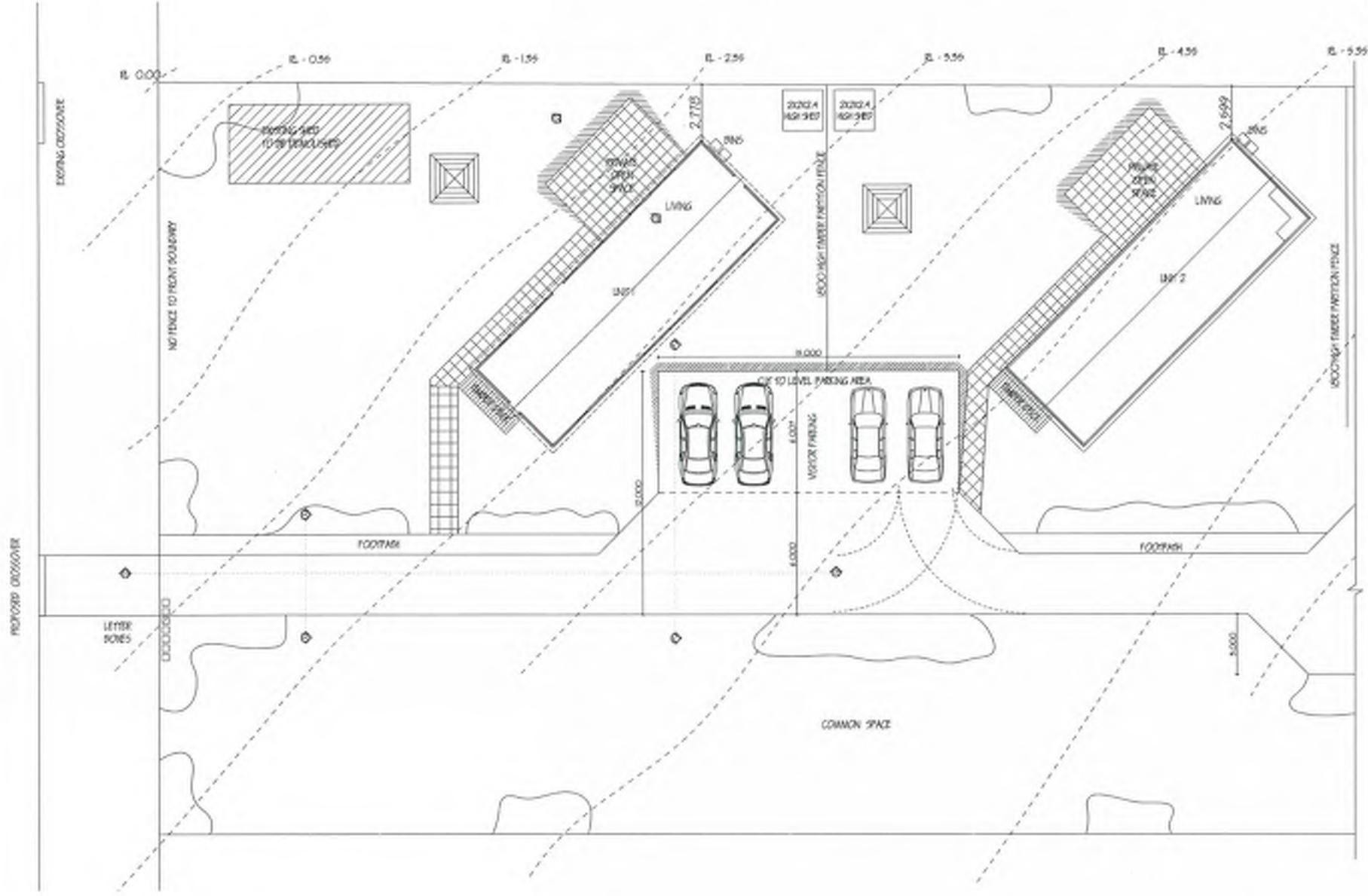
EXISTING SHED  
TO BE DEMOLISHED



PROPOSED CONCRETE CROSSOVER  
- CROSSOVER AND STORAGE  
TO COMPLY WITH COUNCIL  
REQUIREMENTS



ADORN DRAFTING STEPHEN LAWES E-MAIL : stephenlawes@azpt.net.au	CC 4667 J CATEGORY ABP 1 1B / A TAMAR RISE RIVERSIDE, TAS	PROPOSED MULTIWELLING DEVELOPMENT, Lot 3 BEEFEATER ST, DELORAINNE FOR ANDREW TERRY	DRAWING	FULL SITE PLAN
			DATE	14/11/2017
			SCALE	1:400
			DWG 420	SHEET 2 OF 14



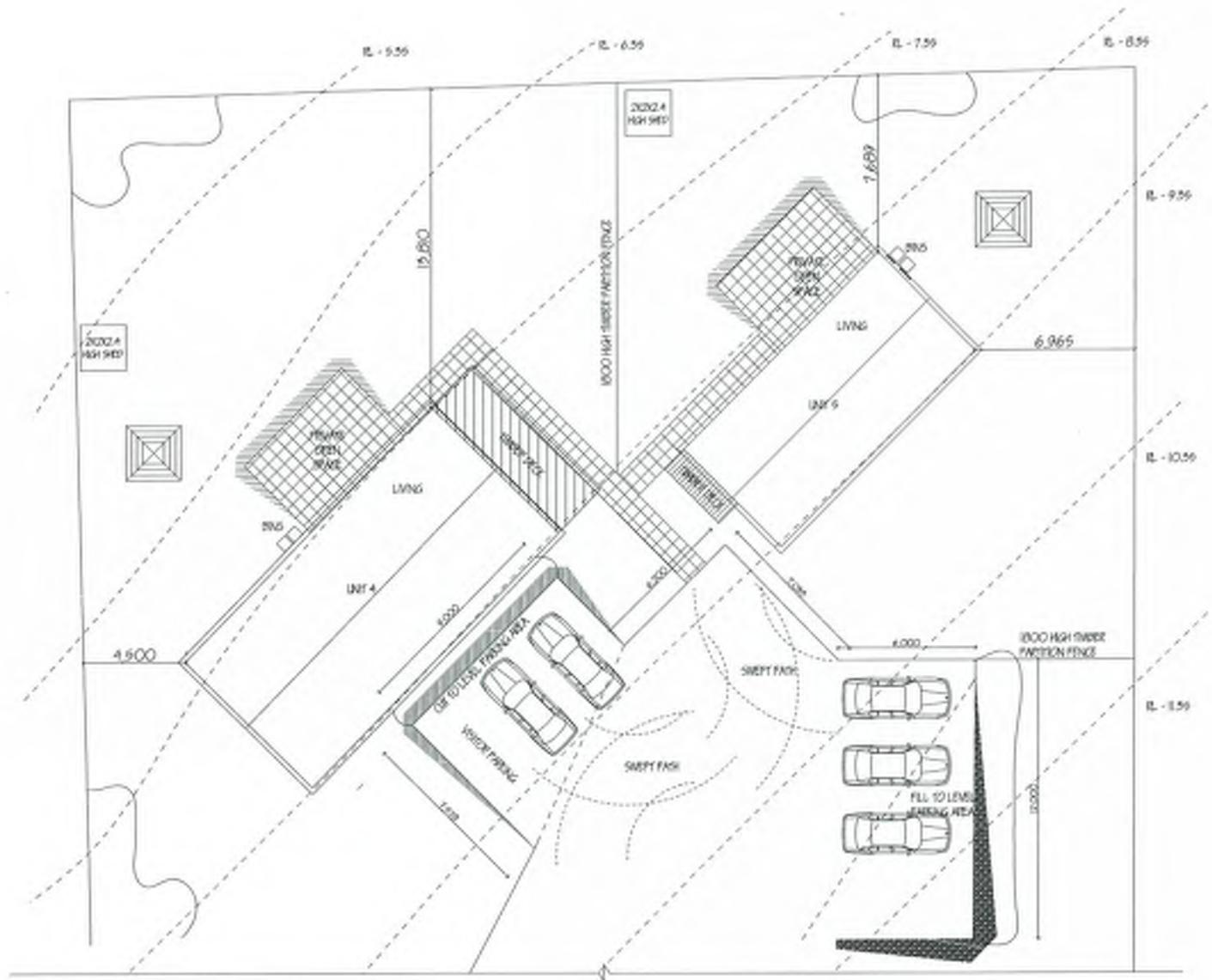
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 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS.  
 ALL TIMBER FINISHING TO BE DONE ON SITES WITH APPROVAL AND FINISHES TO COMPLY WITH LOCAL COUNCIL REQUIREMENTS.  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS.

Meander Valley Council Ordinary Agenda - 16 January 2018

**C&DS 4**

ADORN DRAFTING PH: 0415 255 500 E: info@adorn.com.au	STEPHEN LAMES CC 4667 J CATEGORY NP 1 IS / A TANKER USE REUSE, DS	PROPOSED MULTIDWELLING DEVELOPMENT, Lot 3 BEEFEATER ST, DELORAIN FOR ANDREW TERRY	DRAWING UNIT 1 AND 2 DATE 14 / 11 / 2017 SCALE 1:200 DWG 420 SHEET 3 OF 14
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Page 679



ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK.  
 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS.  
 ALL TIMBER FINISHES TO BE IN COMPLIANCE WITH AUSTRALIAN STANDARDS 1604.1.  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS.

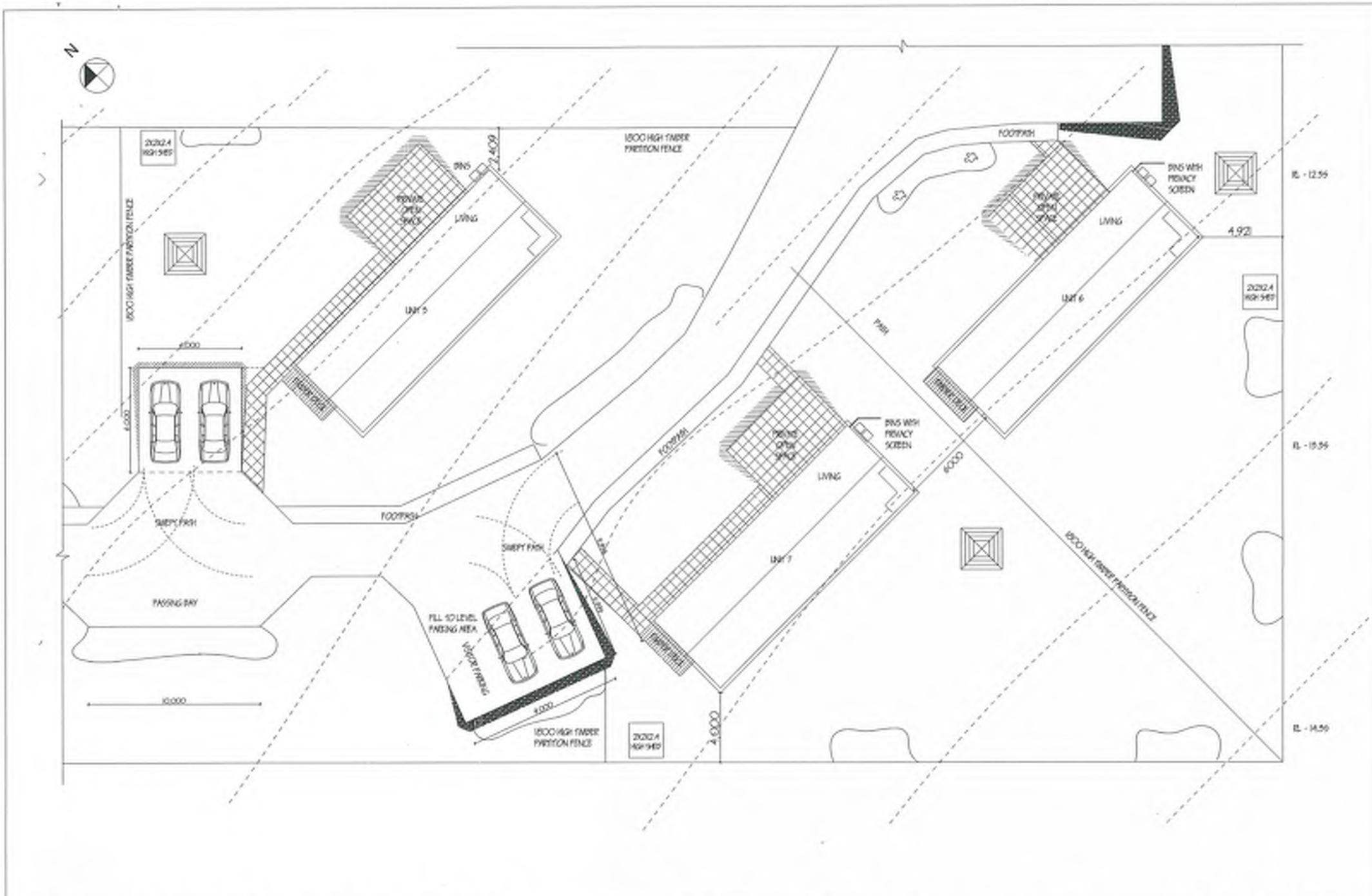
**C&DS 4**

ADORN DRAFTING  
 TEL: 08 255 160  
 EMAIL: [stephen@adorn.net.au](mailto:stephen@adorn.net.au)

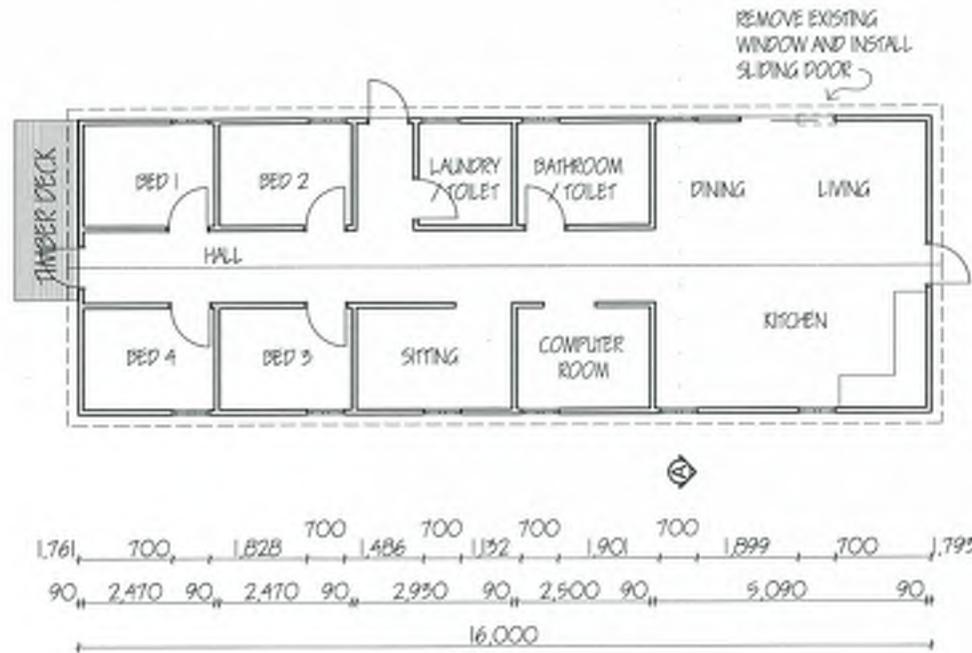
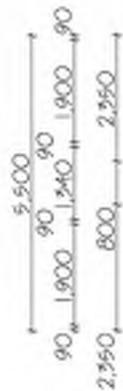
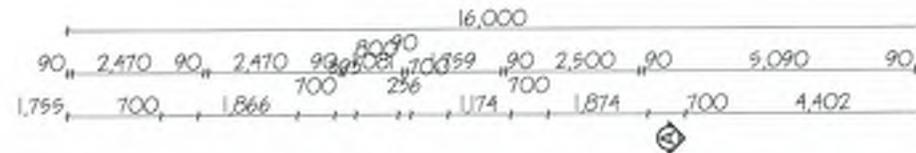
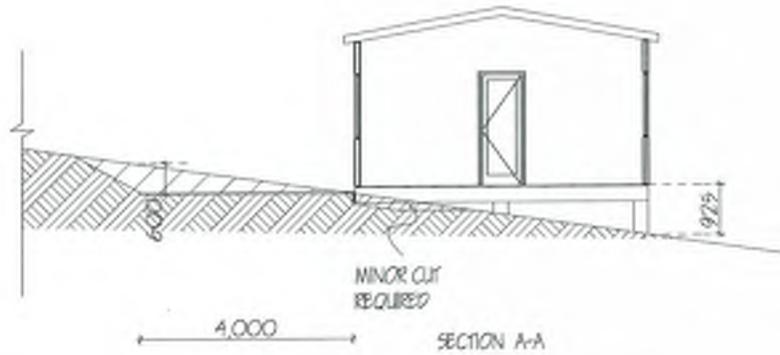
STEPHEN LAMES  
 CC 4667 J  
 CATEGORY AWP 1  
 10/1 A TANK RISE  
 DIVISION 100

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	UNIT 4 AND 5
DATE	14/11/2017
SCALE	1:200
DWG 420	SHEET 4 OF 14



<p>ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK          ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS          ALL TIMBER FENCES TO BE IN COMPLIANCE WITH LOCAL COUNCIL REQUIREMENTS          PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS</p>	<p>ADORN DRAFTING          Ph: 08 255 160          www.adorn.com.au</p>	<p>SEPHIN LAMES          CC 4667 J          CATEGORY AP1          13/ A TAMAR RIVER          RIVERSIDE TAS</p>	<p>PROPOSED MULTIDWELLING DEVELOPMENT,          Lot 5 BEEFEATER ST, DELORAIN          FOR ANDREW TERRY</p>	<p>DRAWING UNIT 5, 6 AND 7          DATE 14/11/2017          SCALE 1:100          DWG 420 SHEET 5 OF 14</p>
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FLOOR PLAN FOR UNITS 1, 2, 3, 6 AND 7

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 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS  
 ALL TIMBER MEANDER VALLEY COUNCIL ORDINARY AGENDA 16 JANUARY 2018  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

C&DS 4

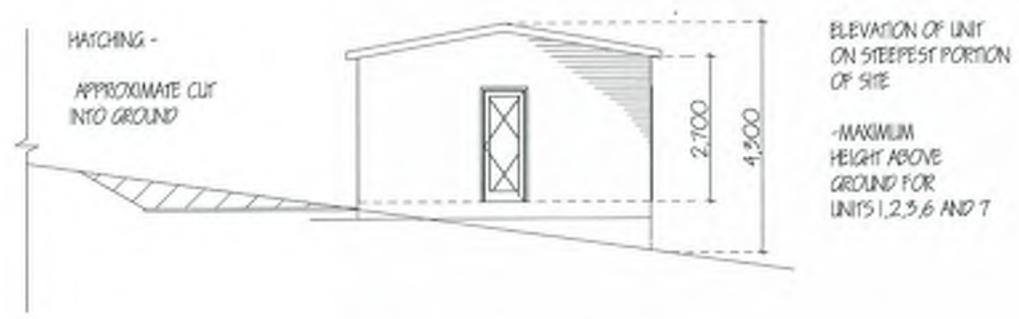
ADORN DRAFTING  
 NSW 0415 255 160  
 EMAIL: ady@adorn.com.au

SERIES LINES  
 CC 4467 J  
 CATEGORY ABP 1  
 ISV A TANK USE  
 REVERSE, 105

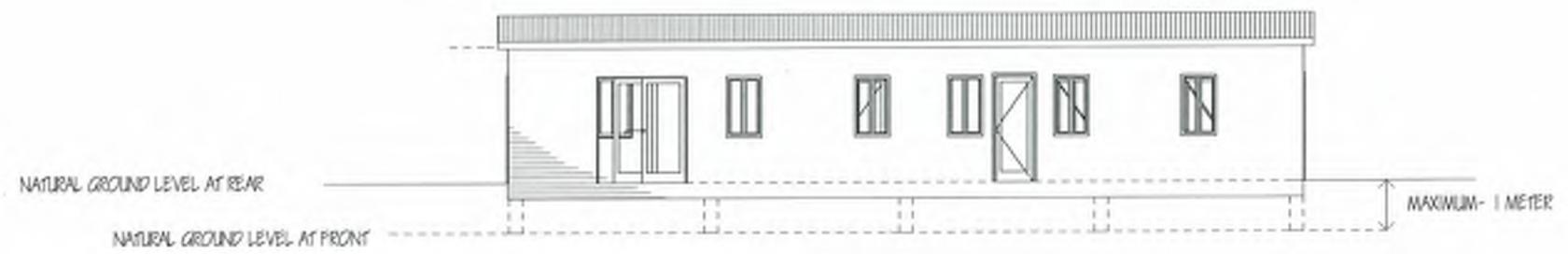
PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 5 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

DRAWING	FLOOR PLAN/ SECTION
DATE	14/11/2017
SCALE	1:100
DWG 420	SHEET 6 OF 14





ELEVATION FOR UNITS 1,2,3,6 AND 7



ELEVATION FOR UNITS 1,2,3,6 AND 7

ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK.  
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 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

Meander Valley Council Ordinary Agenda 16 January 2018

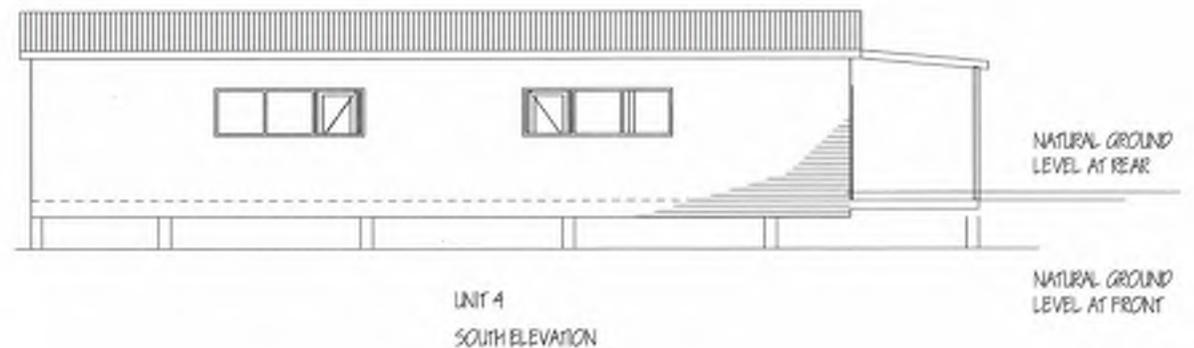
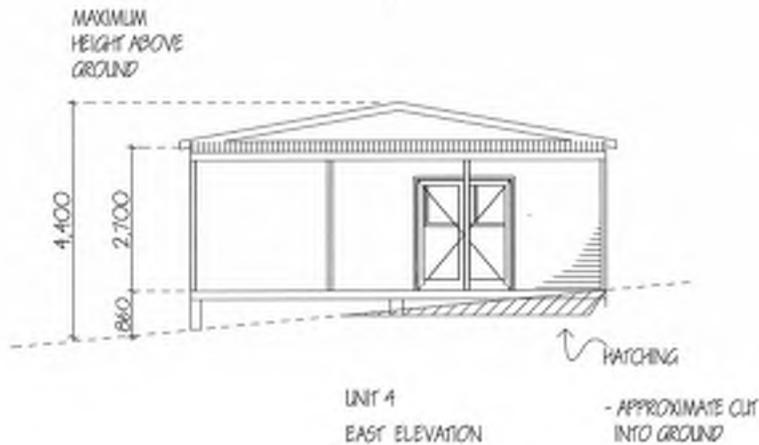
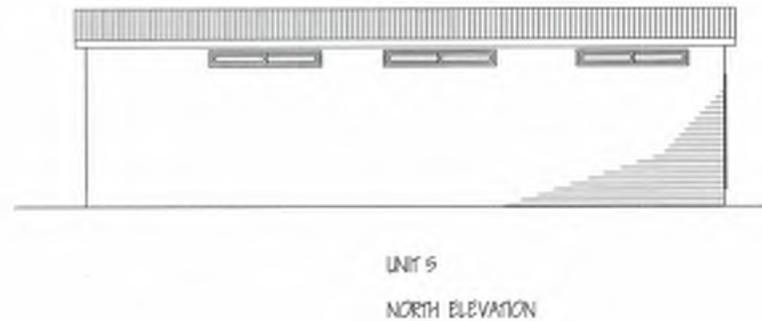
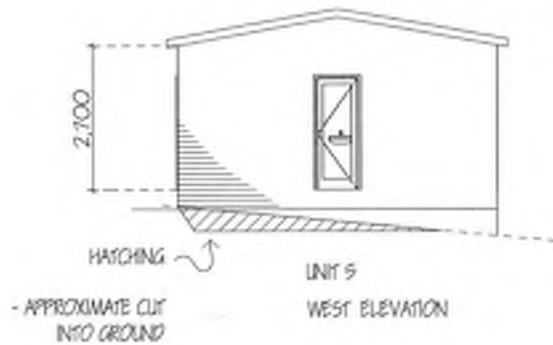
**C&DS 4**

**ADORN DRAFTING**  
 PH: 045 295 160  
 EMAIL: [adorn@adorn.com.au](mailto:adorn@adorn.com.au)

SIXPEN LINES  
 CC 9667 J  
 CATEGORY AHP 1  
 18V A DRAWER 132E  
 REVERSE, 14G

PROPOSED MULTIWELLING DEVELOPMENT,  
 Lot 5 BEEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	ELEVATION
DATE	14/11/2017
SCALE	1:100
DWG 420	SHEET 8 OF 14



ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK.  
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 ALL TIMBER FRAMEWORK TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS.  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

**C&DS 4**

ADORN DRAFTING

185 045 255 160  
 E-MAIL: steph@adorn.com.au

SEVEN LINES  
 CC 4667 J  
 CATEGORY A/P 1  
 15/ A DUNE ESE  
 REVERSE, 140

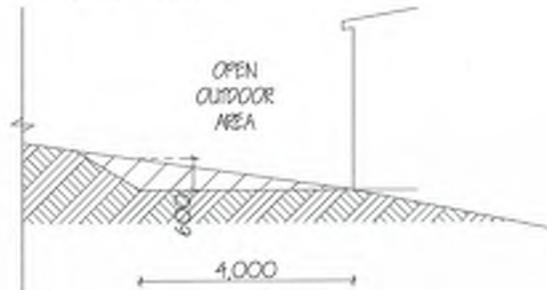
PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	ELEVATION
DATE	14/11/2017
SCALE	Page 68500
DWG 420	SHEET 9 OF 14

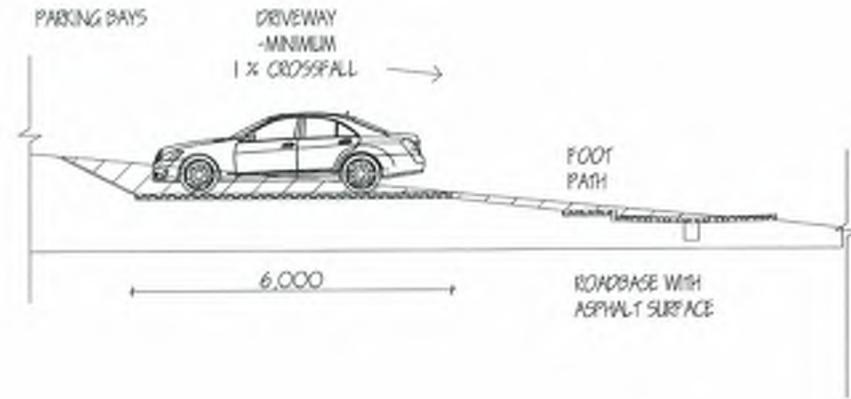
### SECTION E-E OPEN OUTDOOR AREA

A PAVED AREA OF EACH UNIT AS SHOWN WITH A MINIMUM AREA OF 6x4 METERS IS TO BE MADE LEVEL AND HAVE GRADED BANKS

MAXIMUM CUT - 600 TO 700 mm (NO RETAINING WALLS)

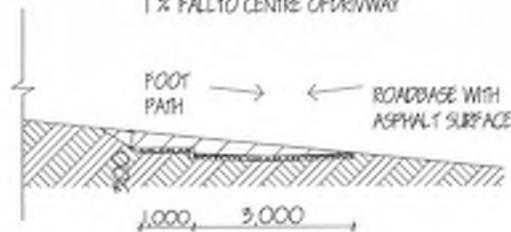


### SECTION P-P PARKING AREA

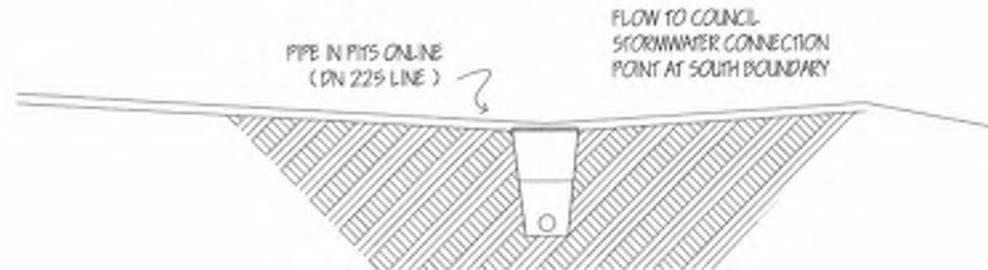


### SECTION D-D DRIVEWAY

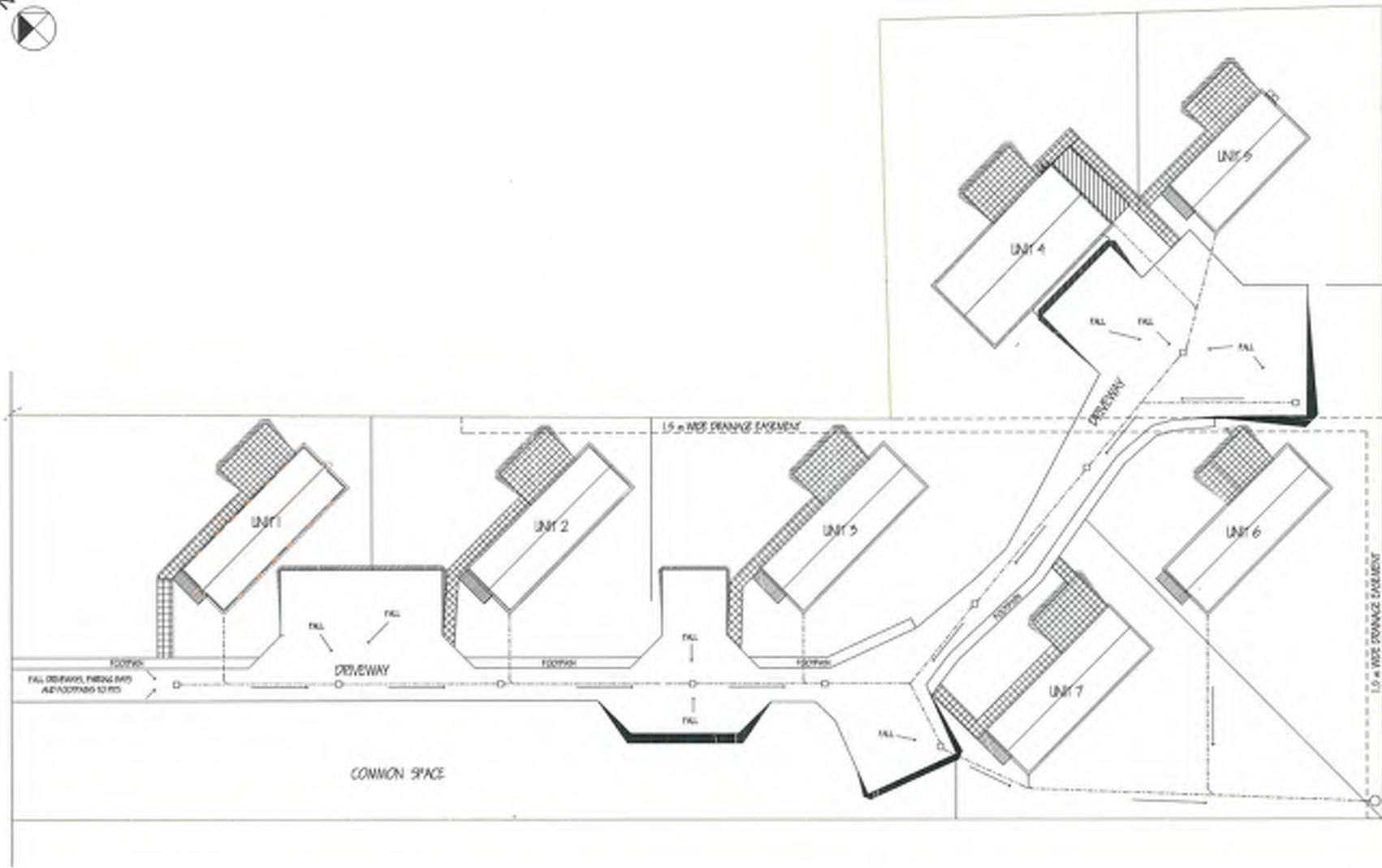
DRIVEWAY - MINIMUM 1% FALL TO CENTRE OF DRIVEWAY



### DRIVEWAY / PIT DETAIL



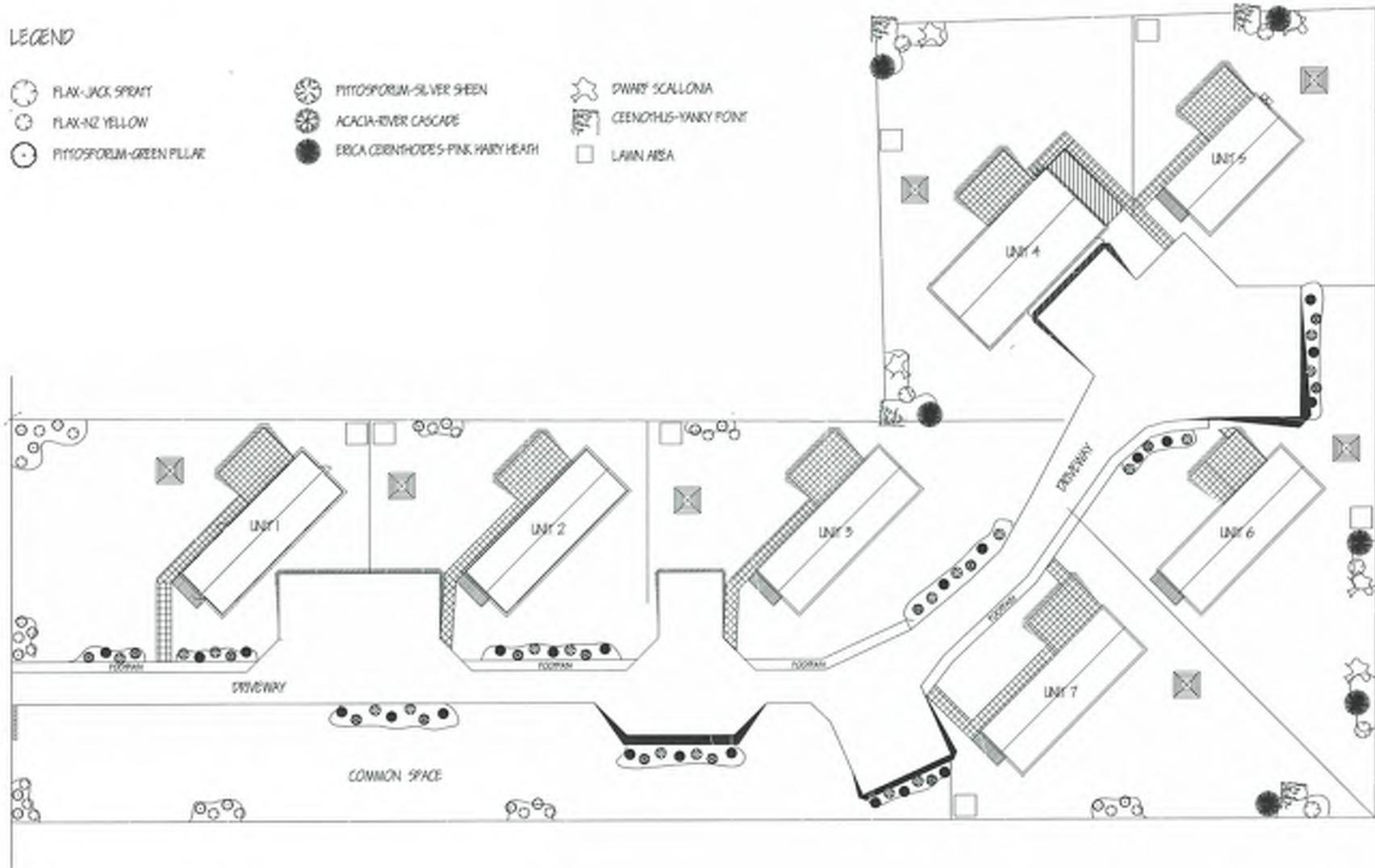
ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK.  
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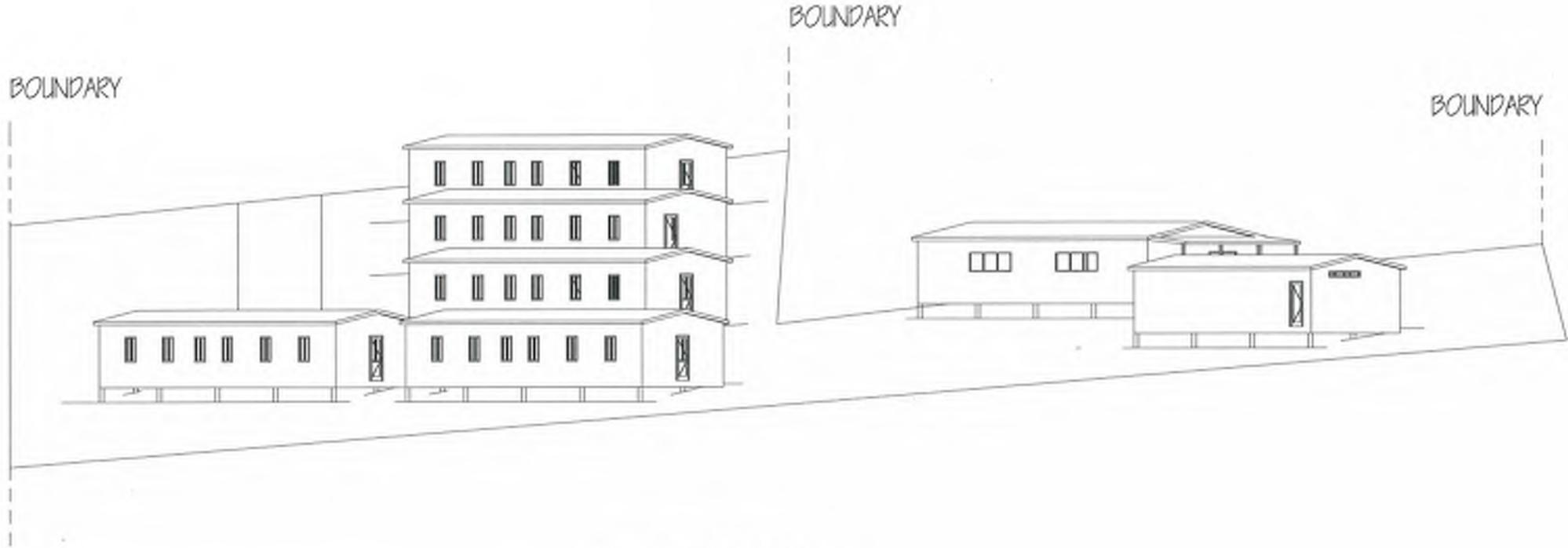
ADORN DRAFTING STEPHEN LAWES TEL: 015 255 160 E-MAIL: stephen.lawes@aspt.net.au	CC 4667 J CATEGORY ABP 1 18/ A TAMAR RISE RIVERSIDE, TAS	PROPOSED MULTIDWELLING DEVELOPMENT, Lot 3 BEEFEATER ST, DELORAINIE FOR ANDREW TERRY	DRAWING	DRAINAGE PLAN
			DATE	14/11/2017
			SCALE	1:400
			DWG 420	SHEET 11 OF 14

LEGEND

- |   |                          |   |                                   |   |                       |
|---|--------------------------|---|-----------------------------------|---|-----------------------|
|  | FLAX-JACK SPROUT         |  | PITTOSPORUM-SILVER SHEEN          |  | DWARF SCALLONIA       |
|  | FLAX-NZ YELLOW           |  | ACACIA-RIVER CASCADE              |  | CEANOTHUS-YANKY POINT |
|  | PITTOSPORUM-GREEN PILLAR |  | ERICA CERNIHOWES-PINK HAIRY HEATH |  | LAWN AREA             |



ADORN DRAFTING STEPHEN LAWES MOBILE: 081 234 400 E-MAIL: stephenlawes@aapt.net.au	CC 4667 J CATEGORY ABP 1 18/ A TAMAR RISE RIVERSIDE, TAS	PROPOSED MULTIDWELLING DEVELOPMENT, Lot 3 BEEFEATER ST, DELORAINÉ FOR ANDREW TERRY	DRAWING	LANDSCAPE PLAN
			DATE	14/11/2017
			SCALE	1:400
			DWG 420	SHEET 12 OF 14



SOUTH EAST ELEVATION

ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK  
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 ALL TIMBER FINISHING TO BE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

Meander Valley Council Ordinary Agenda - 16 January 2018

**C&DS4**

ADORN DRAFTING

PH: 08 255 160  
 WWW.ADORNDRIFTING.COM.AU

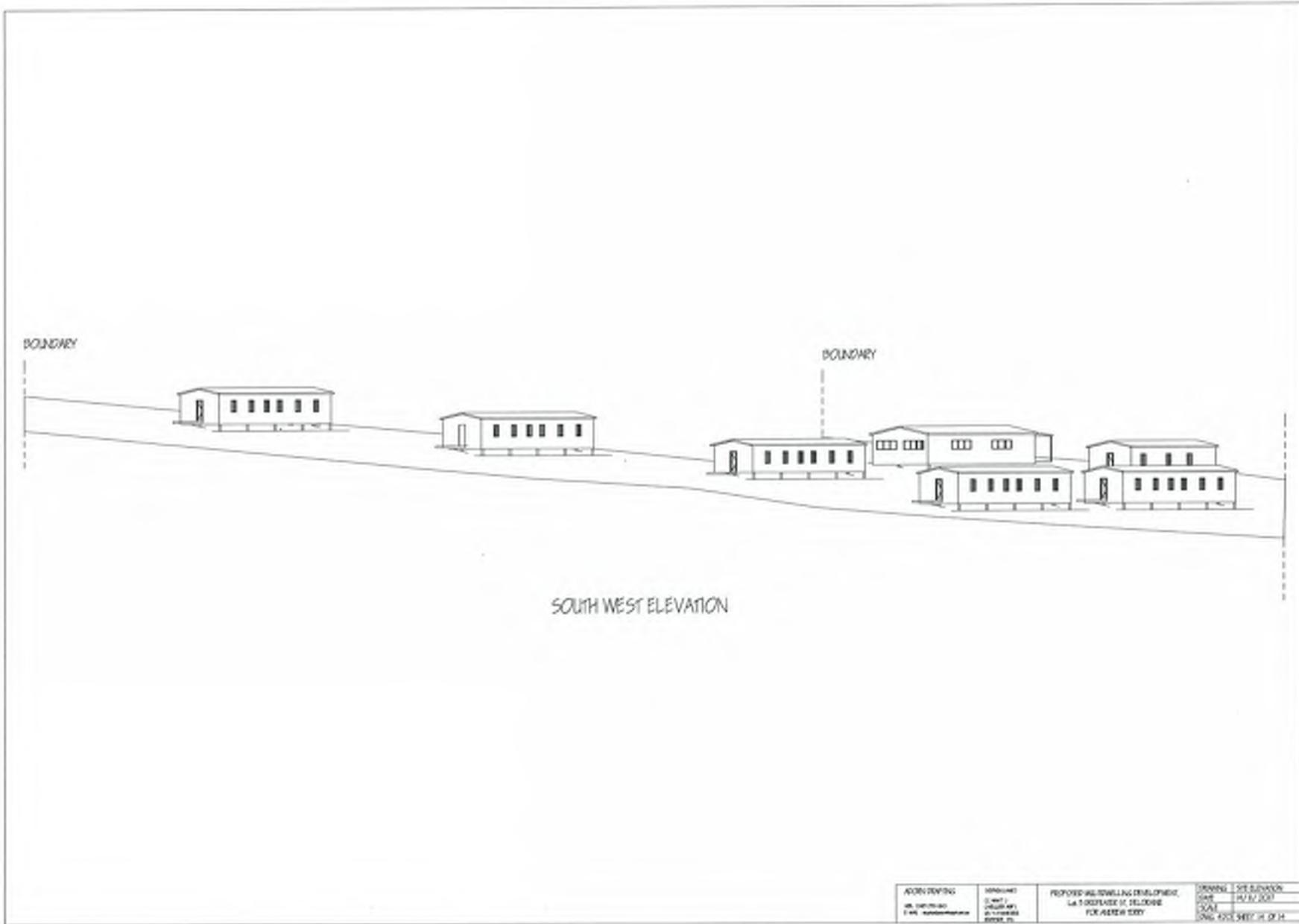
STEPHEN LAMES

CC 4667 J  
 CREGORY RD 1  
 157 A DUNDAS ST  
 EVANESSE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 DEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	SITE ELEVATION
DATE	14/11/2017
SCALE	AS SHOWN
DWG 420	SHEET 15 OF 14

Page 689



## Appendix C: Traffic Assessment

IPD Consulting

Appendix D: Preliminary Stormwater Review

IPD Consulting

25 September 2017

A Terry  
E: [Andrew@tasmanianberries.com.au](mailto:Andrew@tasmanianberries.com.au)

Doc ref: 1571

Attn: Andrew Terry

Dear Andrew,

### **No. 46a Beefeater Street Deloraine - Unit Development Preliminary Stormwater Review**

Please find the following preliminary stormwater review for the proposed development at 46 Beefeater Street, Deloraine.

#### **1.1 Development Overview & Background to Modelling**

IPD Consulting (IPD) have conducted a preliminary stormwater review for the proposed development at No. 46a Beefeater Street, Deloraine. This review was undertaken for the purposes of:

- Determining the peak discharge and corresponding pipe size for a 20% Annual Exceedance Probably (AEP) rainfall event; and
- Comparison to the peak flow for a 20% AEP rainfall event if the stormwater network installed at No. 46a Beefeater Street was also collecting runoff from the following adjacent properties:
  - 38 West Gooderich Street;
  - 116-118 Emu Bay Road; and
  - 46 Beefeater Street.

This scenario has been requested by Meander Valley Council (MVC) to consider the opportunity to provide stormwater connections to adjacent properties if possible.

#### **1.2 Catchment and Model Parameters**

Preliminary modelling was undertaken using the Infoworks ICM software package using the 2016 Australian Rainfall & Runoff (AR&R) guidelines for determining input parameters for the model. Note that the AR&R 2016 update does not recommend the use of the rational method for stormwater analysis.

Using the online data hub and AR&R guidelines, the following key parameters were used in preparing the model and catchment data:

- Temporal patterns adopted (southern slopes – TAS)
- Pre-burst rainfall events were not assessed at this stage

- Initial and continuing losses for rural catchments were provided (IL – 16mm and CL 4.4mm/hr) however these are not adopted for urban catchment studies. An IL of 4mm and CL of 2mm/hr has been adopted as reasonable assumptions for the pervious components of the catchments
- A 20% AEP event was considered appropriate for the underground network given the zoning and location of the development
- Low density urban catchments were modelled with a 40% impervious component, with the pervious component modelled using the Horton equation for losses

Each catchment except 38 West Gooderich Street were modelled as low density residential lots, with 38 West Gooderich Street modelled as 100% impervious as noted from aerial photographs.

Figure 1. shows the model set up and pipeline configuration adopted for the analysis.

Figure 1. Model Setup



The red line shows the proposed stormwater network if MVC collects stormwater from the adjacent properties. The model outfall is located to the south west.

### 1.3 Preliminary Modelling Results

Modelling rainfall events of different durations for the 20% AEP event showed that the rainfall event with a 15 minute duration proved to be the critical event for this model.

Table 1 below shows the peak flows for both scenarios.

Table 1. Model Results

Catchment Scenario	Peak Flow (L/s)	Required Pipe Size
46a Beefeater Street only	55 L/s	DN225
46a Beefeater Street and MVC additional catchments	150 L/s	DN300

The above results were taken from the median temporal pattern result for the critical duration event, in accordance with AR&R 2016. The pipe sizes nominated above are on the assumption of a pipeline grade of 8% given the steep nature of the site.

A 1% AEP overland flow path would also need to be considered during the detailed design phase, which would be nominally located over the alignment of the new pipeline.

It should be noted that this modelling is preliminary only and further modelling would be required to confirm the accuracy of the modelling results. This would be done in conjunction with the detailed design of the development.

This modelling has also not taken into consideration any other stormwater infrastructure downstream of the nominated model outfall and suitability to discharge to this location. This would require guidance from MVC.

If you require any further information or clarification on any aspect of the above, please don't hesitate to contact me on Mob: 0417 015 560 or Email: [mhay@ipdconsulting.com.au](mailto:mhay@ipdconsulting.com.au).

Yours faithfully  
IPD Consulting Pty Ltd



**Michael Hay** BE (Hons) MIEAust CPEng NER

Senior Civil Engineer



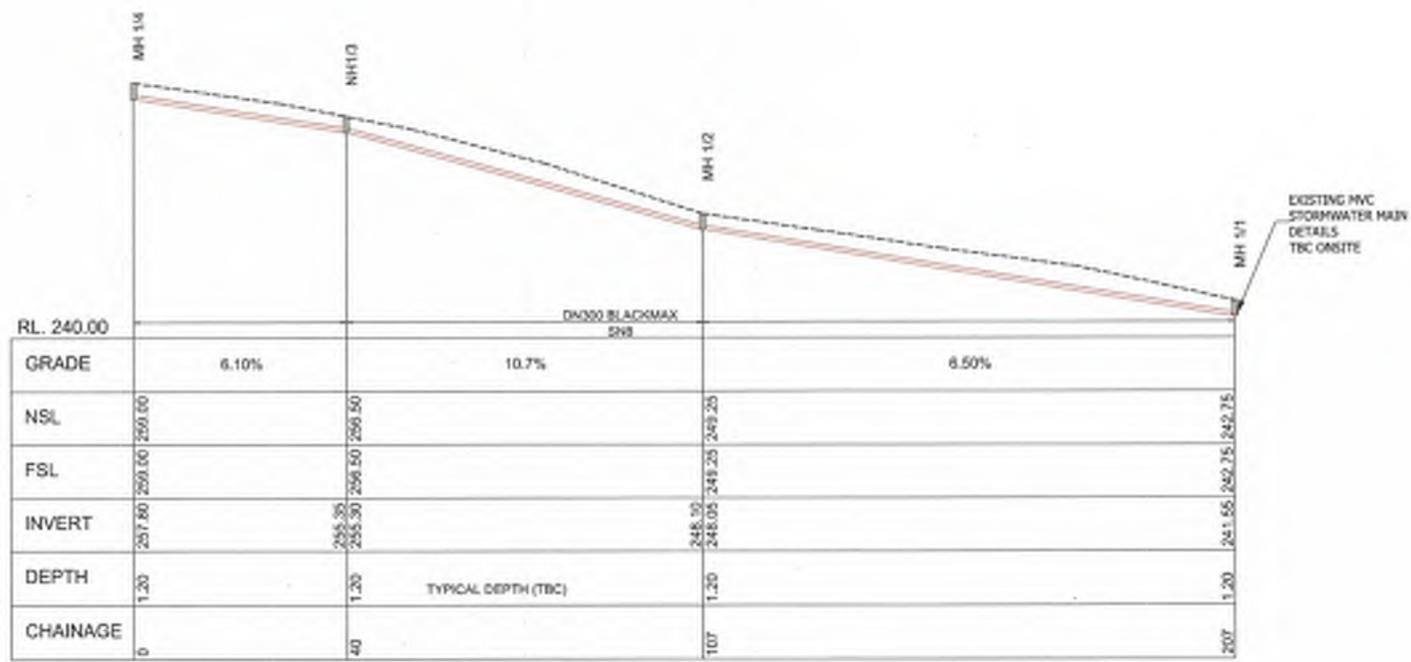
**CONCEPT DESIGN - FOR D.A.**

CONCEPT LAYOUT PLAN  
SCALE: N/A

**NOTES:**

- SERVICING CONCEPT ONLY** - THIS PLAN IS PROVIDED TO DEMONSTRATE SERVICING FOR THE PROPERTY IS LIKELY TO BE ACHIEVED, AND IS SUBJECT TO CHANGE AT TIME OF DETAILED DESIGN AND IN ACCORDANCE WITH TSWATER AND PVC REQUIREMENTS
- PROPOSED CONNECTION POINTS AS SHOWN REQUIRE OBTAINMENT OF AN EASEMENT ALONG THE SOUTHERN BOUNDARY OF THE AGED CARE UNITS/NURSING HOME PROPERTY (SW) AND TW
- STORMWATER LINE** INCLUDE EXTENSION THROUGH SUBJECT LOTS TO PROVIDE SERVICE TO EXISTING LOTS 44 BEEFEATER STREET, 116-118 EMU BAY ROAD AND 38 WEST GODERICH STREET.
- STORMWATER LINE** LIKELY TO BE DN150 TO ACCOMMODATE PVC ADDITIONAL SERVICING AREAS (OTHERWISE DN225) TRC AT DETAILED DESIGN.

FOR CONSTRUCTION			
NO.	DATE	BY	REVISIONS
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Project: <b>BEESDAK STREET DEVELOPMENT</b> Drawing Title: <b>CONCEPT DESIGN - SERVICING LAYOUT</b> Project Manager: <b>A. HOWELL</b> Date: <b>1/11/17</b> Scale: <b>1:1</b> Drawing No: <b>1571-01</b>			



**STORMWATER LONG SECTION**  
 (DETAILS TBC SUBJECT TO SITE SURVEY &  
 EXISTING SERVICES LOCATIONS)  
 HORIZONTAL SCALE 1:200  
 VERTICAL SCALE 1:500

**CONCEPT DESIGN - FOR D.A.**

FOR CONSTRUCTION

Client	
Project Name	
Project No.	
Revision	

REVISIONS

No.	Description	Date
1	FOR CONSTRUCTION	

Client: A. SMITH  
 Project Manager: A. HOWELL

Project: REEFVIEW STATE DEVELOPMENT

Drawing Title: CONCEPT SW LONG SECTION

Prepared By	Checked	Approved	Date
AI SHOWN	EC	ADR	15/11

1571-02

## Traffic Impact Assessment (TIA)

### A Terry – Unit Development Beefeater Street, Deloraine

September 2017

### Document History and Status

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A	12/09/2017	A Howell	TIA Prelim for Comment
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Rev	Quantity	Issued To
A	1	Client for Comment
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**Author:** Andrew Howell  
**Client:** A Terry  
**Project:** Unit Development  
**Subject:** 'TIA report'  
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- A Proposed Development Plan

# 1. Introduction

IPD Consulting has been engaged to complete a brief Traffic Impact Assessment (TIA) relating to a development proposed by Mr Andrew Terry, to construct seven (7) units at 46A Beefeater St, Deloraine, Tasmania (refer Fig 1.1 and 1.2 – Area / Locality Plans). The general layout is as per APPENDIX 1 – Proposed Development Plan.

## 1.1 Background & Project Scope

The development proposes a new access location, and generates additional traffic, and this suggests from planning scheme requirements that a TIA would be required to be undertaken to assess traffic impacts and any issues arising. The below report addresses traffic related aspects where applicable, and attempts to identify and comment on any potential impacts affecting, or arising from, the development.

## 1.2 Objectives

The key objectives of this report are:

- Review of the existing road physical characteristics in the vicinity of the site(s).
- Review of existing traffic conditions.
- Describe the development with regards to arrangements for access, including any implications for traffic efficiency, safety, and amenity.

## 1.3 Subject Site Location

The subject site considered in this TIA is located at 46A Beefeater Street, Deloraine, which is a short Meander Valley Council road link connecting Emu Bay Road (DSG) and Moriarty Street.

The property has an existing access driveway off Beefeater Street, close to the Northern Corner, which is proposed to be decommissioned and removed with a new proposed access driveway further to the West, as per the development plans.



Fig 1.1 – Locality Plan /Area of site (Existing Image from [www.THELIST.tas.gov.au](http://www.THELIST.tas.gov.au))



Fig 1.2 – Site (zoom), and accesses (Existing Image from [www.THELIST.tas.gov.au](http://www.THELIST.tas.gov.au))

#### 1.4 Information Sources & References

IPD have been provided with relevant information on the development, including preliminary plans prepared for development application stages. These details provide an outline of the proposed works, and indicates that generally the development proposes no significant change to the existing traffic arrangements, other than relocation of the property access.

IPD have reviewed publicly available information including [www.THELIST.tas.gov.au](http://www.THELIST.tas.gov.au) and other online tools, to ascertain any obvious issues relating to the development, and have undertaken a site inspection to review the site.

IPD have utilized the DIER (now Department of State Growth or DSG) document "*Traffic Impact Assessment (TIA) Guidelines*" in the preparation of this report.

Further referenced documents include:

- DSG Tasmanian State Road Hierarchy
- MVC Interim Planning Scheme 2013 - Specifically, E4 Road and Rail Assets Code (2013)
- AUSTRROADS Publications (various)

## **1.5 Planning Scheme Aspects**

The Planning scheme applicable is the Meander Valley Council Interim Planning Scheme 2013.

The current zoning for the land and surrounding area is 10.0 – GENERAL RESIDENTIAL.

The Road and Rail Assets Code (E4) from the planning scheme applies.

## 2. Existing Conditions

### 2.1 Transport Network

Beefeater Street in this area (West of Emu Bay Road) is a short link street (185m) which provides access from the (DSG Collector Road) Emu Bay Road to the low priority, low traffic Moriarty street, a street providing generally local access only. Beefeater Street in the context of the Local Government Road Hierarchy may best be described as a "Local Access Road".

There are approx. 10 properties with access (or potential for access) to Beefeater Street in this link, including the subject site. The street starts with kerb and channel close to Emu Bay Road on the Southern side of the street up until the existing property access crossover, after which an open drain and grassed verge is provided for the remainder of the subject site frontage.

The road surface is in somewhat poor condition, with a sealed width of approx. 5m and a 14/7 two coat seal. It is built generally to a rural standard in the area of the new access. The road alignment as it continues down the hill has a slight discontinuity in horizontal alignment (kerb lines do not match, and horizontal curvature)

Based on the small volume of traffic generated by the development, no traffic count or speed data has been sought at this time. Based on the author's familiarity with the road link, the traffic volumes for this road link are believed to be low.



Fig 2.1a – Existing Access to the property



Fig 2.1b – Proposed location for new access to the property

## 2.2 Road Conditions & Road Safety Performance

Generally, the road network in this area appears to function satisfactorily, and provides appropriate carriageway width, visibility, and manoeuvrability.

Existing property access to the subject site, appears satisfactorily located, however the driveway access itself is in poor condition (seal failure, overgrown, etc.). This access is to be removed under the plans provided, with new access required further down the hill (to the West). Such a new access would be required to be constructed to the IPWEA/LGAT Standards, and the construction of this access appears feasible, with care required around drainage and grades/levels of the access to adequately service the development in general. A rural type access (culvert, headwalls for open drain) as per existing arrangements in the area of the new access is proposed by the developer.

The new development proposes seven new dwellings/units, and as such vehicle numbers are anticipated at around 63 VPD additional using Beefeater Street, and the new access. Based on the small traffic numbers capacity of the surrounding network is not considered an issue.



Fig 2.2a – Visual from proposed access looking to West (approx)



Fig 2.2b – Visual from proposed access looking to East (approx)

## 3. Proposed Development

### 3.1 Site Development

The development as proposed includes construction of seven (7) new units. To meet the new arrangements as proposed, the existing access is to be removed, and a new access provided to the West, closer to the low side of the block.

The new access to Beefeater Street in the location proposed appears to have the capacity to meet the requirements of the LGAT/IPWEA guidelines (subject final engineering design), with some consideration of roadside drainage and a need for earthworks to fill the new driveway area back into the property (this is required to raise driveway level up to cater for SISD with regards to vertical curve in Beefeater St looking up to Emu Bay Road).

The Beefeater St link and the access can accommodate additional vehicle movements arising from this development, based on likely low vehicle numbers (noted during inspections/recent site visits).

### 3.2 Traffic Generation & Distribution

It is noted that the development as proposed is likely to present only a modest increase in vehicle movements to Beefeater Street and the wider network, adding around 63 VPD to the daily traffic network on this basis. The existing Emu Bay Road junction (as the likely higher priority route to and from the subject site) can easily accommodate this small increase in traffic.

Due to the development not being seen as a contributor to any large increase in vehicle traffic generated, further off-site impacts are not considered further by this report.

## 4. Traffic Impacts

### 4.1 Access/Junctions

Based on the details provided, it is likely that the property access as proposed can satisfactorily be constructed to cater for development as planned, and in accordance with the IPWEA/LGAT standards. It is recommended that a dual width driveway is provided for this site, with minimum width of 6m per IPWEA standard drawing TSD-R09-v1. Note requirement to lift driveway finished surface level at the boundary detailed below.

Three issues must be accommodated during final design:

- **Existing roadside drainage downstream of the site in Beefeater Street is upgraded to accommodate the existing table drains or new kerb/channel – this may require a new headwall to existing stormwater on the downstream open drain, to formalise drainage at this point.**
- **The proposed access driveway must be filled to a height above existing surface level to ensure that vehicles exiting the property can see over the vertical curve of Beefeater Street back towards Emu Bay Road.**

The proposed access to Beefeater Street has been assessed for sight distance (provided this is raised approx. 1m in height at the boundary) and is believed satisfactory on that basis, with SISD in excess of 80m in either direction, meeting requirements of planning scheme.

### 4.2 Surrounding Road Network Impacts

Due to the likely limited additional traffic generated from the development, assessment of additional road network parameters beyond the site are outside the formal remit of this report, however volumes are not considered material and would have limited to no impact on the wider network.

### 4.3 Parking Assessment

*Not required to be assessed*

### 4.4 Sight Distances

A specific assessment on site has been undertaken to review sight distances with respect to planning scheme requirements.

Clause E4.7.4 of the Planning Scheme notes that sight distance for accesses for Acceptable Solution A1 must comply with Safe Intersection Sight Distance (SISD) from table E4.7.4. For a speed limit of 50km/hr (60km/hr or less from E4.7.4) and an assumed vehicle speed of estimated up to 50km/hr this SISD is nominally 80 metres. As noted from photos for the proposed site access, SISD appears achieved.

**ACCEPTABLE SOLUTION A1 for E4.7.4 is considered to be met for the proposed access (subject to lifting the height of the new access by approx. 1m at the boundary)**

### 4.5 Road Safety & Traffic Service

Due to the sight distances with regard to Planning Scheme Performance Solution A1 being deemed met, road safety appears to not be compromised by the development works proposed.

Traffic service for the proposed development is believed adequately provided with the existing infrastructure (capacity, turning gaps, etc.), based on the low traffic volumes anticipated.

#### 4.6 Pedestrian and Cyclist impacts

Currently there is no formal pedestrian and cycle access via footpath near to the site, and no changes are proposed or considered required.

#### 4.7 Delivery Vehicles

*Not required to be assessed.*

#### 4.8 Public Transport Provision

Taxis can service the site. Buses appear to service the general area. No specific changes are proposed.

#### 4.9 Summary of Assessment against Planning Scheme E4 – Road and Railway Assets Code

Item	Comment/Criteria Met
E4.6.1 – Use of Road or Rail Infrastructure	A1 – Not Applicable A2 – Not Met – use increase of more than 10% is proposed P2 – <b>REQUIREMENTS ARE MET (Safe Access, Deemed acceptable - refer comments Section 4.1 - 4.5)</b> A3 – Not Applicable
E4.7.1 – Development on and adjacent to Existing & Future Arterial Roads and Railways	A1 – Not applicable (no works/key items proposed within 50m of Cat 1 or 2 Roads or Railways)
E4.7.2 – Management of Road Accesses and Junctions	A1 – Deemed to Comply – single access A2 – Not applicable (<60 km/hr)
E4.7.3 – Management of Rail Level Crossings	NOT APPLICABLE
E4.7.4 – Sight Distances at Accesses, Junctions and Level Crossings	A1 – <b>REQUIREMENTS ARE MET (Deemed acceptable - refer comments Section 4.4)</b>

**Conclusion:** Requirements for E4 are met (subject conditions as noted)

## 5. Regulatory Authority Feedback on Traffic Impacts

### 5.1 Meander Valley Council Comment/Feedback

MVC feedback has not been sought formally at this time in relation to traffic aspects for the development, and no traffic count data available on the MVC provided list (online access) at this time.

### 5.2 DSG comment

No comment believed required.

## 6. TIA Conclusions

This TIA has investigated the potential impacts from the development of the site as proposed.

Key findings are as follows:

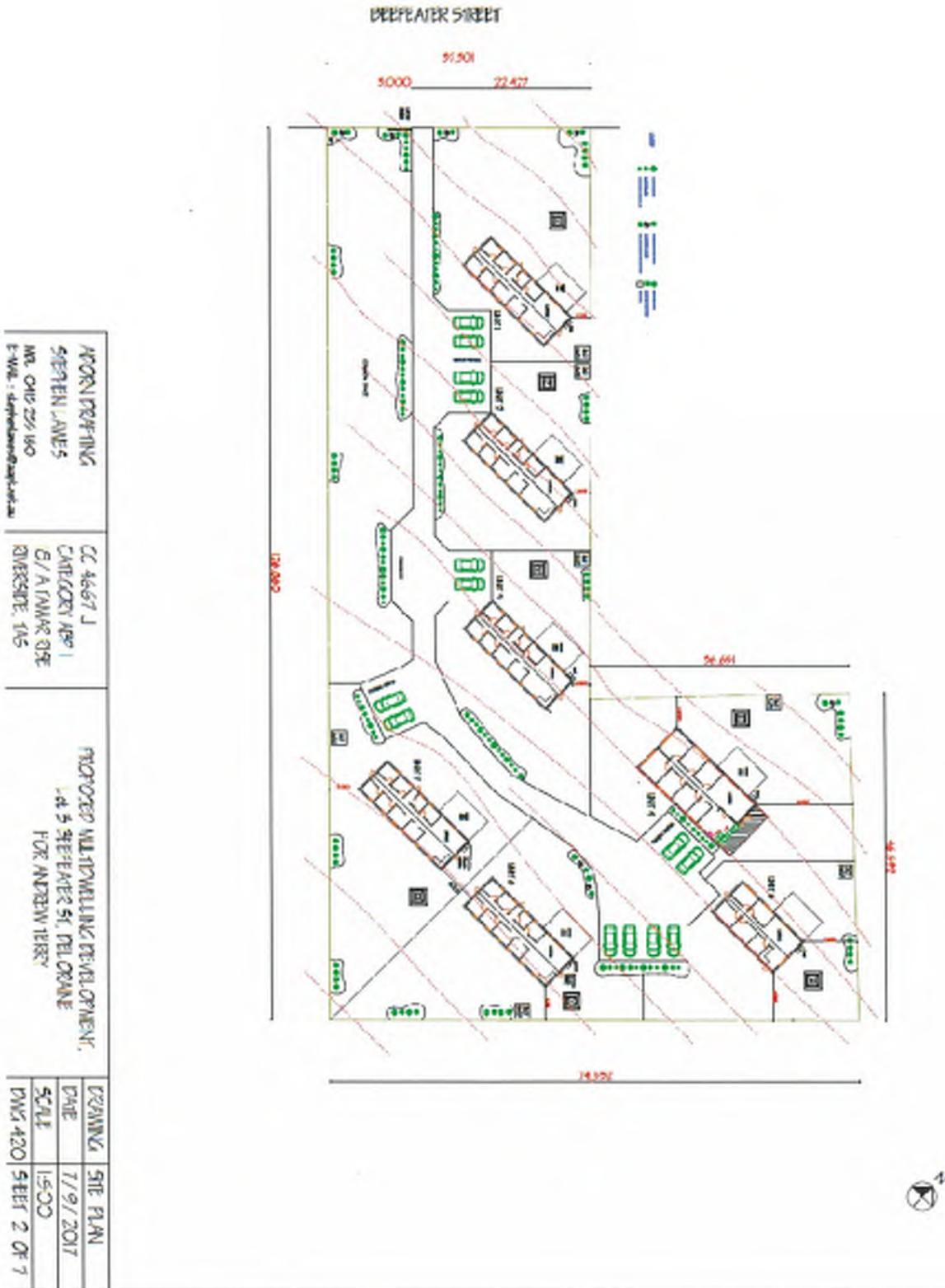
- That the proposed new access with general arrangements as per the proposed concept layout, is likely to meet the requirements to service the development and cater for traffic as proposed, providing that the access driveway FSL is lifted approximately 1m at the boundary, and consideration of roadside drainage is appropriately considered/upgraded with new inlet headwall etc. in the final design detail. (It is noted that the existing property access must be removed as part of the new works).
- That traffic service is likely adequately provided for by the road and access arrangements as proposed, in order to service the development,
- Sight distances for the new access are deemed to comply with the planning scheme E4.7.4 Acceptable Solution A1, with sound SISD able to be achieved generally based on an assessment of the site (*subject to lifting access driveway at boundary*)
- Other Planning Scheme Requirements under Code E4 are met as noted.

IPD Consulting conclude based on the above assessment of available information, that traffic aspects associated with the development are likely to meet the requirements for Traffic Safety and Service, and any potential for adverse effect on the existing traffic situation is unlikely based on relevant standards and guidelines noted, subject to recommendations and comments noted.

### Limitations

- *IPD have completed this TIA based on information provided by the client and available in the public domain, additional information beyond this has not been considered*
- *Based on the nature of the development, this TIA has considered the access and operational aspects for this development only, and has not considered in detail the wider impacts beyond the site (upstream network impacts), this being outside the scope of this report.*

# Proposed Development Plan



APORN DRAWING STEPHEN JAMES MR. CHRIS 225 160 E-MAIL: stephen@aporn.com.au	CC 4667 J CATEGORY APT 1 G/A TANK 03E OVERSIDE, 105	PROPOSED MULTIPHASE DEVELOPMENT, 141-5 BEEFEATER ST. BELONGANE FOR ANDREW TERRY	DRAWING: SITE PLAN DATE: 7/9/2017 SCALE: 1:500 DWG: 420 SHEET 2 OF 7
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1176422

**Leanne Rabjohns**

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**From:** Dino De Paoli  
**Sent:** Wednesday, 15 November 2017 11:44 AM  
**To:** Leanne Rabjohns  
**Cc:** Sandi Scott  
**Subject:** PA/18/0064 - 46a Beefeater Street Deloraine - Traffic Impact Assessment

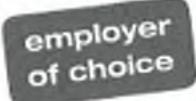
Leanne

I have reviewed the Traffic Impact Assessment (TIA) prepared by IPD Consulting for the proposed unit development. The information provided in the TIA is considered to be reasonable and I have no concerns at this point in time that need to be addressed prior to the project being advertised.

Kind regards

**Dino De Paoli** | Director Infrastructure Services  
Meander Valley Council  
*working together*

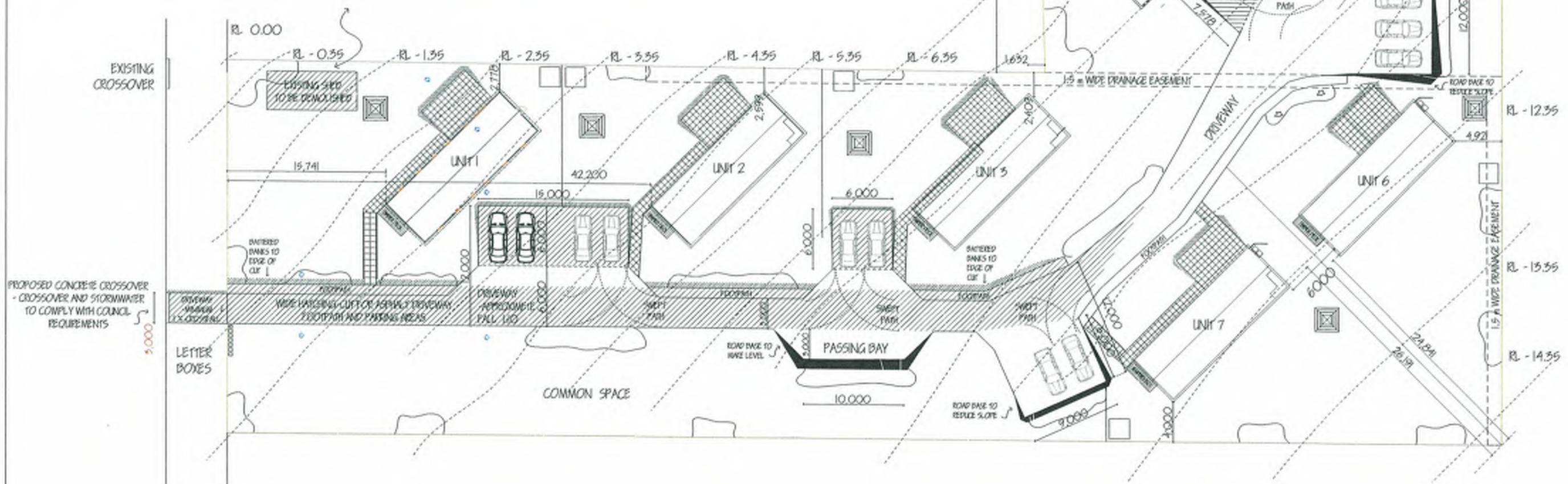
T: 03 6393 5340 | F: 6393 1474 | M: 0409 547 797 | E: [Dino.DePaoli@mvc.tas.gov.au](mailto:Dino.DePaoli@mvc.tas.gov.au) | W: [www.meander.tas.gov.au](http://www.meander.tas.gov.au)  
26 Lyall Street (PO Box 102), Westbury, TAS 7303



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BEEFEATER STREET

EXISTING SHED  
TO BE DEMOLISHED

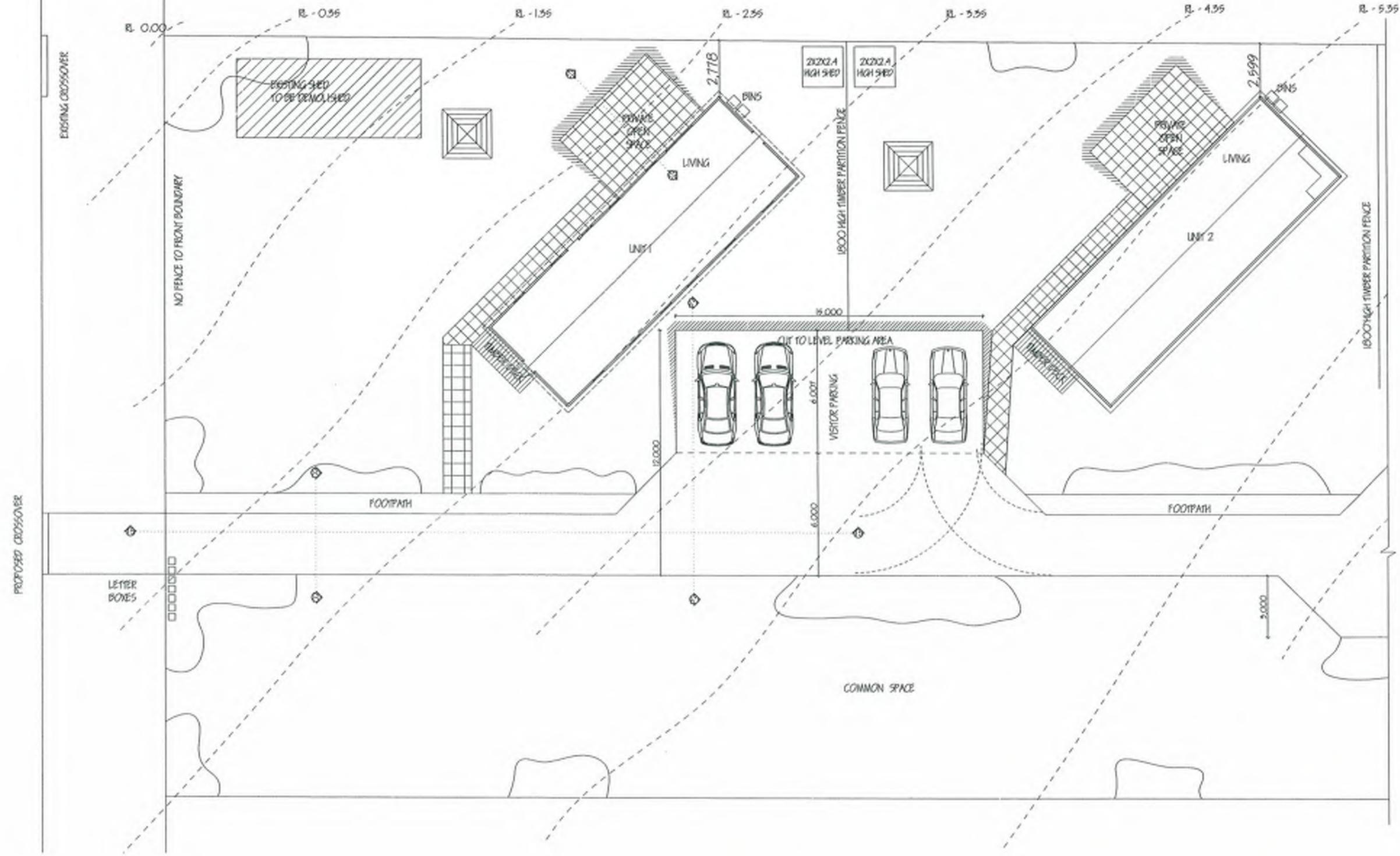


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CC 4667 J  
CATEGORY ABP 1  
18/ A TAMAR RISE  
RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
Lot 3 BEEFEATER ST, DELORAINÉ  
FOR ANDREW TERRY

DRAWING	FULL SITE PLAN
DATE	14/11/2017
SCALE	1:400
DWG 420	SHEET 2 OF 14



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 PLAN TO BE VIEWED IN CONNECTION WITH SERVICE ENGINEER'S DRAWINGS

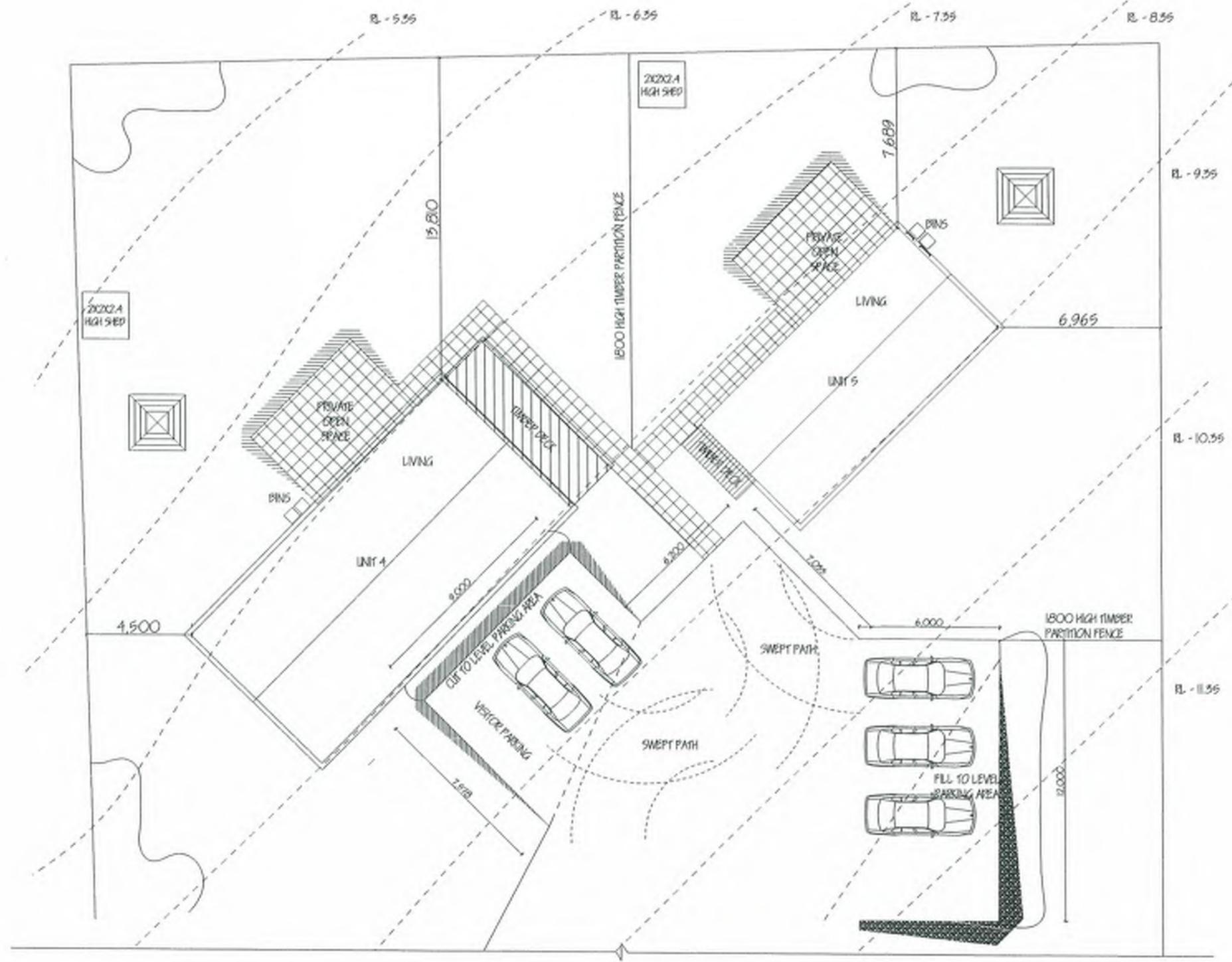
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STEPHEN LAWES  
 CC 4667 J  
 CATEGORY ABP 1  
 18/ A TAMAR RISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

DRAWING	UNIT 1 AND 2
DATE	14/11/2017
SCALE	1:200
DWG 420	Page 7 of 14

C&DS 4



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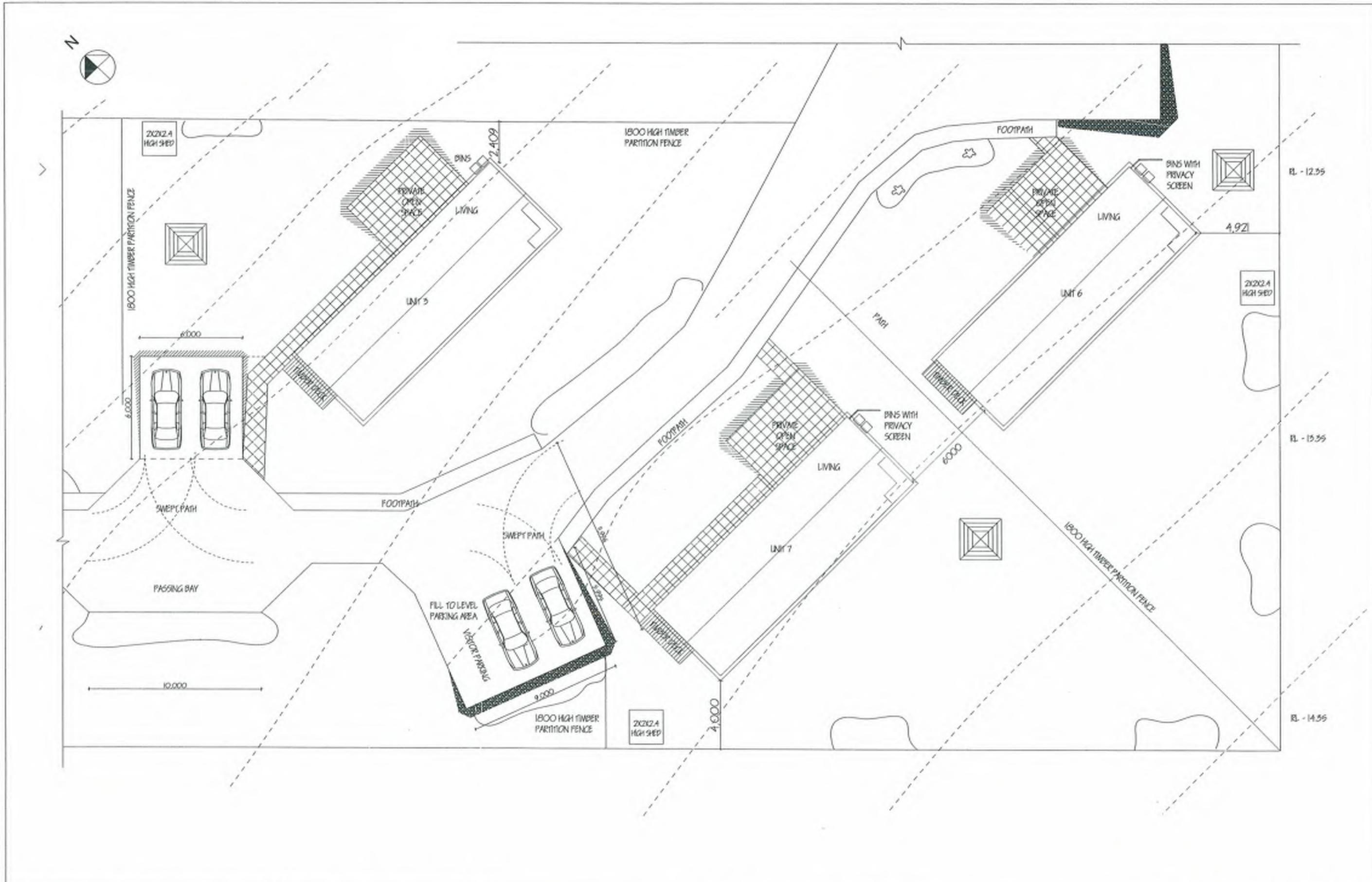
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C&DS4

STEPHEN LAMES  
 CC 4667 J  
 CATEGORY ASP 1  
 18/ A TAMAR RISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORANE  
 FOR ANDREW TERRY

DRAWING	UNIT 4 AND 5
DATE	14/11/2017
SCALE	1:200
DWG 420	SHEET 4 OF 14



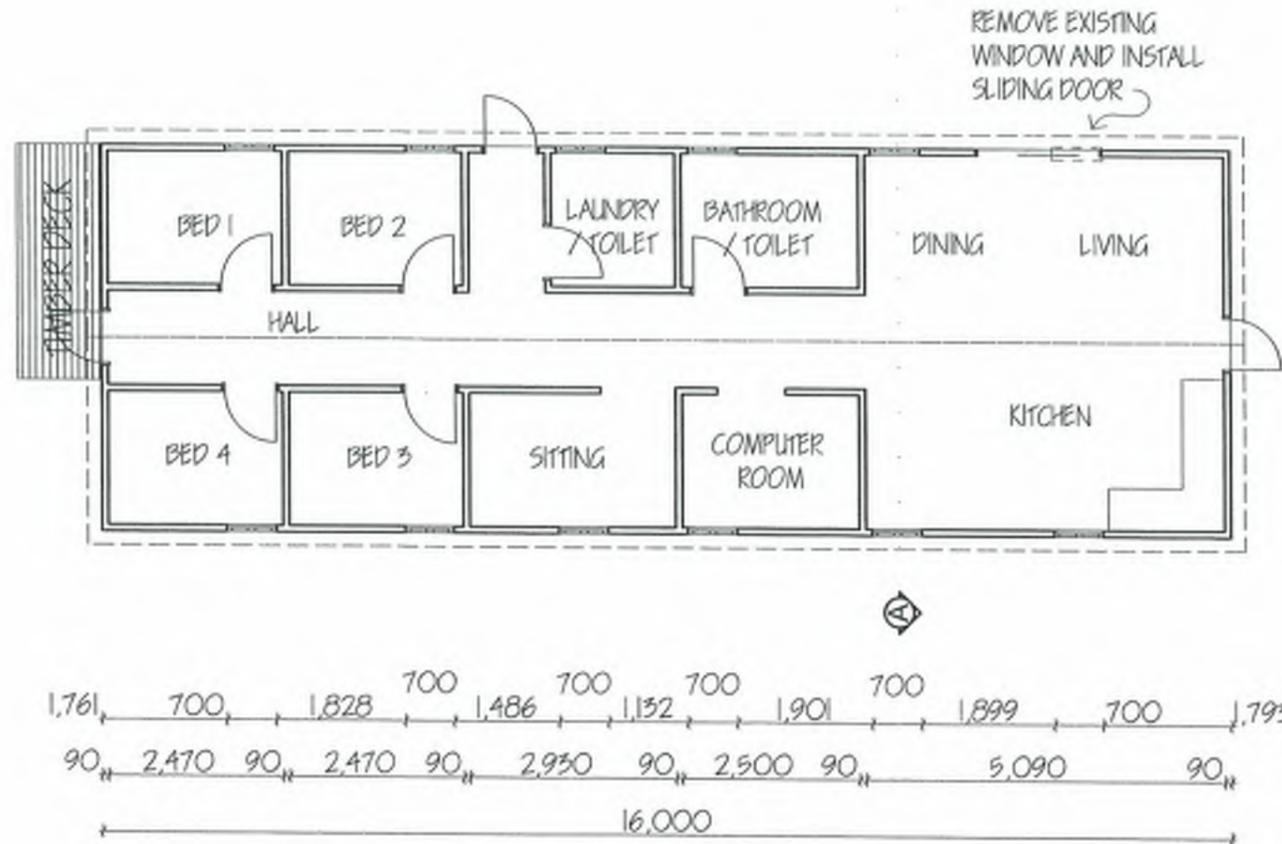
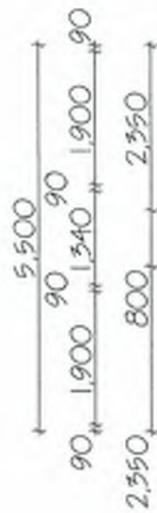
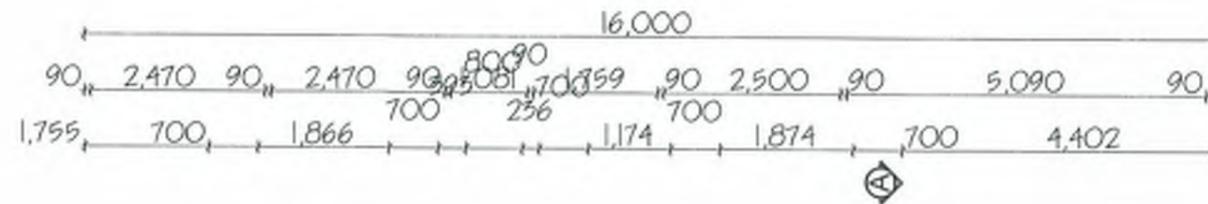
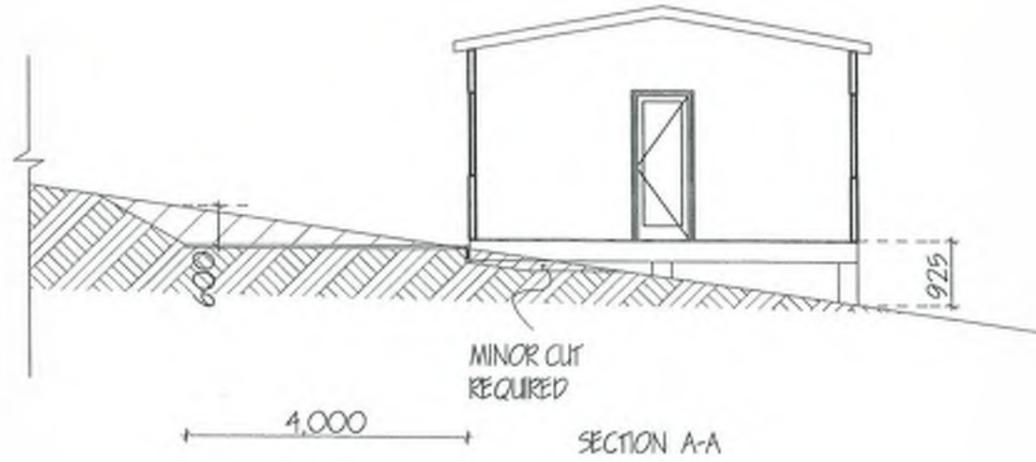
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 MEL. 0415 255 160  
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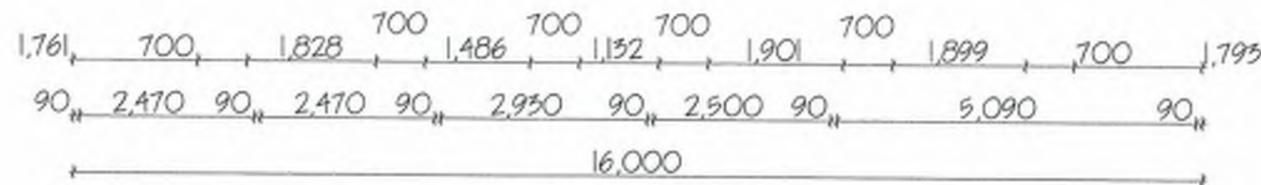
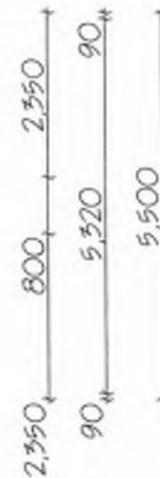
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 CATEGORY ASP 1  
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 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

DRAWING	UNIT 5, 6 AND 7
DATE	14/11/2017
SCALE	1:200
DWG 420	Page 7 of 14



FLOOR PLAN FOR UNITS 1, 2, 3, 6 AND 7



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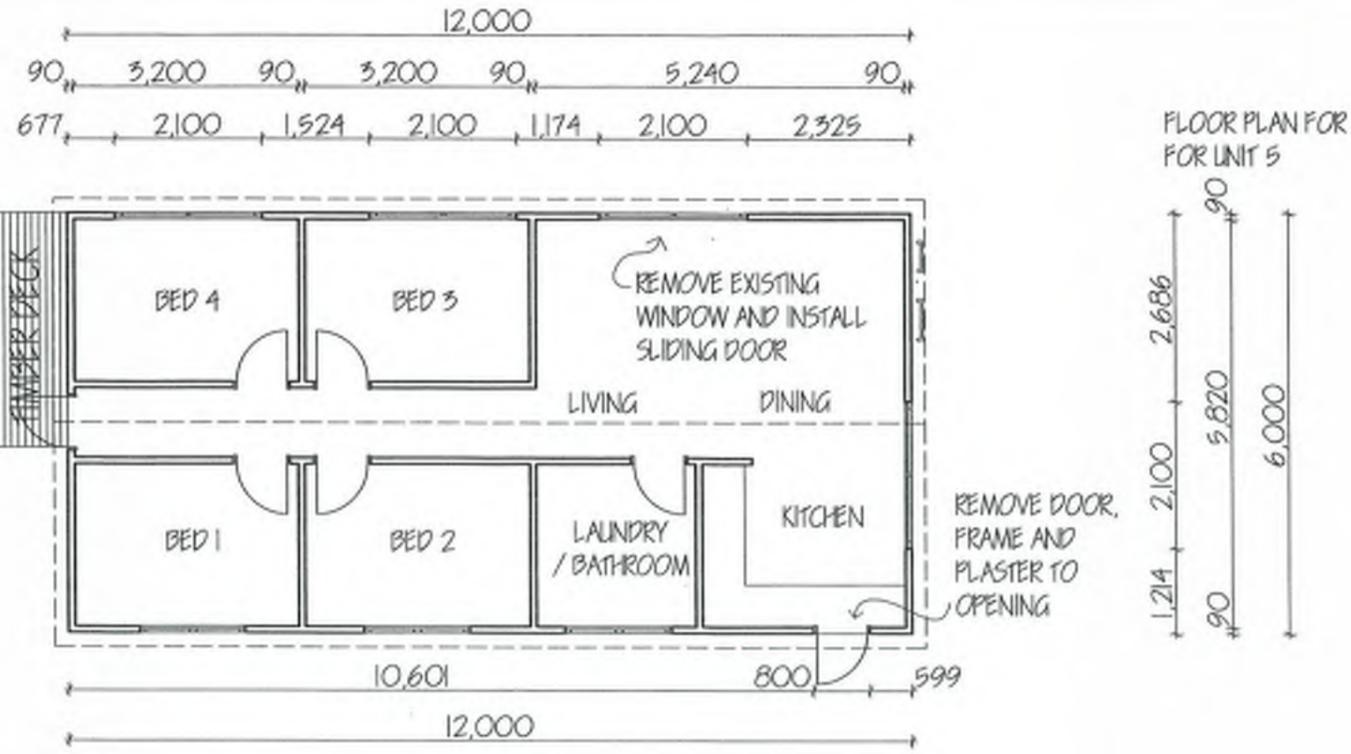
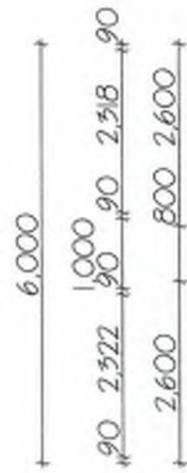
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STEPHEN LAMES

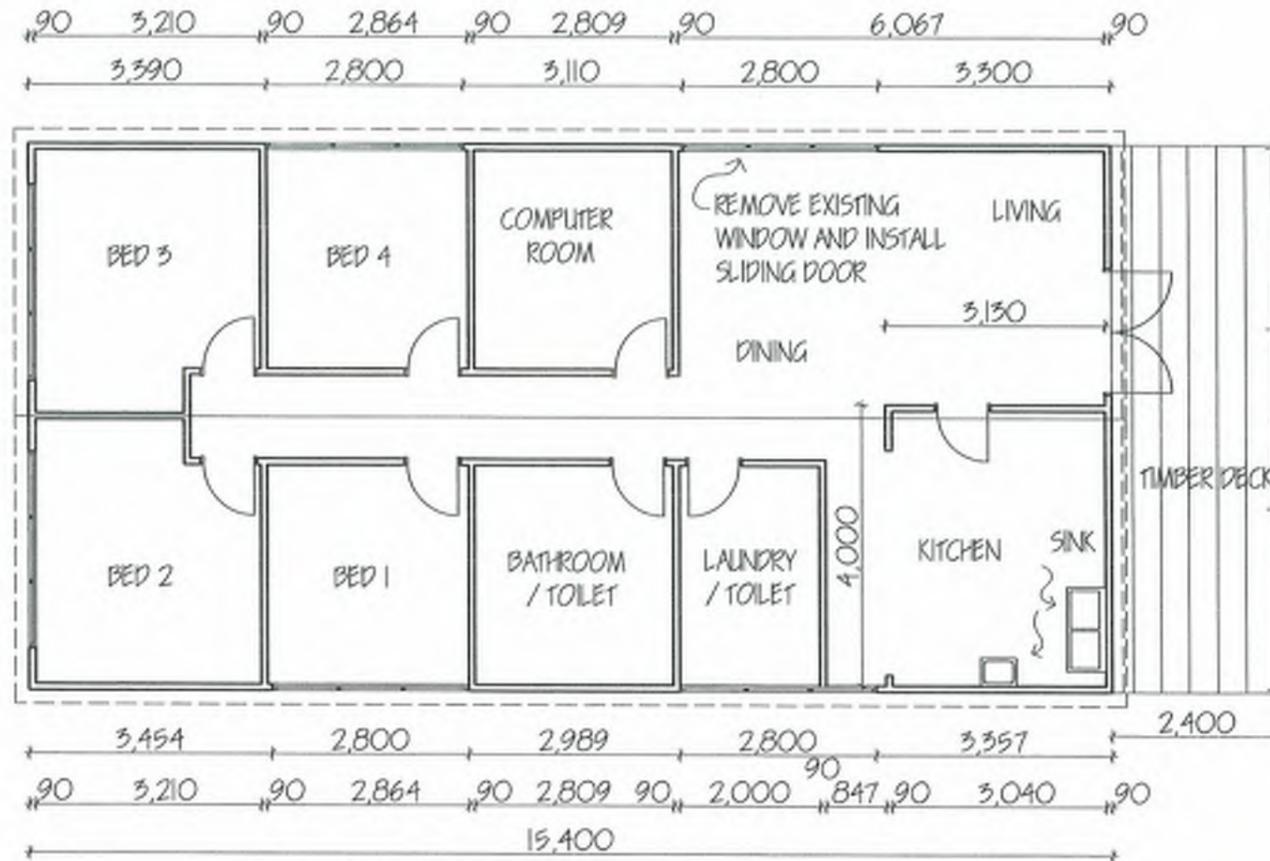
CC 4667 J  
 CATEGORY ABP 1  
 18/ A TAMAR RISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

DRAWING	FLOOR PLAN/ SECTION
DATE	14/11/2017
SCALE	1:Page 718
DWG 420	SHEET 6 OF 14



FLOOR PLAN FOR FOR UNIT 5



FLOOR PLAN FOR FOR UNIT 4

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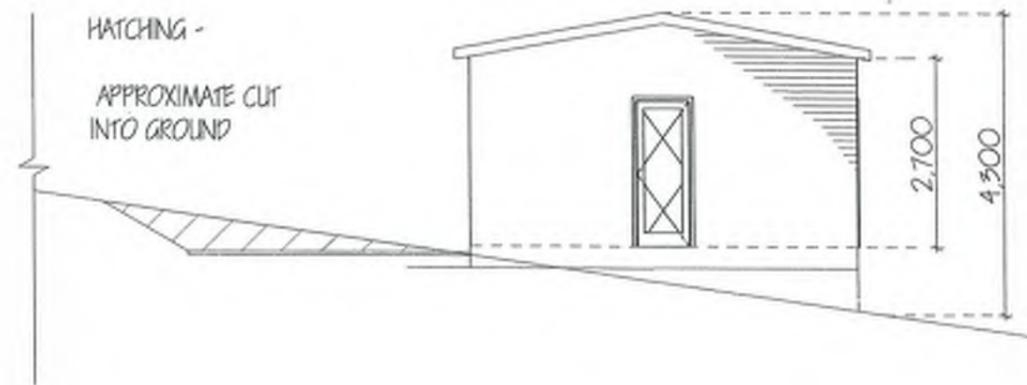
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STEPHEN LAMES  
 CC 4667 J  
 CATEGORY APP 1  
 18/ A TAMAR RISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

DRAWING	FLOOR PLAN
DATE	14/11/2017
SCALE	1:100
DWG 420	SHEET 7 OF 14

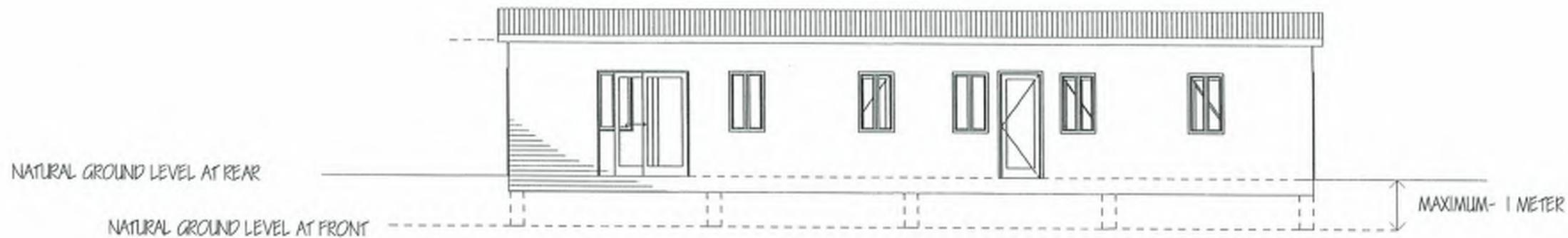


HATCHING -  
APPROXIMATE CUT  
INTO GROUND

ELEVATION OF UNIT  
ON STEEPEST PORTION  
OF SITE

-MAXIMUM  
HEIGHT ABOVE  
GROUND FOR  
UNITS 1,2,3,6 AND 7

ELEVATION FOR UNITS 1,2,3,6 AND 7



NATURAL GROUND LEVEL AT REAR

NATURAL GROUND LEVEL AT FRONT

MAXIMUM- 1 METER

ELEVATION FOR UNITS 1,2,3,6 AND 7

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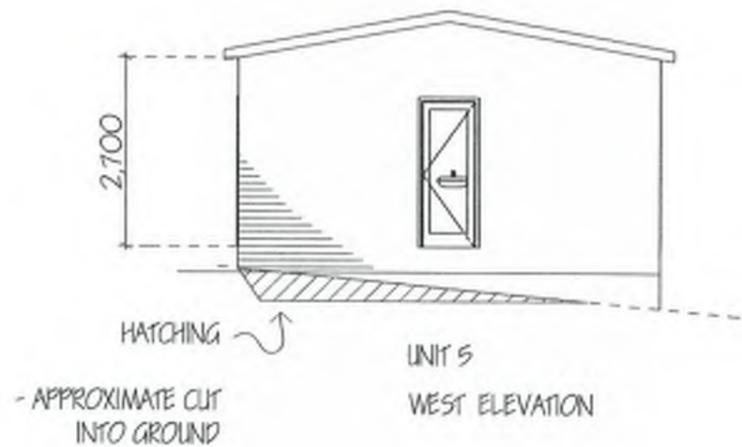
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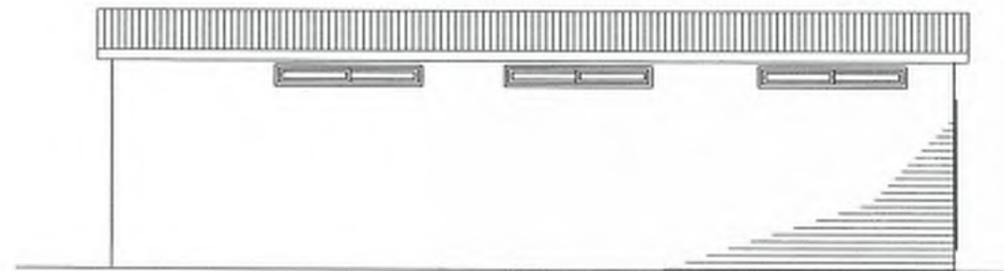
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REVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
Lot 3 BEEFEATER ST, DELORAINÉ  
FOR ANDREW TERRY

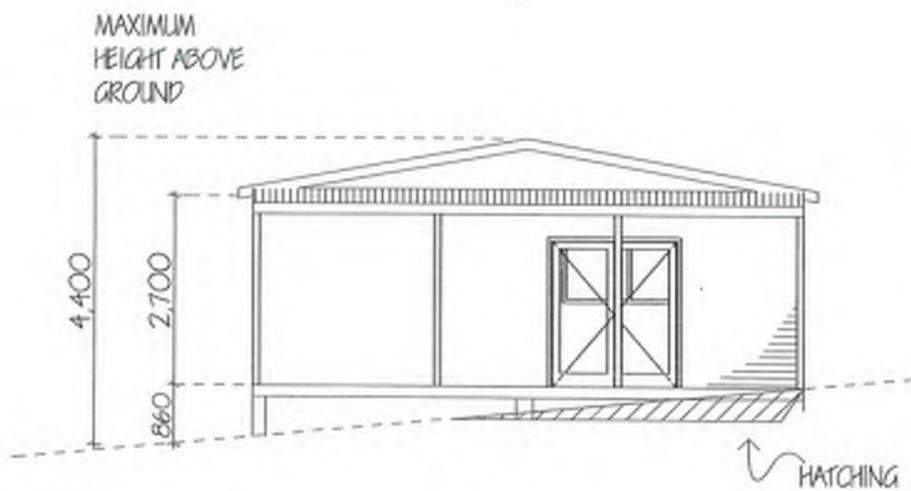
DRAWING	ELEVATION
DATE	14/11/2017
SCALE	1:Page 720
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UNIT 5  
WEST ELEVATION

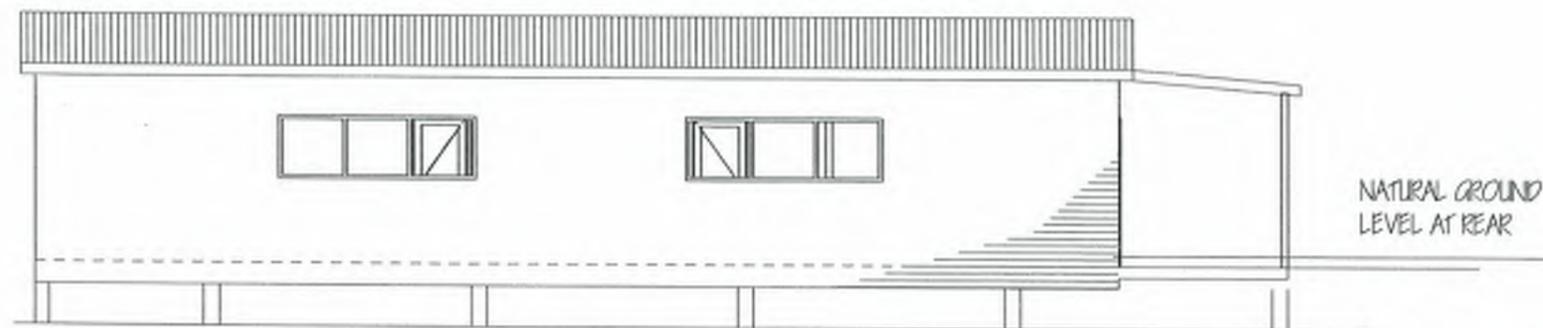


UNIT 5  
NORTH ELEVATION



UNIT 4  
EAST ELEVATION

HATCHING  
- APPROXIMATE CUT INTO GROUND



UNIT 4  
SOUTH ELEVATION

NATURAL GROUND LEVEL AT REAR

NATURAL GROUND LEVEL AT FRONT

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 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS  
 ALL TIMBER FRAMING TO BE IN COMPLIANCE WITH AUSTRALIAN STANDARDS 1684.4  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

Meander Valley Council Ordinary Agenda - 16 January 2018

ADORN DRAFTING

MBL 0415 235 160  
 E-MAIL : stephen.lanes@adorn.net.au

STEPHEN LANES  
 CC 4667 J  
 CATEGORY ASP 1  
 18 / A TAMAR RISE  
 RIVERSIDE, TAS

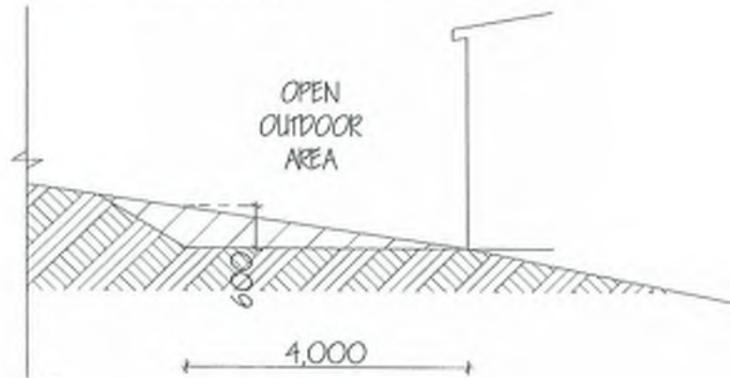
PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINNE  
 FOR ANDREW TERRY

DRAWING	ELEVATION
DATE	14/11/2017
SCALE	1:100
DWG 420	Page 7 of 14

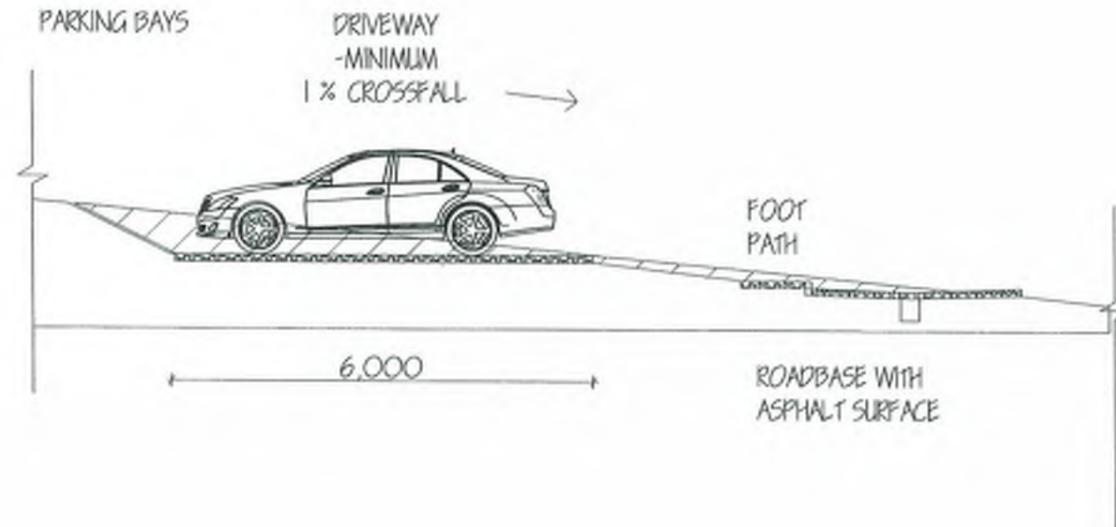
### SECTION E-E OPEN OUTDOOR AREA

A PAVED AREA OF EACH UNIT AS SHOWN WITH A MINIMUM AREA OF 6x4 METERS IS TO BE MADE LEVEL AND HAVE GRADED BANKS

MAXIMUM CUT - 600 TO 700 mm (NO RETAINING WALLS)



### SECTION P-P PARKING AREA

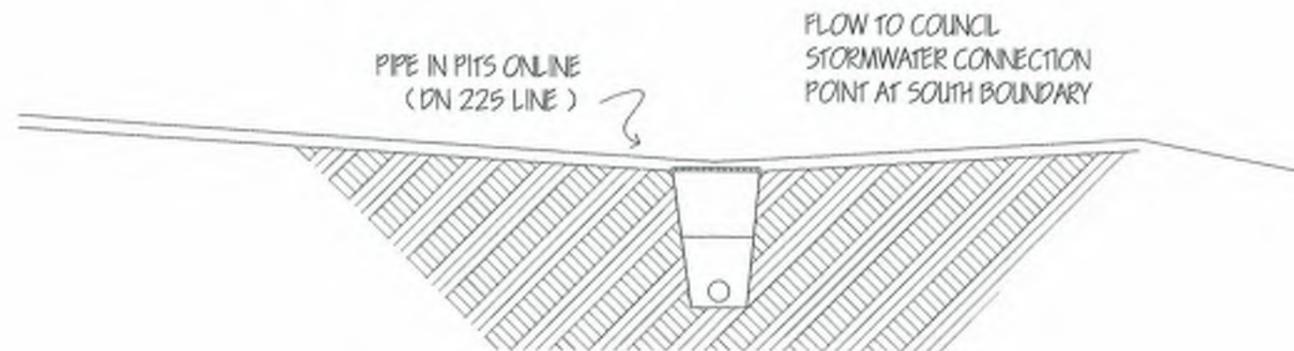


### SECTION D-D DRIVEWAY

DRIVEWAY - MINIMUM 1% FALL TO CENTRE OF DRIVEWAY



### DRIVEWAY / PIT DETAIL



ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK  
 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS  
 ALL TIMBER FRAMING TO BE IN COMPLIANCE WITH AUSTRALIAN STANDARDS 1684.4  
 PLANS TO BE CONSTRUCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

ADORN DRAFTING

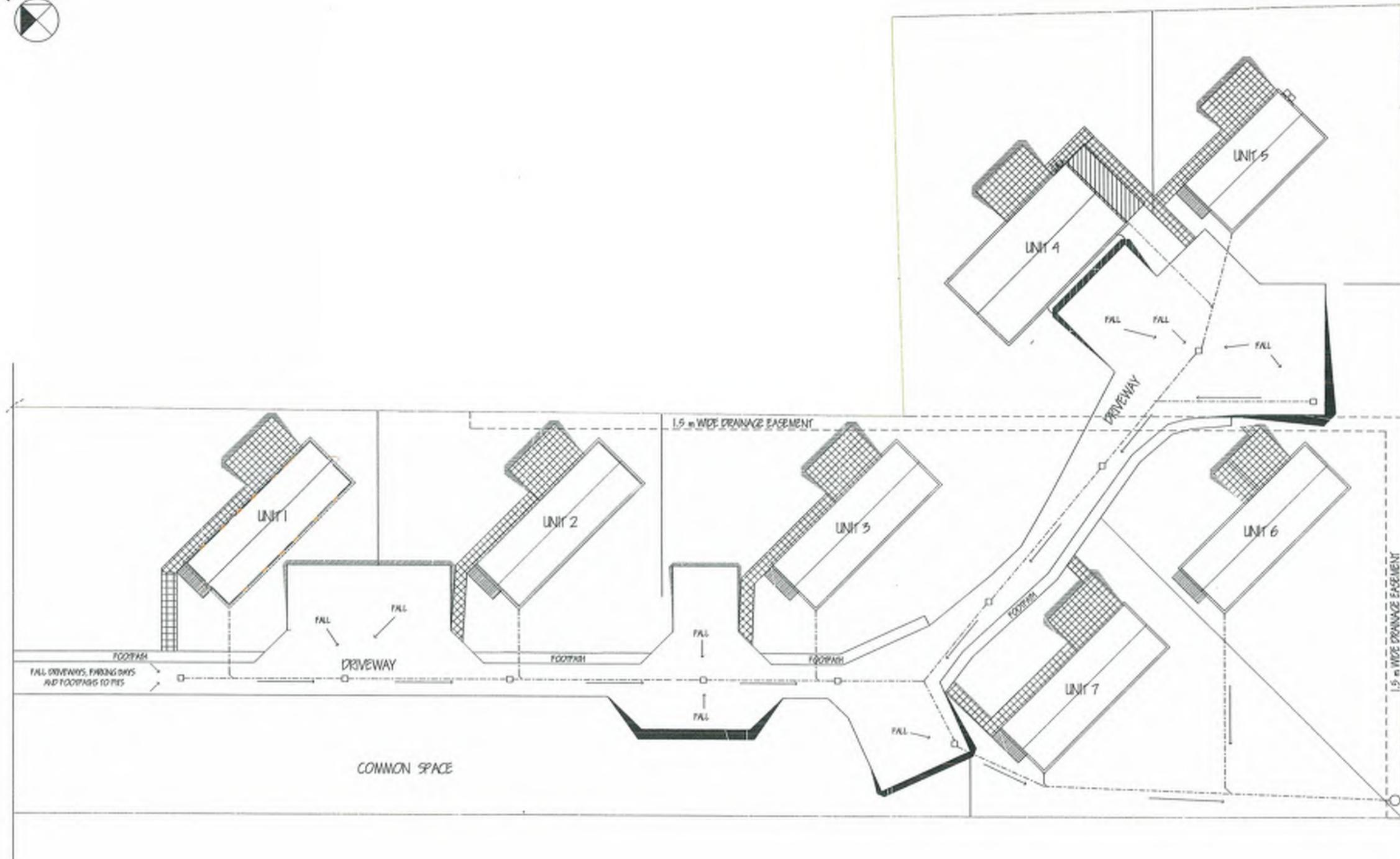
MBL 0415 255 160  
 E-MAIL: stephen.lanes@aapt.net.au

C&DS 4

STEPHEN LANES  
 CC 4667 J  
 CATEGORY ABP 1  
 IS / A TAWAR EISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAINÉ  
 FOR ANDREW TERRY

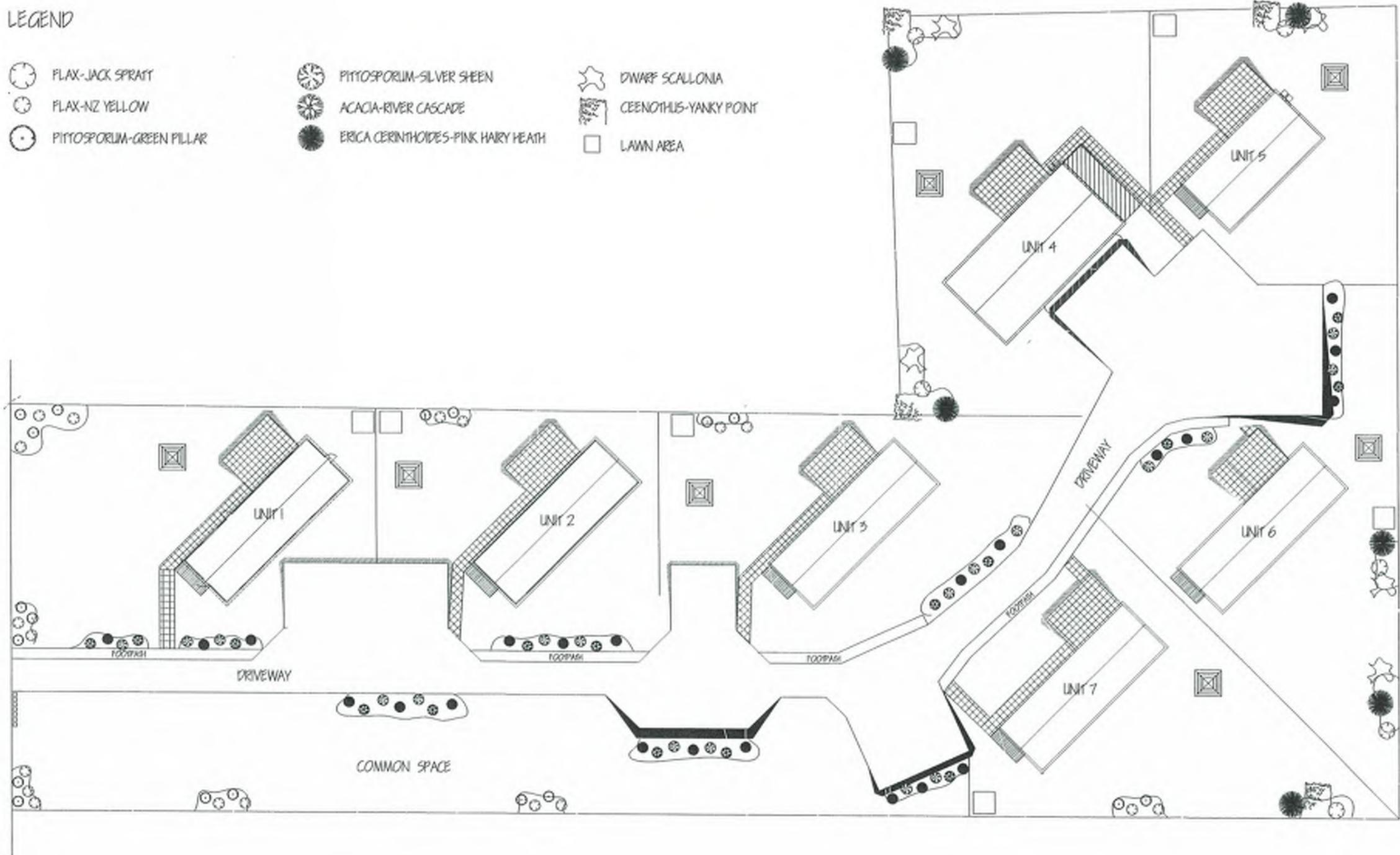
DRAWING	DRIVEWAY DETAILS
DATE	14/11/2017
SCALE	1:100 / 1:25
DWG 420	SHEET 10 OF 14



ADORN DRAFTING STEPHEN LAWES MBL 0413 235 160 E-MAIL : stephenlawes@aapt.net.au	CC 4667 J CATEGORY ABP 1 18/ A TAMAR RISE RIVERSIDE, TAS	PROPOSED MULTIDWELLING DEVELOPMENT, Lot 3 BEEFEATER ST, DELORAINÉ FOR ANDREW TERRY	DRAWING	DRAINAGE PLAN
			DATE	14/11/2017
			SCALE	1:400
			DWG 420	SHEET 11 OF 14

LEGEND

- |  |   |   |
|--|---|---|
|  FLAX-JACK SPRATT         |  PITTOSPORUM-SILVER SHEEN            |  DWARF SCALLONIA       |
|  FLAX-NZ YELLOW           |  ACACIA-RIVER CASCADE                |  CEANOTHUS-YANKY POINT |
|  PITTOSPORUM-GREEN PILLAR |  ERICA CERINTHOIDES-PINK HAIRY HEATH |  LAWN AREA             |



ADORN DRAFTING  
STEPHEN LAWES

MBL 0413 235 160  
E-MAIL : stephenlawes@aapt.net.au

CC 4667 J  
CATEGORY ABP 1  
18/ A TAMAR RISE  
RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
Lot 3 BEEFEATER ST, DELORAINÉ  
FOR ANDREW TERRY

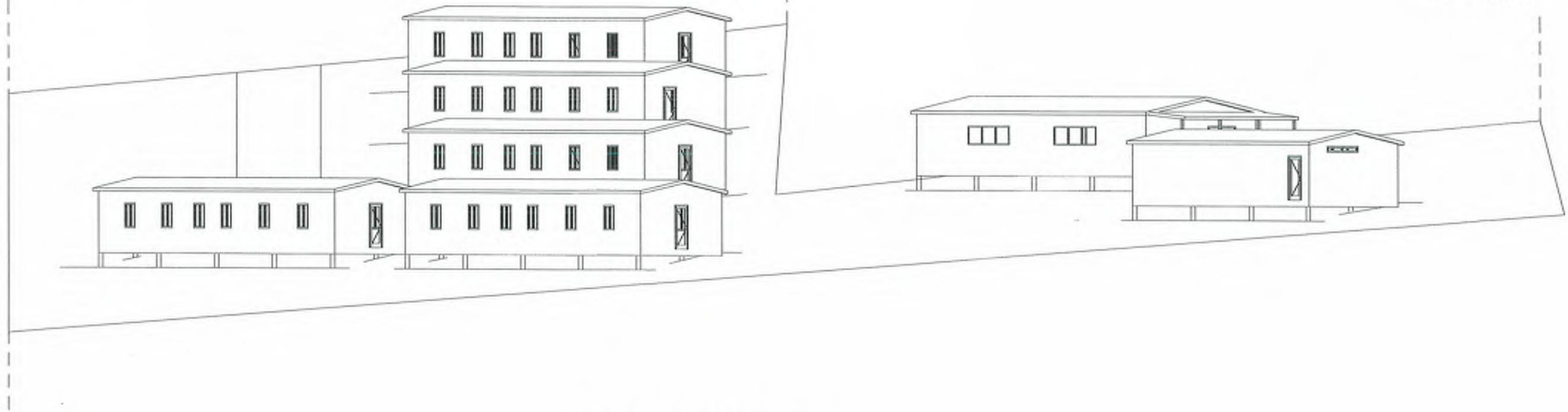
**C&DS 4**

DRAWING	LANDSCAPE PLAN
DATE	14/11/2017
SCALE	1:400
DWG 420	SHEET 12 OF 14

BOUNDARY

BOUNDARY

BOUNDARY



SOUTH EAST ELEVATION

ALL DIMENSIONS TO BE CHECKED AND VERIFIED BY BUILDER BEFORE THE COMMENCEMENT OF WORK  
 ALL WORK AND MATERIALS TO BE IN COMPLIANCE WITH THE BUILDING CODE OF AUSTRALIA AND LOCAL COUNCIL REQUIREMENTS  
 ALL TIMBER FRAMING TO BE IN COMPLIANCE WITH AUSTRALIAN STANDARDS 1684.4  
 PLANS TO BE USED IN CONJUNCTION WITH STRUCTURAL ENGINEER'S DRAWINGS

ADORN DRAFTING

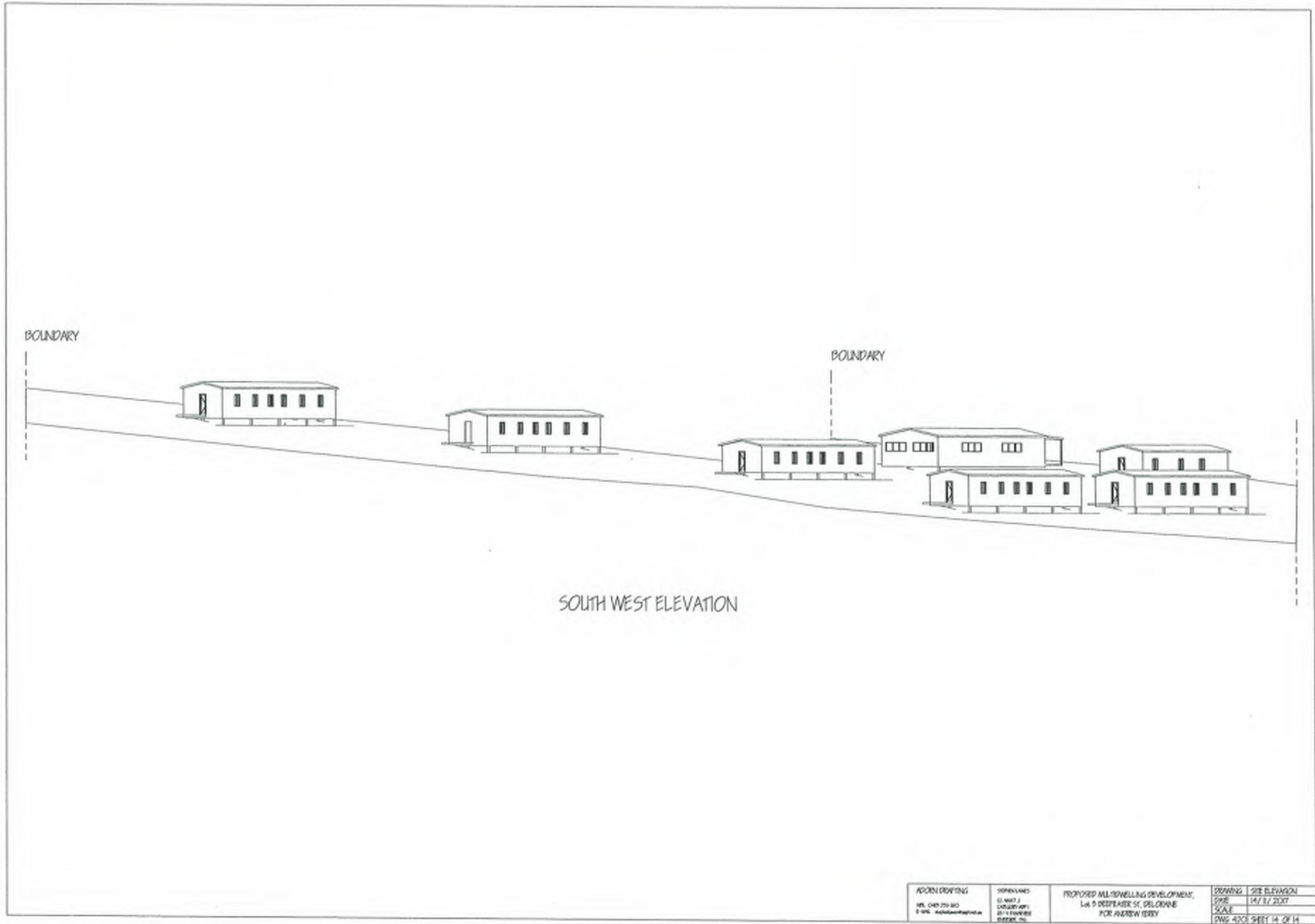
MBL 0415 255 160  
 E-MAIL : stephenlawes@adorn.net.au

STEPHEN LAWES

CC 4667 J  
 CATEGORY AHP 1  
 18/ A TAMAR RISE  
 RIVERSIDE, TAS

PROPOSED MULTIDWELLING DEVELOPMENT,  
 Lot 3 BEEFEATER ST, DELORAIN  
 FOR ANDREW TERRY

DRAWING	SITE ELEVATION
DATE	14/11/2017
SCALE	
DWG 420	Page 725 OF 14



ADORN DRAFTING MEL 048 275 810 1/18/18 adorn@adorn.com.au	SHEPHERD 01 4667 1 08 200 401 25/11/18 MELB 312	PROPOSED ALL-RESIDENTIAL DEVELOPMENT, Lot 9 SHEPHERD ST, OSLEORNE FOR ANDREW TERRY	DRAWING: SEE ELEVATION DATE: 14/11/2017 SCALE: DWG 4201 SHEET 14 OF 14
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## Submission to Planning Authority Notice

Council Planning Permit No.	PA\18\0064	Council notice date	18/10/2017
<b>TasWater details</b>			
TasWater Reference No.	TWDA 2017/01667-MVC	Date of response	20/10/2017
TasWater Contact	Amanda Craig	Phone No.	03) 6345 6318
<b>Response issued to</b>			
Council name	MEANDER VALLEY COUNCIL		
Contact details	planning@mvc.tas.gov.au		
<b>Development details</b>			
Address	46A BEEFEATER ST, DELORAINE	Property ID (PID)	2269740
Description of development	Multiple dwellings - 7 units		
<b>Schedule of drawings/documents</b>			
Prepared by	Drawing/document No.	Revision No.	Date of Issue
Acorn Drafting	420 Sh. 2 of 7 Site Plan	--	07/09/2017
<b>Conditions</b>			
<p>Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:</p> <p><b>CONNECTIONS, METERING &amp; BACKFLOW</b></p> <ol style="list-style-type: none"> <li>A suitably sized water supply with metered connections / sewerage system and connections to each dwelling unit / lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.</li> </ol> <p><b>ADVICE</b></p> <ol style="list-style-type: none"> <li>Any water connection greater than an DN20 property water connection, the Developer will be required to upgrade the existing DN50mm water main within Beefeater St to a DN100mm water main from outside of 111 Emu Bay Rd to the proposed development.</li> <li>TasWater cannot supply a greater than an DN20 property water connection for this development. Domestic water supply will need to be provided by a dedicated water tank via a DN20 (ID20) mm connection.</li> </ol> <ol style="list-style-type: none"> <li>Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.</li> <li>Prior to commencing construction, a boundary backflow prevention device and water meter must be installed, to the satisfaction of TasWater.</li> </ol> <p><b>ASSET CREATION &amp; INFRASTRUCTURE WORKS (Upgrading Sewer asset DLSZ03GM6468 to a DN150mm sewer)</b></p> <ol style="list-style-type: none"> <li>Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.</li> <li>Prior to applying for a Permit to Construct to construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The</li> </ol>			

application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for sewerage to TasWater's satisfaction.

6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.
7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.
8. Prior to the issue of a Certificate of Water and sewerage Compliance (Building and/or Plumbing) all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development, generally as shown on the concept servicing plan "IPD Consulting 001", are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
9. After testing to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.
10. At practical completion of the water and sewerage works and prior to applying to TasWater for a Certificate of Water and Sewerage Compliance (Building and/or Plumbing), the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
  - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;
  - b. A request for a joint on-site inspection with TasWater's authorised representative must be made;
  - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;
  - d. As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.
11. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.
12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.
13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.

#### **DEVELOPMENT ASSESSMENT FEES**

14. The applicant or landowner as the case may be, must pay a development assessment fee of \$343.55 to TasWater, as approved by the Economic Regulator and the fee will be indexed, until the date it is paid to TasWater. The payment is required within 30 days of the issue of an invoice by TasWater.

## Advice

### General

For information on TasWater development standards, please visit <http://www.taswater.com.au/Development/Development-Standards>

For application forms please visit <http://www.taswater.com.au/Development/Forms>

### Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

A copy of the GIS is included in email with this notice and should aid in updating of the documentation. The location of this infrastructure as shown on the GIS is indicative only.

- A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater
- TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit [www.taswater.com.au/Development/Service-location](http://www.taswater.com.au/Development/Service-location) for a list of companies
- TasWater will locate residential water stop taps free of charge
- Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

### Advice to Planning Authority (Council) and developer on fire coverage

TasWater cannot provide a supply of water for the purposes of firefighting for this development.

### Boundary Conditions Off the DN50mm Water Reticulation Main in Beefeater St

With the supply reservoir set at 1/3 full level of 319.5 m AHD, the boundary conditions are:

- Connection: DN50 Beefeater Street
- Elevation: 261 m AHD
- Pressure during peak: 314 m AHD or 515 kPa

## Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

### Authorised by



**Jason Taylor**

Development Assessment Manager

## TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

## Beth Williams

---

**From:** Annette Miller <annettemiller47@hotmail.com>  
**Sent:** Monday, 11 December 2017 9:05 AM  
**To:** Planning @ Meander Valley Council  
**Subject:** Objection to planning PA\18\0064. Rebecca Green & associates

I'm writing to object to a planning application by Rebecca Green & associates -PA\18\0064. We still believe these buildings are not suited to this area. They are going to be used for accomodation for fruit pickers run as part as a business this is zoned a residential area. Also it is not appropriate to have this type of accomodation next to housing units for elderly people. Currently this is a very quiet area and with a huge amount of fruit pickers /back packers the noise levels will be escalated also excess rubbish and no caretaker living here to monitor the area. I believe the appearance of these buildings and what they are being used for will greatly devalue our property.

Regards Darren & Annette Miller

Sent from my iPhone

## Beth Williams

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**From:** Belinda Miller <belinda.miller@hotmail.com>  
**Sent:** Monday, 11 December 2017 9:09 PM  
**To:** Planning @ Meander Valley Council  
**Subject:** Objection to Rebecca Green & associates PA/18/0064

To whom it may concern,

I'm writing to object again planning application by Rebecca Green & associates -PA\18\0064.

I believe this is an application similar to that advertised earlier in the year for "visitor accommodation" to house berry pickers.

I understand certain matters have been addressed however I feel there are still many that are left in answered.

This is still going to house a very large number of people, similar to that of a backpackers. But there is no caretaker to oversee any issues that may arise.

I also have concern regarding the time the busses may be departing and returning as this is usually very early in the morning - earlier than hours stipulated in the application.

I do not think the area is suited to house so many units used for that purpose when it is so close to residential buildings, a lot of which house retirees with aged care Deloraine.

I myself have a young family and we chose to buy our home here because of how quiet and serene it is. If this development goes ahead it will change everything in this peaceful little end of Deloraine, not to mention devalue the surrounding properties.

I think this development would be more suited to be on the farm or close by to where the pickers will be picking their berries from, not in the middle of a residential area.

I hope you take our concerns into consideration when reviewing this application.

Regards

J & B Phelan

**Beth Williams**

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**From:** White, Kerry <Kerry.White@humanservices.gov.au>  
**Sent:** Tuesday, 12 December 2017 9:56 AM  
**To:** Planning @ Meander Valley Council  
**Subject:** Planning Application PA/18/0064 [SEC=UNOFFICIAL]

Development Service Officer

In response to the new application for development of 46A Beefeater St Deloraine, I would like to make the following objections.

Whilst I do acknowledge that the new development proposal has improved the quality of the accommodation being proposed, it is still low quality, high density accommodation for itinerant workers.

The accommodation is inappropriately placed in a purely residential area not suited to itinerant workers where there will be high traffic movement, often outside what is acceptable in a residential area.

The buildings being proposed will still impose significantly on the surrounding properties interfering with privacy and amenity and therefore also impacting on the values of these properties.

I note that less car parking is being provided in the new model. I have a concern as to whether this will be sufficient as no indication has been provided as to how many people this development is planned to house. No indication has been given as to how many people may be housed in each bedroom of each block. Each of the 7 units has 4 bedrooms. This means at a minimum 28 people living here, however, as the previous application was for a significantly higher number of residents, it is more likely that there will be between 2 and 4 people per room which will give a density of up to 112 people. This is completely unacceptable in this environment

In summary, I would like to state that whilst the Development Application has been modified in positive ways it is still definitely NOT a suitable development for a purely residential area.

Regards  
Kerry White  
41 Tower Hill St  
Deloraine 7304  
Email: [kezzie3011@gmail.com](mailto:kezzie3011@gmail.com)

\*\*\*\*\* IMPORTANT: This e-mail is for the use of the intended recipient only and may contain information that is confidential, commercially valuable and/or subject to legal or parliamentary privilege. If you are not the intended recipient you are notified that any review, re-transmission, disclosure, dissemination or other use of, or taking of any action in reliance upon, this information is prohibited and may result in severe penalties. If you have received this e-mail in error please notify the sender immediately and delete all electronic and hard copies of this transmission together with any attachments. Please consider the environment before printing this e-mail \*\*\*\*\*

rep - P & D Cole

The General Manager,  
Meander Valley Council.

45 Tower Hill Street,  
Deloraine.  
26/11/2017.  
Ph. 0438725977

Dear Mr. Gill,  
We wish to object in the strongest possible terms to the proposed development at 46a Beefeater Street.  
We moved into our cottage at 45 Tower Hill Street confident the undesirable proposal had been defeated and have spent a considerable amount of money on renovations. The amenity of all the houses in the vicinity will decrease.  
After all who would want to live over the fence from huts housing migrant workers who will be largely unsupervised. We love the peace and beauty of this unique and beautiful town and think any development should be well considered and of a high standard.  
I cannot imagine the mentality of the proponents that they think it is okay to plonk a camp for seasonal workers in the middle of a residential area already surrounded by well established homes and walk away and not be at all affected by the consequences.  
Noise such as music and conversations travel easily from Beefeater Street down to our home so we are well aware a large group of people and the consequent noise and movement will impact dramatically on our lives.  
We have experienced first hand the behaviour of seasonal workers lighting fires on the beaches over from our previous home in Ulverstone and causing constant disturbances in the parks at night.  
We hope the council will support us by rejecting this unsuitable proposal.

Pauline and David Cole

## Beth Williams

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**From:** patsy blair <patsyblair@live.com.au>  
**Sent:** Monday, 27 November 2017 5:39 PM  
**To:** Planning @ Meander Valley Council  
**Subject:** Town Planning At 46a Beefeater St, Deloraine.

Dear Council Members.

What can one say, Mr. Andrew Terry lost his case on putting up Back Packers accommodation at 46a Beefeater St.

But now he has got very smart and is calling the same sheds,,, units,,, but still for Back Packers. Just revamped them to make it sound better.

Still the dust and noise when putting them in,, and the noise of the tenants.

We just love the quite retirement life in our Age Care Unit at 35 Moriarty St.

We are not lawyers just good old Tassie people and don't know what to do to try and stop this.

We have worked hard all our lives and we are so much enjoying this quite easier life still.

But if this goes through,,, that will be no more.

Do hope our letter will be considered in our favour.

Yours Truly.

Daryl & Patsy Blair.

Unit 38/35 Moriarty St,

Deloraine.

General Manager,  
and all Councillors,  
Meander Valley Council,  
Westbury

11<sup>th</sup> December 2017  
Gayl and Paul Mansell  
Mansell 

Re: PA/18/0064

Index No. 15059	
Doc No.	
RCVD	11 DEC 2017 MVC
Action Officer	NW Dept. CDS
EO	OD <input checked="" type="checkbox"/>

Rebecca Green & Associates (Cover Page)

(Page 1) Planning Submission

Use and Construction of 7 New Dwellings

46A Beeferster Street, Deloraine

(Page 3) Executive Summary

1.1 Proposed Overview

The proposal is summarised as:

- Use and Development of 7 new dwellings

(Page 4)

3. Proposal

3.1 Development Proposal

The proposal is for the construction of 7 dwellings

dated 12/11/2017 - (Page 31) 5. Conclusion:- Proposal is for use and development

TIA Report also states

[of 7 new dwellings]

(Pages)

3. Proposed Development

3.1 Site Development

The development as proposed includes construction of seven (7) new units

WHAT ELSE IS INCORRECT!!! in PA/18/0064

This information is incorrect if the buildings are still the second hand detention demountables! NOTHING with CHANGE the impact on surrounding residents, the inappropriate use of these buildings for the intended area and that they are going to house fruit pickers for an agricultural purpose!

Index No. 15059			
Doc No.			
RCVD	08 DEC 2017	MVC	
Action Officer	NW	Dept.	COS
EO		OD	✓

Jan & Ross Scott  
46 Beefeater Street  
Deloraine Tas 7304

5<sup>th</sup> December, 2017

Meander Valley Council  
General Manager  
P.O. Box 102  
Westbury Tas 7303

**Re: Development Application  
Rebecca Green & Associates – PA\18\0064**

We are renting the dwelling at 46 Beefeater Street, Deloraine which was purchased by our daughter and son-in-law for us to live in. We have retired from farming and chose this area for its rural aspect and very peaceful and quiet neighbourhood.

We are absolutely devastated with the proposal planned by Mr Terry. The proposal impacts on every homeowner and resident that lives in this area.

Our concerns are listed below:

- (1) Units 1, 2, 3, 4 and 5 living areas, deck and private spaces are extremely close to the boundaries. Unit 1, 2 and 3 face into our Lounge, Dining and all Bedrooms. Unit 2 looks directly into us. Our private space, which is our Verandah, will be impossible to use as we will be looking straight into their living and private open spaces and all conversations will be heard by both parties. Unit 2 completely blocks our view, the unit is as high as our ceiling. We will not be able to sit inside or on our verandah and enjoy the view, we will have to stand to enjoy the view.

If we walk out to the back entrance of our dwelling, Units 4 and 5 look straight into us, as their private space is right on the boundary.

All Units impact greatly on us. The residents of Moriarty Street, Tower Hill Street and Beefeater Street are faced with the same issues. All Units look into their private spaces.

A paling fence will not rectify any of these problems. All Units proposed are situated higher than the homes in this area.

**(2) Noise Pollution**

The Units are for Seasonal Workers accommodation. They have the potential to accommodate 56 at the minimum, or more. It is a huge amount on one block. The activity would be extreme.

**(3) Traffic Pollution**

All Units have parking bays. There are 14 parking bays, plus visitor space. Buses are hired to transport occupants to places of employment. Traffic would be continuous and noisy.

**(4) Light Pollution**

Electric lights would be on continuously.

**(5)** The value of homes in this area would decrease dramatically.

**Summary:**

We are not in favour of this proposal.

The Units were the Brighton Detention Centre Buildings, and are more like caravan park accommodation than residential accommodation.

The units will be used as Hostel type accommodation, which we feel is not suitable for this area.

Ross & Jan Scott

Phone:

Ross 0428 132 370

Jan 0447 292 235

*Jan Scott*      *R. O. Scott*

Proposal  
09/2017  
46 A Beefeater St.  
Deloraine

Index No. 15059			
Doc No.			
RCV'D	12 DEC 2017	MVC	
Action Officer	NW	Dept.	CDS
EO		OD	✓

Juanita, Wayne Ferguson  
Meander Valley Life  
Unit 39 35 Moriarty St  
Deloraine  
8/12/17

Councillors,  
Once again we find ourselves defending our peace and quiet, safety of valuables and security in our retirement years.

We are very concerned as Mr Terry has already been defeated by your council and didn't bother to be present for the Tribunal Hearing in Hobart which he had asked for.

These are still the ex-Pontville Army Demountables as before, but now have a new name and coat of paint. They still do not fit in with the ambience of the local area, reducing house prices. It is still proposed 60 people extra living next door.

As to the planning we live very peacefully in Unit 39 which runs along most of the area. A carpark is planned for just outside our bedroom windows. This is of great concern with these fruitpickers working all hours starting between 5 and 6 am, what can be done about headlights shining into our bedroom. If these people have cars they are usually cheap vehicles that would probably not pass inspection. (See Woolworths carpark any afternoon). If not using their own vehicle, the bus could be making 10 trips per day, 'beating the horn'. 60 people saying 'good morning' to one and other lighting up a smoke.

Our lounge room and verandah are next to the 'Common Area'. Islanders like to cook and sing, socializing outdoors, having a good time, smoking and drinking. There is no security to police this practice. We are extremely worried for our own health, safety, security and definitely peace of mind.

As Mr Terry says (Early to Bed, Early to rise) Where did he get his facts from. A good example of this untruth was behind St Marks units. I personally have witnessed workers drinking beer in Woolworths car parks most afternoons while waiting for the shoppers. This does not show any concern about being departed.

As to rubbish removal. 60 people will generate a large amount of garbage. How is this to be removed. What noise will be generated by the waste removal trucks?

Are there security lights. Will they be left on all night or just come on with these 60 people moving about. These lights will be outside business hours which would not be required if the site had other purposes.

We are living in an Aged Care Facility, most of us rely on family and Home Help in our daily life. This Back Packer facility will take away our feeling of peace, safety and security. Will we have to live behind a high fence and security gates with touch pads. Is this to be Deloraines first 'Gated Security'?

What has changed from the previous application to this current proposal. It is still a Back Packer accommodation for 60 young people, coming and going 24 hours per day in cars or buses.

Please read Katy Proctor's letter.

We strongly object to this proposal



## Environmental Health Comments

From an Environmental Health perspective, the main factors for consideration with this development application are noise and impacts on residential amenity. The application documentation does not provide any information detailing how noise impacts from the development and use are proposed to be mitigated.

It is considered that the establishment of a facility accommodating up to 60 people which operates 24 hours a day, 7 days per week would not be in keeping with the General Residential Zone purpose, which states that:  
Non-residential uses are not to be at a level which distorts the primacy of residential uses within the zones, or adversely affect residential amenity through noise, activity outside of business hours traffic generation and movement or other off site impacts (10.1.1.3); and,  
To encourage residential development that respects the neighbourhood character and provides a high standard of residential amenity (10.1.1.4).

The lot is largely surrounded by existing residential dwellings, including 14 purpose built aged care units, and the setback distance between the existing dwellings, including private open space areas and the proposed dormitory units is approximately 5.5m. There is potential for the surrounding residential amenity to be adversely affected by the proposed development via noise impacts from the concentration of up to 60 people living on the site, particularly given the proposed centralised amenities block and communal kitchen, as well as from traffic movements including buses from the facility operating 24 hours a day.

It is important to note that Council has approved visitor accommodation developments in the General Residential Zone, such as B&B accommodation, however these have been on a much smaller scale where it could be justified that the level of use and impact was similar to that of surrounding residences and therefore in keeping with the Zone Purpose.

There are existing examples within the municipality where commercial/non-residential uses have been granted Planning approval adjoining residential land, and there are ongoing problems regarding noise nuisance in these areas as a result of incompatible use. On this basis, the proposed visitor accommodation development is considered to be inappropriate for the location and does not meet the criteria listed in the Zone Purpose. Therefore the application for visitor accommodation at 46a Beefeater Street, Deloraine is not supported.

**Katie Proctor** | Environmental Health Officer  
Meander Valley Council  
*working together*

**C & D 3**

Dear Sir/Madam,

I am writing in relation to the planning application ref no PA\18\0064.

We own the adjoining property/land at 48 Beefeater Street and **strongly oppose** to this development proceeding any further.

My reasons for this objection is as follows:

- This development proposal will generate traffic movement and noise outside of business hours.
- The development will see an increase in environmental nuisance through noise and traffic movement , smoke, odour, dust and illumination.
- The proposal is not sympathetic to the form and scale of residential development in the area and , as a result, will affect the amenity of nearby residential properties.
- The nature of the portable buildings will stand out against the current residential nature of the surrounding properties and buildings, significant devaluation of existing properties.

We strongly implore you not to support this application, to enable us and the community around us to protect our investments, homes, lifestyle, tranquillity and environment in its existing state.

Yours sincerely,

Michael and Gina Sullivan

Index No. <b>15059</b>			
Doc No.			
RCV'D	<b>11 DEC 2017</b>		MVC
Action Officer	<b>NW</b>	Dept.	<b>CDS</b>
EO		OD	<b>✓</b>

Phillip and Katrina Atkins  
 225 Dairy Plains Road  
 Deloraine 7304

Mr Martin Gill  
 The General Manager  
 Meander Valley Council  
 Westburuy 7303

11 December 2017

Dear Mr Gill,

**Objection to Development Application 46a Beefeater Street, Deloraine (PA\18\0064)-  
 Development of Multiple Dwellings (7 units).**

As concerned residents of Meander Valley we write to object to the proposed development of 7 units on 46a Beefeater Street, Deloraine.

We have reviewed the application, associated reports and the Meander Valley Interim Planning Scheme 2013.

We understand the property to be developed is zoned residential, however, the proposal is to be a Commercial Development.

This application is the same as a previous Application PA\17\0062 with some aesthetic changes.

The previous Application was unanimously rejected by the Meander Valley Councillors, the Town Planner and the Environmental Health Officer.

It was seen to be "not consistent with the residential zone purpose".

The Zone Purpose Statement protects against non-residential uses which distort the primary use of residential developments, or adversely impact residential amenity through noise, traffic movement or activity outside of business hours (Section 10.1.1.3)

We question the number of people who will be housed in these units. It is not mentioned anywhere in the application.

We do not believe that the proposed development respects the neighbourhood character, or is in keeping with the current developments in the region. We have concerns regarding noise from transport and the high number of residents on site. Also the maintenance of the development.

Yours sincerely,

Phillip and Katrina Atkins

[Planning@mvc.tas.gov.au](mailto:Planning@mvc.tas.gov.au)

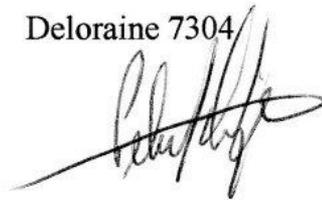
I wish to express my feelings re the development of this piece of land .... Development of multiple occupied dwellings at Goderick & Beefeater st ct118655/1

I see little difference in this proposal and the previous one which was defeated, the area adjoining this land has a large retired population ,whose peace and quiet would be unduly disturbed. Why not build more 1&2 bedroom retirement style units,instead of large multiple style buildings which are more boarding house or backpacker style accommodation. Surely this development could be built at a more suitable area

Peter Legdin

39 towerhill st

Deloraine 7304



RJ and LM Kershaw  
10 Kirra Road  
Roches Beach Tas 7170

10 December 2017

The General Manager  
Meander Valley Council  
PO Box 102  
Westbury Tas 7303

Via email: [planning@mvc.tas.gov.au](mailto:planning@mvc.tas.gov.au)

To The General Manager

**Re: Planning Application 46a Beefeater Street, Deloraine  
PA\18\0064**

We are the new owners of 46 Beefeater Street, which we purchased in August 2017 for our elderly parents to retire in. The property appealed to us for its rural aspect, peaceful amenity and that it was a safe environment away from the traffic of the main road but still within walking distance of the town centre. We were aware that there had been a previous application for this development to house fruit pickers for the properties owners family farm, but it had been rejected and we believed that was the end of the matter, had we know this development was going to be resubmitted we would not have purchased this property for our parents.

We wish to object to the application to place prefabricated multiple dwellings for the intended use on the property of 46a Beefeater Street for the following reasons:-

**1. The development has been advertised as a residential development.**

The units have 4 and possibly up to 6 small bedrooms with a floor area of 88m<sup>2</sup> for the majority with basically very little living space, these are not residential dwellings. They are going to be dormitory or backpacker style accommodation, which to say is residential dwellings under the planning scheme is incorrect when it is more like commercial accommodation and therefore should be positioned in an area zoned for such a use not in a residential zoned area. Some of the units have Computer rooms and Sitting rooms which in reality will be additional accommodation in those units. Beyond this we believe it is likely that the buildings could have bunk accommodation thus doubling the number of people that could be housed in these properties. Housing this many people is not an appropriate use for this site, within a residential zone.

## **2. Loss of Privacy.**

The applicant is proposing placing 7 dwellings on this property 4 of which are between 2.4 and 4.5 meters from our boundary, these dwellings all have proposed "Private Open Spaces" that are right on our boundary. Three of the proposed units, as they appear could accommodate at least 4 people and possibly 6 to 12 people depending on the dormitory configuration if bunks are utilised. As there is limited living space the occupants will inevitably spend a lot of time outdoors in the "Private Open Space", this will impact on the privacy of our property more than any traditional development on this site would. The design of this development shows a total disregard for the neighbours.

## **3. Loss of view.**

Three of the units are going to be in direct line of our view of the rural landscape and the view of the Western Tiers, unit 2 has been positioned directly in front of our living area, and as the roofline of this unit is equivalent to the ceiling height of our property it will effectively cut off all of our properties view, which was one of the things that attracted us to this property.

## **4. Noise Pollution.**

As mentioned we are concerned about the potential number of residents that could reside in these units, which at a minimum could be 28 but maybe as many as 78 if computer and sitting rooms are used as bedrooms with the use of bunks. The developers prospective in the application would be the more people the better and there is nothing we can see that will limit the number of people to be accommodated. This many people, be it 28 or 78 will have a huge impact on the noise levels in this area, be it from just general noise while within the residence or out in the "Private Open Spaces" through to vehicles usage. We also believe the developer will operate busses to transport their workforce, the noise of these busses of an early morning will further impact the amenity of the area.

## **5. Loss of Property Value.**

We purchased our property as a short term solution for our parents between leaving the family farm and moving into a retirement village so they could maintain some independence. The property was purchased at current market value, should this development be approved that value will drop dramatically. If we are ever able to sell it again we will stand to make a large financial loss that we will never regain at no fault of our own. This financial loss, along with the decrease in value of the other neighbouring properties by far outweigh any gain the developer might make. This is not in the community interest at all, surely there would be a more appropriate site for such a development.

## **6. Vehicle Impact.**

The proposal currently caters for 2 parking spaces per unit but in reality there could be many more cars than this considering the number of independent individuals that could be housed on the property. The property has a 30 meter plus driveway exposure to Beefeater Street that could accommodate another 5 cars, this is still not going to be sufficient and the cars could potentially be parked up both sides of the road restricting access to and from our property. The increased number of vehicle movements with restricted views from driveways would substantially increase the risk of an accident. Added to this the developer will operate

buses, as mentioned previously, to transport his workers, these buses will add to the congestion on the road and issues with vehicle movements.

We strongly oppose the application as it is not a suitable development for this location. Should the application be approved by Council we will appeal and at a minimum seek the following changes:

1. Set a limit on the number of people that can be accommodated in the units to 28.
2. Ensure the units only cater for long term accommodation with a minimum term of 3 months, not Air B & B or other backpacker style accommodation.
3. Reverse the floor plans of units 1, 2 and 3 so the living areas and private open spaces are further away from our boundary.
4. The access road in front of unit 2 to be moved closer to the south western boundary to then allow space for unit 2 to move further down the hill and along with this, the site be excavated further reducing the overall height of this unit to allow a view over the building from our property.
5. Provide a 2.0 meter high solid boundary fences and mature tree plantings with a height of 3.0 metres along the boundary to act as an acoustic screen to reduce noise from this property. The proposed planting of Flax will do nothing for this. Plantings need to be maintained for the life of this development.

Had we known the planning application was going to be resubmitted we would not have purchased our house.

Yours sincerely



Rodney and Lou-ella Kershaw  
Ph 0419 888 103

Mr Martin Gill  
 General Manager  
 Meander Valley Council  
 P. O. Box 102  
 Westbury, TAS, 7303

Sunday 3<sup>rd</sup> December, 2017

Index No. 15059			
Doc No.			
RCVD	11 DEC 2017	MVC	
Action Officer	NW	Dept.	CDS
EO		OD	✓

Dear Mr Martin Gill,

**Representation in accordance with the Land Use and Planning Approvals Act 1993, regarding:**

**Applicant:** Rebecca Green & Associates – PA\17\0062 PA\18\0064  
**Property Address:** 46a Beefeater Street, DELORAINE (ct:31888/3, with drainage works via 33 Tower Hill Street (CT:118654/2), 38 West Goderich Street (CT:118655/1) & 35 Moriarty Street (CT:32226/1), DELORAINE  
**Development:** Multiple dwellings (7 units) & demolition of building – number of vehicle movements & pedestrian walkway  
~~Discretionary use – visitor accommodation – non residential development, construction of car park, design and layout of car park, pedestrian walkway, associated signage.~~

We *strongly* object to this proposed development. We have a number of significant concerns, detailed in the below table, which adversely affect us personally, our neighbours, and the broader residential amenity.

It is important to note that minus a few minor amendments the same applicants previously submitted an application for the exact same structures to be positioned on the exact same property, but as a non-residential development. It is also important to note that this application was not approved, and that the applicant was pursuing it to a tribunal arena, where for personal reasons they said they would withdraw if it was not pursued. Had it have been pursued and rejected the applicant as we understand it, would have not been able to re-apply for a period of no less than two years. The applicant pleaded on personal reasons for the tribunal process to be stopped. Fortunately, for them, they do not have to now wait the two years... Essentially it is the same type of units, with the same intended use, in the same residential blocks as their previous application. It is going to have the same negative impacts on the amenity of the residential area. It is going to have the same financial negative affect on the surrounding home owners. It is going to have the same significant negative impacts on environmental nuisances through, in particular noise and traffic movement (both vehicular and foot traffic), and the same issues further outlined below.

		Objection
10.1.1.1	To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided	Criterion NOT met. See 10.2 objection below for detail.
10.1.1.2	To provide for compatible non-residential uses that primarily serve the local community	It is not compatible to the amenity of the area. The area within which this development is proposed is a quiet residential area. Some of the closest neighbours to this proposal are elderly and are at present living in a well-designed, managed facility, where their safety is not an issue. There are significant known noise complaints with two other locations where backpackers/pickers are currently residing in

		<p>&amp; around Deloraine. As council is already well aware from the number of noise complaints, from both The Manse property situated in Deloraine, and at Glendel. Additionally, there is to be no on-site manager to even attempt to have some say over noise level control when it is breached.</p> <p>De-mountable buildings in the centre of town are foreign in the amenity of the area, they would significantly de-value properties all around them, and certainly do not compliment or enhance the area.</p> <p>Additionally, see all points detailed below, as further evidence this is not compatible for the proposed location.</p>
10.1.1.3	<p>Non-residential uses area not to be at a level that distorts the primacy of residential uses within the zones,</p> <p>or adversely affect residential amenity through noise,</p>	<p>This would dramatically alter the current residential uses, and distort the primacy of residential uses within our zone. Our zone composes of residential homes (owned or long-term rental properties, where they live permanently). This development would significantly alter negatively the nature, tone, privacy, and ambience of the area. This is explained throughout the document.</p> <p>Attached (appendix 2) is a letter from a current neighbour of the current residence of the local pickers accommodation at The Manse in Deloraine, Mr Steven &amp; Mrs Cheryl Loone, written in April 2017. They strongly detail the repeated extreme noise levels that affected them on a daily basis from as early as 5.30am through to all hours of the night. It demonstrates a significant alteration to the amenity of the area, which goes well after 7pm. Additionally, Rodney Brooks (MVC employee, residing on Davies Road, neighbouring Glendel) welcomes a phone call to provide further evidence of noise complaints and disruption to the current amenity of the area, let alone the impact it would have within the proposed area. The number of pickers that are currently residing in The Manse are nowhere near the proposed number of 60 occupants and in such a small space. Additionally, we note that a number of noise complaints have been made to the Meander Valley Council regarding both The Manse and Glendel from a large number of varying parties. The development is designed to accommodate an unknown number of backpackers/ fruit pickers, staff. What we do know is that each building has four bedrooms. Within each bedroom, you can fit two sets of bunk beds, with a capacity of 4 people per bedroom. This means a total potential capacity of 16 people per building. There is a total of 7 buildings proposed, sharing the same number of sleeping capacity, means that there could potentially be 112 people sleeping within the proposed development. That is of course assuming that the rooms are only used as described on the plans, for example units 1,2,3,6, and 7 have a very roomy "computer room" and a "sitting" room of greater than or equal to size as the bedrooms, unit 4 similarly has a "computer room" of significant size. This has the potential to blow out an already excessive amount of people within this proposed development.</p> <p>There is no way you can put that number of people into that</p>

	<p>activity outside of business hours,</p> <p>traffic generation and movement</p> <p>or other off site impacts.</p>	<p>kind of area, within a residential town and it not have a significant adverse effect and distort the current residential amenity. How does council think the elderly neighbours (or any neighbours for that matter) are going to handle the frequent yelling, shouting and squealing, that is frequent in this environment, and detailed in Mr &amp; Mrs Loone's letter? It just simply is not acceptable, and definitely would have an adverse effect on the existing residential amenity through noise, activity outside of business hours, and the like.</p> <p>The attached letter, also details the significant change in activity to the residential amenity of the area, and it goes on well beyond 7pm. Noise is a significant concern. Additionally, bus noise, tooting, fumes, noise of boarding the bus, are all creating additional significant negative alterations to the Manse's area, let alone the proposed area. Our current area is a quiet well respected residential area, where consideration is given to its neighbours. A very real potential 112+ people residing in the middle of a traditionally quiet residential country town atmosphere, would significantly adversely impact on our area, and in the re-sale value of our properties.</p> <p>There is "a <u>minimum</u> capacity of 17 spaces for the uses" allocated for car parking spaces (as stated in E6.6.1.A1), plus "passing bays" and lawn area which could also hold additional modes of transport. Regardless of what the owners of the land say the predominant mode of transport may be, there is still the capacity for 17 cars, plus "passing bays" which could accommodate additional cars/bus parking. It is not at all unreasonable to expect each of the 17 cars/buses to leave the property <i>at least</i> two to three times daily and re-enter the property <i>at least</i> two to three times per day minimum (for work, grocery, shopping, medicines, doctors, touring, petrol, etc). The net effect of this being a probable additional 102 vehicle entry and exists per day. Let alone the noise implications attach to this occasion. Note "for roads with a speed limit of 60km/h or less the use must not generate more than a total of 40 vehicle entry and exit movements per day. This more than double exceeds the maximum.</p> <p>Additionally, "Traffic" as defined by <i>The English Oxford Living Dictionary</i> includes "Vehicles moving on a public highway... The movement of ships, trains, aircrafts or pedestrians..." Pedestrian traffic generation (potentially 112+ people) and movement has to be significantly adversely impacted in comparison to the current tone and amenity of the quiet tranquil country-look and feel residential area. Imagine the use on the deck area alone.</p> <p>There will be a significant decline in re-sale value of the properties adjoining/surrounding this property. This is of significant concern, as the block is located in the middle of a block, within a township, and affects heavily a large number of property owners. This loss was not anticipated nor wanted to house short-term influx of seasonal back-packers/pickers</p>
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		<p>for 112+ people. This type of development would put undue hardship on the surrounding property owners/mortgagees.</p> <p>We experienced flooding for the first time in 46 years last year, immediately following the Kanangra unit development. We had to spend \$350 plus to have an extra drain installed to hopefully stop the water entering our house, as the natural water course had been altered. The council engineer, who attended our house on the morning of June 6<sup>th</sup> 2016 stated that there was no use putting extra drains in, as if a sub-division went in it would have to be re-done anyhow. Water drainage/runoff onto surrounding properties is a significant concern within this area. Major flood plains are at the base of the proposed site, and the runoff from the proposed site significantly contributes to the flooding of the immediate below lands. Whenever any development of any type is done on this land, drainage must be adequate as to protect our properties, from the disastrous flooding we experienced all through our house for the first time ever.</p>
10.1.1.4	To encourage residential development that respects the neighbourhood character and provides a high standard of residential amenity.	For all the reasons mentioned above, this proposed development does not support this requirement. It does not respect the neighbourhood character, and it does not provide a high standard of residential amenity to the area – it in fact has the opposite effect, as is evident by the current neighbours of the pickers current accommodation, and as stated in Mr & Mrs Loone’s attached letter, and council’s numerous other complaints.
10.2	Permitted Use	<p>We STRONGLY object to this “development” best fitting to be classed as Residential as a permitted use within the General Residential Zone, based on :</p> <ul style="list-style-type: none"> <li>1- These developments are NOT multiple “dwellings” (as the applicant has stated). <ul style="list-style-type: none"> <li>a. A “dwelling” by definition in the MVC Planning Scheme, <i>“means a building, or part of a building, used as a self-contained residence and which includes food preparation facilities, a bath or shower, laundry facilities, a toilet and sink, and any outbuilding and works normally forming part of a dwelling.”</i></li> </ul> </li> </ul> <p>“Dwelling” by definition requires these buildings to be a “residence”. A residence is defined as (in absence of definition in MVC Planning Scheme, definition is extracted from Oxford Dictionary states <i>“A person’s home, especially a large and impressive one.”</i> This is not a person’s “home”.</p> <p>A “Home” is defined in the Oxford Dictionary as <i>“The place where one lives permanently, especially as a member of a family or household”</i>. It is NOT the intended use for the applicant’s “multiple dwellings” to be “where one lives permanently”. In fact it</p>

		<p>appears to be quite the opposite, the intended use is for hostel/backpackers/fruit pickers. Not that the applicant has stated it as clearly as it was in the first application.</p> <p>b. I refer you to APPENDIX 1 - VCAT's decision concerning Banyule CC v Girbau (2007) VCAT 2251, where it states the "Council retorted that it... there was nothing to stop it being used as a dwelling in the future. However, the Tribunal considered it was not enough to rely on capability of the building to be used as a dwelling, rather than its actual or proposed use." VCAT determined "At present, there is insufficient evidence that the building (as opposed to the 'capability' of the building) is as a self-contained residence, nor any clear evidence that this is the intended future use."</p> <p>IF the applicant's proposed buildings were somehow found to be classified as a Dwelling, "Dwelling Type 1" a.k.a. "unit 5" is missing a toilet, which is essential component to meet the requirement of a dwelling.</p> <p>Criteria NOT met.</p>
10.3.1.A1	P1 The use must not cause or be likely to cause an environmental nuisance through emissions including noise and traffic movement, smoke, odour, dust and illumination	<p>We object to the applicant's opinion that "the proposed use it permitted. Acceptable solution met". There is in fact the opposite situation almost guaranteed to occur (with 112+ potential people sleep on the property at any one given time). They are very likely to cause or be likely to cause an environmental nuisance through emissions, including noise and traffic movements, smoke, odour, dust and illumination.</p> <p>The attached letter, combined with previous complaints MVC has already received, and Rodney Brook's facts, are evidence alone that noise and traffic disturbances are significant and ongoing, in fact Mr Loone states they are "totally unacceptable". The requirement that "the use must not cause or be very likely to cause...nuisance through... noise and traffic movement" cannot be met by a possible 112 backpackers/pickers in dorm styled buildings.</p> <p>Additionally, illumination to the area would have to be significantly increased, to ensure safety within the confines of the proposed development. Including lighting for movement throughout the proposed development to and fro each of the dorms. This just simply would not be acceptable to the existing amenity of the area.</p>
10.3.1.A2	Commercial vehicle movements for discretionary uses must not unreasonably impact on the amenity of occupants of adjoining and nearby dwellings	<p>Detail from the applicant is not provided on this. Mr Rodney Brooks, says that the commercial buses used, branded "Buses r us", arrive anywhere between 5.30-6.00am, which is outside the allowed time of 7am-7pm Monday to Friday, and 8.00am to 6.00pm Saturday and Sunday. This would be completed unacceptable and would unreasonably impact the amenity of nearby dwellings.</p>



If it is not buses, but is cars, the mode would be no different, there is still a large number of people (potentially 112+), that need transporting, which is not a fit with the existing amenity of the nearby dwellings, and is far better suited for somewhere like the applicant's primary property, outside the residential town boundary.

Regardless of the applicants "anticipated" traffic use, the facts are:

1. 112+ people can reside there at any given time PLUS staff.
2. There are a minimum of 17 car park spaces plus a "passing bays" and lawn area (where additional parking could occur).
3. People attend work, tour, eat, shop, attend doctors, pharmacy, etc. frequently. It is not un-reasonable and in fact is highly probable to expect each mode of transport to exit the property 2-3 times per day, and re-enter the property 2-3 times per day.

Based on these very minimalistic and probable calculations, it is highly probable that there would be in excess of 40 vehicle entry and exit movements per day (more likely 102). To exceed the 40 vehicle entry and exist movements it would only take 10 vehicles to make two trips within a day each (4 entries and exits per day, plus 1) – this is a very modest calculation, when the proposal could accommodates for 112+ occupants/pickers plus staff (kitchen, cleaners, gardeners, etc)!

Based on the above facts this criterion cannot be met.

10.4.1.A1	Multiple dwellings must have a site area per swelling of not less than: (a) 325m2; or (b) If within a density area specified in Table 10.4.1 below and shown on the planning scheme maps, that specified for the density area.	These buildings do not meet the definition of a "Dwelling", as described above in point 10.2
10.4.2.A1	Setbacks and building envelope for all dwellings...	These buildings do not meet the definition of a "Dwelling", as described above in point 10.2
10.4.2.A2	Setbacks and building envelope for all dwellings...	
10.4.2.A3	Setbacks and building envelope for all dwellings...	These buildings do not meet the definition of a "Dwelling", as described above in point 10.2

10.4.3.A1	Site coverage and private open space for all dwellings...	These buildings do not meet the definition of a "Dwelling", as described above in point 10.2
10.4.3.A2	<b>A2 A dwelling must have an area of private open space that:</b>	These buildings do not meet the requirements of a "dwelling" and therefore they do not meet this criteria.
10.4.3.A2.b	<b>(a) Is in one location and is at least:</b>	
	<b>(i) 24m<sup>2</sup>; or</b>	
	<b>(ii) 12m<sup>2</sup>, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8m above the finished ground level (excluding a garage, carport or entry foyer); and</b>	
10.4.3.A2.e		
10.4.3.A2.f		
10.4.3.A2.g		
	<b>(b) Has a minimum horizontal dimension of:</b>	IF deemed to be a "dwelling";
	<b>(i) 4m; or</b>	b) The applicant states "...in one location with a minimum horizontal dimension of 4 metres", yet the requirement is "A dwelling must have an area of private open space that: (b) Has a minimum horizontal dimension of: (i) 4m; ..."
	<b>(ii) 2m, if the dwelling is a multiple dwelling with a finished floor level that is entirely more than 1.8m above the finished ground level (excluding a garage, carport or entry foyer);</b>	Generally:
		Do they all meet this?
		Do they all meet this?
		Will this be met? How can 17 car spaces (of which 3 are not for people staying there) be adequate to cater for a potential 112+ people? Not realistic.

	<p style="text-align: center;">and</p> <p>(c) Is directly accessible from, and adjacent to, a habitable room (other than a bedroom); and</p> <p>(d) Is not located to the south, south-east or south-west of the dwelling, unless the area receives at least 3 hours of sunlight to 50% of the area between 9.00am and 3.00pm on the 21<sup>st</sup> June; and</p> <p>(e) Is located between the dwelling and the frontage only if the frontage is orientated between 30 degrees west of north and 30 degrees east of north; and</p> <p>(f) Has a gradient not steeper than 1 in 10; and</p> <p>(g) Is not used for vehicle access and parking.</p>	
10.4.4	Sunshine and overshadowing for all dwellings...	These buildings do not meet the definition of a "Dwelling", as described above in point 10.2

10.4.8.A1	<p><b>A1</b>  <b>A multiple dwelling must have a storage area, for waste and recycling bins, that is an area of at least 1.5m<sup>2</sup> per dwelling and is within one of the following locations:</b></p> <p>(a) In an area for the exclusive use of each dwelling, excluding the area in front of the dwelling; or</p> <p>(b) In a communal storage area with an impervious surface that:</p> <p>(i) has a setback of at least 4.5m from a frontage; and</p> <p>(ii) is at least 5.5m from any dwelling; and</p> <p>(iii) is screened from the frontage and any dwelling by a wall to a height is screened from the frontage of at least 1.2m above the finished surface level of the storage area.</p>	<p>These buildings do not meet the definition of a "Dwelling", as described above in point 10.2</p> <p>If they do meet definition of Dwelling;</p> <p>Come rubbish collection day, does this mean potentially 14 wheely bins/rubbish disposal bins/recycling bins, or similar, sitting roadside for collection, on the old, narrow road side? This does not meet the amenity of the area, and questionable safety given the age and nature of the road Beefeater St.</p>
10.4.9.A1	<p>Each dwelling must have access to at least 6 cubic metres of secure storage space.</p>	<p>These buildings do not meet the definition of a "Dwelling", as described above in point 10.2</p> <p>IF they do meet definition of Dwelling;</p> <p>The need for storage sheds attached to each building, to meet the required area of at least 6 cubic meters per dwelling, supports the point that the space intends to be full capacity within the buildings, i.e. easily catering for a minimum of 112 people (not including "computer rooms" or extra "sitting room" space.</p>
10.4.10	<p>Development for multiple dwellings must clearly delineate public, communal and private areas such as:</p> <p>a) Driveways;</p> <p>b) Site services, bin areas and any waste collection points.</p>	<p>These buildings do not meet the definition of a "Dwelling", as described above in point 10.2</p> <p>IF they do meet definition of Dwelling;</p> <p>One of the requirements is to stipulate "bin areas, and any waste collection points" cannot locate where this is mentioned?</p>
E4.6.1.A2	<p>For roads with a speed limit of 60km/h or less the use must not generate more than a total of 40 vehicle entry and exit movements per day</p>	<p>Regardless of the applicants "anticipated" traffic use, or the very modest, non-realistic traffic implications mentioned in the Traffic Impact Assessment of 63 vehicles per day additional using Beefeater Street" (sec.2.2 of Traffic Impact</p>

Assessment, page 6) (which exceeds the requirements), the more probable facts are:

1. 112+ people can reside there at any given time PLUS staff.
2. There are a minimum of 17 car park spaces plus a "passing bays" and lawn area (where additional parking could occur) for additional cars, buses, bicycles.
3. People attend work, tour, eat, shop, attend doctors, pharmacy, etc. frequently. It is not un-reasonable and in fact is highly probable to expect each mode of transport to exit the property 2-3 times per day, and re-enter the property 2-3 times per day.

Based on these very minimalistic and probable calculations, it is highly probable that there would be in excess of 40 vehicle entry and exit movements per day (more likely 102). To exceed the 40 vehicle entry and exist movements it would only take 10 vehicles to make two trips within a day each (4 entries and exits per day, plus 1) – this is a very modest calculation, when the proposal could accommodates for 112+ occupants/pickers plus staff (kitchen, cleaners, gardeners, etc)!

The increased traffic implications on the existing amenity and safety is huge. Noise implications will be significantly increased, for pedestrians, and vehicular traffic. This is not the place for such a development, with these types of traffic numbers in such a confined space, it would totally alter the amenity of the area, and in a very negative way – both physically, but also financially. It belongs outside the town boundary.

Additionally, in the *Traffic Impact Assessment* report attached (whom used exceptionally modest numbers for traffic movement in comparison to the potential reality), section 4.9, E4.6.1.A2, it states "A2-Not Met – use increase of more than 10% is proposed".

The proposed location, to accommodate this many people within a residential area, just simply does not fit the existing area on either existing amenity or safety. IT is not suitable;

i) Firstly; IPD states in their introduction of the Traffic Impact Assessment that they "have been engaged to complete a **brief** Traffic Impact Assessment".

Secondly; IPD states in 1.1 that it "attempts to identify and comment on any potential impacts affecting, or arising from, the development", note "attempts";

Thirdly; IPD states in 1.4 "Information Sources and References" section that they "have been provided with relevant information on the development, including preliminary plans, prepared for development application stages....and indicates that generally the development

		<p>proposes no significant change to the existing traffic arrangements, other than relocation of the property access.”</p> <p>We believe either the information provided to IPD or IPD’s interpretation of the information, has been grossly understated. It has the potential to have a very significant traffic implications which is in complete contrast to IPD’s informed statement of “no significant changes to the existing traffic...”. However IPD determine themselves later in their report, in section 4.9, sub-section E4.6.1.A2. Where IPD identified A2 criterion as – “Not Met – use increase of more than 10% is proposed”, and as previously stated their numbers used to determine this fact were very under stated; as detailed in OUR submission under section E4.6.1.A2 in this document.</p> <p>Based on all the above facts this criterion cannot be met.</p>
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(E?)4.7.2.A1	<p>For roads with a speed limit of 60km/h or less the development must include only one access providing both entry and exit, or two accesses providing separate entry and exit.</p>	<p>The proposed site intends to have a single access point, providing both entry and exit.</p> <p>The width at the entry/exit point is only 5m. This is in contradiction to The Traffic Impact Assessment report which states in 4.1 “It is recommended that a dual width driveway is provided for this site, with minimum width of 6m...” Note “minimum width of 6 m”, and this is based on the IPD’s perceived/mis-informed very minimalistic view of change of numbers to traffic flow versus the real possibility of 102 VPD per day.</p> <p>Requirement NOT met.</p>
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E4.7.4.A1	<p><b>A1 Sight distances at:</b></p> <ul style="list-style-type: none"> <li>a) An access or junction must comply with the Safe Intersection Sight Distance shown in Table E4.6.4; and</li> <li>b) Rail level crossings must comply with AS1742.7 Manual of uniform traffic control devices – Railway crossings, Standards Association of Australia; or</li> <li>c) If the access is a temporary access, the written consent of the relevant authority has been obtained.</li> </ul>	<p>According to the recommendations made by the The Traffic Impact Assessment report which states in 4.1 “It is recommended that a dual width driveway is provided for this site, with minimum width of 6m...” the proposal does not meet safety.</p> <p>The applicant has put a driveway in with a width of 5m only, this is in complete opposition to what was recommended as the “minimum width of 6m” in the Traffic Impact Assessment report.</p> <p>5m is an insufficient width for a two lane (entry and exit) road way, when a fairly standard vehicle the Ford Territory is 1.8m wide, or a transit van 1.9m wide? How do two cars safely fit next to each other? Let alone a bus or two? Plus pedestrians? Cyclists? This does not provide for a safe environment for tourists/back packers/pickers/staff/etc. Let alone combining this with a highly probable entry and exit movements in the hundred/s per day.</p>
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E6.1	<table border="1"> <thead> <tr> <th rowspan="2">Use</th> <th colspan="3">Parking Requirements</th> </tr> <tr> <th>Vehicle</th> <th>Bicycle</th> <th>Required</th> </tr> </thead> <tbody> <tr> <td>Residential</td> <td>2 spaces per dwelling</td> <td>no requirements set</td> <td>14 spaces</td> </tr> <tr> <td>Visitor Parking</td> <td>1 dedicated space per 4 dwellings</td> <td></td> <td>2 spaces</td> </tr> </tbody> </table>	Use	Parking Requirements			Vehicle	Bicycle	Required	Residential	2 spaces per dwelling	no requirements set	14 spaces	Visitor Parking	1 dedicated space per 4 dwellings		2 spaces	<p>Having a <b>minimum</b> capacity in this residential environment in this proposed development, within the town boundary, is NOT a good thing. It only adds to the traffic implications of such a development, and completely goes against the amenity of the area, and will de-value the amenity if it were to go ahead. This will decrease property values significantly</p>
Use	Parking Requirements																
	Vehicle	Bicycle	Required														
Residential	2 spaces per dwelling	no requirements set	14 spaces														
Visitor Parking	1 dedicated space per 4 dwellings		2 spaces														

		within the area.
E.6.1.A1	<p>The number of car parking spaces must not be less than the requirements of:</p> <ul style="list-style-type: none"> <li>a) Table E6:1 or</li> <li>b) A parking precinct plan contained in Table E6.6: Precinct Parking Plans (except for dwellings in the General Residential Zone).</li> </ul>	<p>Whilst the number of 17 exceeds the Table E6:1 minimum requirement by 1, there is a gross underestimation in relation to the amount of traffic movements within and related to this proposed development, which has a direct effect on parking numbers. This results in significant negative impacts on the existing amenity and safety of the existing residential area.</p> <p>With the potential number of visitors to this development, based on the potential number of people able to be sleeping there (112+), this would very much alter negatively both the amenity of the area, and the safety of the area.</p> <p>The proposed location, to accommodate this many people within a residential area, just simply does not fit the existing area on either existing amenity or safety. IT is not suitable;</p>
E6.7.1.A1	<p><b>A1 All car parking, access strips manoeuvring and circulation spaces must be:</b></p> <ul style="list-style-type: none"> <li>a) Formed to an adequate level and drained; and</li> <li>b) Except for a single dwelling, provided with an impervious all weather seal; and</li> <li>c) Except for a single dwelling, line marked or provided with other clear physical means to delineate car spaces.</li> </ul>	<p>Does this meet council standard? Including all weather types? Gradients? Drainage?</p>
E6.7.2	<p><b>A1.1 Where providing for 4 or more spaces, parking areas (other than for parking located in garages and carports for dwellings in the General Residential Zone) must be located behind the building line; and</b></p> <p><b>A1.2 Within the general residential zone, provision for turning must not be located within the front setback for residential buildings or multiple dwellings.</b></p> <p><b>A2.1 Car parking and manoeuvring</b></p>	<p>The applicant has put a driveway in with a width of 5m only, this is in complete opposition to what was recommended as the "minimum width of 6m" in the Traffic Impact Assessment report.</p> <p>The lack of width in the driveway (below the recommended minimum width mentioned above) impacts negatively on the design and layout of parking areas. Specifically, to the manoeuvring space to ensure "safe and efficient...use" as is required throughout this criteria.</p>

	<p>space must:</p> <ul style="list-style-type: none"> <li>a) Have a gradient of 10% of less; and</li> <li>b) Where providing for more than 4 cars, provide for vehicles to enter and exit the site in a forward direction; and</li> <li>c) Have a width of vehicular access no less than prescribed in Table E6.2; and</li> <li>d) Have a combined width of access and manoeuvring space adjacent to parking spaces not less than as prescribed in Table E6.3 where any of the following apply: <ul style="list-style-type: none"> <li>i) There are three or more car parking spaces; and</li> <li>ii) Where parking is more than 30m driving distance from the road; or</li> <li>iii) Where the sole vehicle access is to a category 1,2,3 or 4 road; and</li> </ul> </li> </ul> <p><b>A2.2 The layout of car spaces and access ways must be designed in accordance with Australian Standards AS 2890.1 – 2004 Parking Facilities, Part 1: Off Road Car Parking.</b></p>	<p>The application is omitting table E6.2 and E6.3, is it not compliant with these requirements?</p>
E6.7.3	Parking for Persons with a Disability	<p>These buildings do not meet the definition of a “Dwelling”, as described above in point 10.2.</p> <p>Although the client states “Not applicable – residential use” - we strongly disagree. This is a business, and connected to a picking business. We believe disabled parking should be a requirement IF this was deemed to meet all the other components to be residential.</p>

E6.7.4	<p><b>A1 For retail, commercial, industrial, service industry or warehouse or storage uses:</b></p> <p><b>a) At least one loading bay must be provided in accordance with Table E6.4; and</b></p> <p><b>b) Loading and bus bays and access strips must be designed in accordance with Australian Standard AS/NZS 2890.3 2002 for the type of vehicles that will use that site.</b></p>	<p>Is there really not going to be any retail, commercial, industrial, service industry or warehouse or storage uses? How are the people staying here fed, cleaned, etc?</p> <p>Is this criterion correctly accessed as "Not Applicable" in their application, as they will be presumably loading and un-loading pickers from buses, etc?</p>
E6.8.1	Pedestrian access must be provided in accordance with Table E6.5.	Is pedestrian access provided for appropriately? Table E6.5 has been omitted from the submission. The driveway width is narrower than the recommended minimum width, this alone increases the risk to safety.

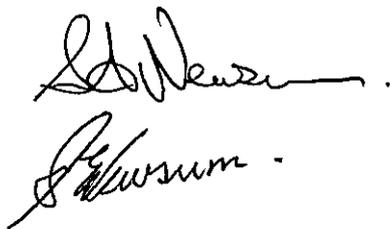
For all the reasons above we strongly object to the above mentioned proposal gaining approval. It has a significant impact on the existing amenity of the area, which would additionally have significant negative impact on the residential re-sale value of all the surrounding properties, which in turn would cause extreme undue hardship on the existing residents.

We strongly implore you to use your discretionary vote to not support this proposal, to enable us and the community around us to protect our investments, homes, lifestyle, tranquillity and environment in its existing state. We are not anti-development and would, in all probability not object to a well-designed sub-division of suitable homes with appropriate curbing and guttering e.g. Marlendy Heights, Deloraine. Such a sub-division would support the amenity of the area within which we reside, and in fact we have not objected to any previous developments that have occurred around us.

Please do not hesitate to contact us further if you require further clarification.

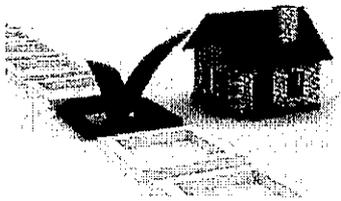
Yours sincerely,

Stephen & Susanne Newsum.  
Resident of 43 Tower Hill Street, Deloraine for 46 years.



## THE INTENTION IS THE KEY, WHAT IS 'A DWELLING' FOR THE PURPOSES OF PLANNING ENFORCEMENT?

By Justin Cotton, Partner, of Lovegrove Smith



In a key VCAT decision, while the Member advised that a Council had 'every right to be suspicious' of whether the use of a building complied with the planning scheme, the Member ultimately refused a Council's bid for an enforcement order. VCAT ruled that the Council had the onus to prove the intention of the Owner was to actually use a building as a third dwelling on the land, rather than merely showing the building was capable of being used as a dwelling.

The decision concerned is *Banyule CC v Girbau* [2007] VCAT 2251, and turned on enforcement of the Banyule Planning Scheme. A central question was this: Was the studio/bungalow on the site "a dwelling" as defined in the Banyule Planning Scheme? If the answer was yes, then it constituted a third dwelling on the site and would be unlawful unless authorised by a planning permit. All parties agreed there was no planning permit for a third dwelling.

It was necessary for the VCAT to initially examine the definition of "use", and that included the proposed use as well as the actual use being present. But even the "proposed use" suggested there needs to be an intent to carry out a use of the building for a particular purpose, rather than looking at whether the building is capable of being used for that purpose.

Deputy President Dwyer agreed with an earlier case, in that the Tribunal needs to be satisfied that there is an intention to use the studio as self-contained accommodation, and to look at the way the building is actually being used. Given it was the Council applying for an enforcement order, the Council has the onus of proof in showing this to be so. Also, the Member said that a contested application for an enforcement order carries a higher standard than an ordinary application for review.

In the planning scheme, "dwelling" was defined to be a building used as a self-contained residence which must include:

- a kitchen sink;
- food preparation facilities;
- a bath or shower; and
- a closet pan and wash basin.

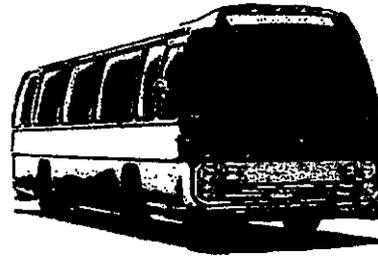
It also includes out-buildings and works normal to a dwelling.

So the Tribunal considered there were two limbs to the definition, ie (i) the four nominated facilities must all be present, and (ii) even if all four present, the building must still be "used as a self-contained residence".

It was found that on the evidence provided, that the studio/bungalow was at least capable of being used as a self-contained residence, given all four nominated facilities all existed, and that a portable cooking device (eg a microwave oven) could be added.

While the Owner obviously argued the building was not being used as a dwelling or self-contained residence, Council retorted that it had been used as a dwelling in the past, and there was nothing to stop it being used as a dwelling in the future. However, the Tribunal considered it was not enough to rely on the capability of the building to be used as a dwelling, rather than its actual or proposed use.

**S.R. & C.A. LOONE**  
**39 West Parade**  
**DELORAIN TAS 7304**



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**Mbl: 0417 035 365**

**Accredited Operator: 419294176**

AS A LAND OWNER / RATE PAYER, WE ARE CONCERNED BY THE AMOUNT OF FRUIT PICKERS THAT RESIDE IN OUR TOWN AND NOW THE COUNCIL ARE THINKING OF ALLOWING A DEVELOPMENT TO BE BUILT IN A RESIDENTIAL AREA. WE HAVE FRUIT PICKERS LIVING IN A RESIDENCE BEHIND WHERE WE LIVE AND THE NOISE THAT COMES FROM THEM AS THEY BOARD THEIR BUS AT 5.30AM / 6.00AM. IN THE MORNING IS TOTALLY UNACCEPTABLE. WHEN THEY RETURN FROM THEIR WORK (THE JOBS THAT THE LOCAL DOLE BLUDGERS SHOULD BE DOING) THEY ONCE AGAIN ARE YELLING, SHOUTING AND SQUEALING, NOT WHAT YOU WOULD EXPECT OR WANT IN A SMALL TOWN ENVIRONMENT.

**C & D 3**

THEY MAY BE A BENEFIT TO THE LOCAL FARMS  
AND BUSINESSES BUT THEY ARE NOT NEIGHBOURS  
THAT WE WANT.

REGARD

STEVEN & CHERYL LOONE

## **C&DS 5 2017-2018 COMMUNITY INCENTIVE GRANTS** **APPLICATION ASSESSMENT – ROUND 3 –** **JANUARY 2018**

### **1) Introduction**

The purpose of this report is to present for Council approval, the recommendations of the Community Grants Committee for Community Incentive Grants Round 3.

### **2) Background**

The total Grants allocation for the year is \$93,200 (1% of the General Rate). \$10,000 of this sum is reserved for Council's policy for refunding regulatory fees to community groups and \$8,000 is earmarked for individual sponsorships and establishment grants leaving a balance of \$75,200 for community grants. With four rounds each year, the Committee aims to work around an amount of 25% of the balance, each quarter. For 2017-18, this is \$18,800.

Councillors Tanya King and Andrew Connor and Jonathan Harmey (Director Corporate Services) and Neville Scott (General Inspector) met on 19 December 2017 to consider the applications received. They were supported by Patrick Gambles (Community Development Manager) and Merrilyn Young (Grants Administrator). Cr Connor stood in for Cr Ian Mackenzie who was an apology.

### **3) Strategic/Annual Plan Conformance**

Furthers the objectives of the Council's Community Strategic Plan 2014 to 2024:

- Future Direction (3): Vibrant and engaged communities
- Future Direction (4): A health and safe community.

### **4) Policy Implications**

The Grants assessment process was undertaken in accordance with the guidelines attached to the Community Incentive Grants Policy No 82.

## 5) Statutory Requirements

Section 77 of the Local Government Act 1993 – *'Details of any grant made are to be included in the Annual Report of the Council'*

## 6) Risk Management

Liability and public risk issues are considered in evaluating grant applications.

## 7) Consultation with State Government and other Authorities

Not applicable

## 8) Community Consultation

Advice and assistance is provided to applicants on request. The Community Grants program is communicated through community networks and the media. An Information and Guidelines Kit is available from the Council website with hard copies on hand at Council reception. A Grants Information Forum is held annually in May.

## 9) Financial Impact

The awarding of grants is made within the limits of the annual budget allocation which is spread over four rounds throughout the year.

## 10) Alternative Options

Council can amend or elect not to approve the Committee's recommendations.

## 11) Officers Comments

### Individual Sponsorship Requests

The following requests have been approved by the General Manager during the period September-December 2017:

Name	Suburb	Purpose	\$	
Jarryd	Battle	Westbury	National 15 & Under Student Golf Champs - NSW	150
Danielle	Laugher	Westbury	Pacific School Games Netball - SA	150
Danni	Clayton	Hadspen	Women's World Youth Boxing Champs - INDIA	300
				<b>600</b>

## Regulatory Fees Refund Scheme

No applications were received for fee refunds during the period September-December 2017.

## Grant Applications from Organisations

Sixteen grant applications were received for the round, totalling requests of \$37,924. A range of factors were considered to achieve a fair distribution. The recommended outcomes are indicated in the final column of the following table:

Organisation	Project	Project Cost \$	Grant Requested \$	Grant Recommended \$
Blackstone Heights C N Assoc.	Establishment Grant		250	250
Bracknell Football Club	Electronic Score Board	10,400	3,000	2,500
Carrick Community Committee	Historical Publication	2,497	2,497	2,200
Carrick Park Pacing Club	Visual Upgrade	3,196	2,500	500
Launceston City Football Club	Media Reporting Equip.	6,614	3,000	1,500
MV Emergency Relief Scheme	Christmas Appeal		500	500
Meander Valley Suns Football Club	Audio/Vis Training Equip.	3,055	3,000	-
Mole Creek Memorial Hall	Multi-Media Upgrade	4,452	3,000	2,000
Mole Creek Swim Centre Assoc	Season Chemicals	4,000	2,000	1,500
Parkham Community Inc	Tree management	3,000	3,000	-
Prospect Hawks JFC	Senior Women's Equip	9,491	3,000	2,000
Rosevale Hall Committee	Kiosk Shed	2,176	2,177	-
Tas Billiards & Snooker Assoc.	Ron Atkins Classic	35,000	3,000	2,000
Ten Lives Cat Centre	Edu.Cat Program	31,400	3,000	-
Westbury Cricket Club	Junior Cricket Balls	2,328	2,000	1,500
Westbury Show Horse Com.	Tiered Seating	2,254	2,000	2,000
		<b>119,863</b>	<b>37,924</b>	<b>18,450</b>

Twelve allocations equalling \$18,450 are recommended for approval by Council. These have a total project cost of \$80,232 with voluntary labour estimated in excess of \$16,000 (calculated @ \$20 per hour).

Two applications have been fast-tracked to meet event timeframes; with the approval of the General Manager:

Organisation	Project	Grant Provided \$
Blackstone Heights C N Assoc.	Establishment Grant	250
MV Emergency Relief Scheme	Christmas Appeal	500

Four applications did not receive funding in this round for the following reasons:

Organisation	Project	Grant Requested	Reason (s)
Meander Valley Suns Football Club	Audio/Vis Training Equip.	3,000	This applicant is a partner recipient in the Prospect Hawks JFC project funded in this round
Parkham Community Inc	Tree management	3,000	Invited to resubmit following heritage approval
Rosevale Hall Committee	Kiosk Shed	3,000	Invited to resubmit following planning and building approvals
Ten Lives Cat Centre	Edu.Cat Program	3,000	Invited to resubmit following MV school liaison

**AUTHOR:** Patrick Gambles  
COMMUNITY DEVELOPMENT MANAGER

## 12) Recommendation

***It is recommended that Council endorses the recommendations of the Community Grants Committee and approves the following allocations:***

Organisation	Project	Grant Recommended \$
Blackstone Heights C N Assoc.	Establishment Grant	250
Bracknell Football Club	Electronic Score Board	2,500
Carrick Community Committee	Historical Publication	2,200
Carrick Park Pacing Club	Visual Upgrade	500
Launceston City Football Club	Media Reporting Equip.	1,500
MV Emergency Relief Scheme	Christmas Appeal	500
Mole Creek Memorial Hall	Multi-Media Upgrade	2,000
Mole Creek Swim Centre Assoc	Season Chemicals	1,500
Prospect Hawks JFC	Senior Women's Equip	2,000
Tas Billiards & Snooker Assoc.	Ron Atkins Classic	2,000
Westbury Cricket Club	Junior Cricket Balls	1,500
Westbury Show Horse Com.	Tiered Seating	2,000
		<b>18,450</b>

## DECISION:

# **GOV 1 2018 TASMANIAN STATE ELECTION PRIORITY PROJECTS**

## **1) Introduction**

The purpose of this report is to seek Council's endorsement of proposed Priority Projects to be presented to political parties for consideration in the lead up to the 2018 Tasmanian State Election.

## **2) Background**

Prior to each Federal or State election, Council officers review the future capital works program, existing outline development plans, and consider other emerging infrastructure projects to prepare a list of priority projects to present to interested political parties in the electorates of Bass and Lyons.

There will be a Tasmanian State election this year. The Tasmanian State election must be called before 29 March 2018. A number of candidates have already contacted Council seeking guidance about priority projects that will require funding.

At a workshop in August 2017 Council discussed a long list of projects that were important for the region and the Meander Valley local government area. Some projects discussed, like the need to upgrade the Bass Highway at Elizabeth Town, have been considered by the political parties. Other Council projects have emerged since August 2017.

Council officers have now prepared draft list of priority projects for the Bass and Lyons electorates for Council consideration.

## **3) Strategic/Annual Plan Conformance**

Furthers the objectives of the Council's Community Strategic Plan 2014 to 2024:

- Future Direction (4): A healthy and safe community
- Future Direction (5): Innovative leadership and community governance
- Future Direction (6): Planned Infrastructure

#### **4) Policy Implications**

Not Applicable

#### **5) Statutory Requirements**

Not Applicable

#### **6) Risk Management**

Not Applicable

#### **7) Consultation with State Government & other Authorities**

Council has been approached by candidates from both major parties during the December quarter of 2017 seeking advice about Council's priority projects.

#### **8) Community Consultation**

All the projects included in the recommended priority list have been subject to some form of community consultation, through outline development plan projects, feasibility studies or community forums.

#### **9) Financial Impact**

It is difficult to estimate the overall financial impact on Council at this point. The impact will be dependent on the projects that political parties commit to supporting and the result of the Tasmanian State Election. If a grant commitment is made, Council would be required to approve the capital works project.

Council has already made a financial commitment to some of the projects on the draft priority list. There is however a number of projects that will require a financial commitment from Council if they are allocated funding by the in-coming State Government.

#### **10) Alternative Options**

Council can elect to amend the recommendation or provide no priority projects.

## **11) Officers Comments**

Feedback from candidates in the Bass Electorate suggested that Council should provide three to four priority projects greater than \$500,000 and the same number for projects less than \$500,000 in value. Although the draft priority list for Council consideration contains more than four projects for each category it does follow this format for both electorates.

### **Bass Electorate**

The officer recommendations reflect work that Council has programmed, committed to, or continues to work on. As such, there is a focus on utility infrastructure for the Hadspen Urban Growth Area and the ongoing ground and road improvements at Prospect Vale Park.

There is also recognition of ongoing expansion to pedestrian and cycle connectivity and recreation in the Blackstone Heights area.

### **Lyons Electorate**

Two of the three large projects nominated for Lyons are projects that will need external assistance to be delivered to the community. The introduction of reticulated sewerage at Bracknell in particular is a project that requires partnerships, State government funding and a coordinated approach between agencies.

The major recreation and community facility project nominated in the town of Westbury is a significant development that is still subject to community consultation, feasibility assessment and final design.

### **Upgrade of Carrick Waste Water Treatment Plant**

This project sits across the two electorates and will be included on both priority lists. This is a project of regional significance that will service the Hadspen Urban Growth Area, one of the three major residential growth areas in greater Launceston, but it sits outside of the scope for the Launceston Sewerage Improvement Project.

## Deloraine and Districts Recreation Precinct

Council received a letter from the Deloraine and Districts Recreation Precinct Working Group (Working Group) on 8 January 2017. The letter asks that Council include a request for a *'funding commitment towards the Deloraine and Districts Recreation Precinct as part of Meander Valley Council's 2018 Tasmanian Government Election Priority List'*. Please see attached letter.

This request follows earlier advice from the Working Group recommending that Council commits to developing Scenario 3, Phase 1 in the draft Deloraine and Districts Recreation Precinct Feasibility Study Report.

An outline of this development phase scenario is outlined in the table below:

<b>Scenario 3 – Phase 1</b>	
Components	Capex
Indoor sports courts (Squash Only)	\$13.2million*
Outdoor Multi-sport Field and Perimeter Access	
Club/Meeting/Function Space	
Front/Back of House	
Amenities	
Carparking and Access	
Outdoor entry Plaza/Landscape amenity	
<i>*includes \$1mil allowance for better site access for schools &amp; outdoor netball court</i>	

The project has not been included in the draft priority project list prepared by Council officers because at the time of writing Council has yet to:

- Receive or adopt the Deloraine and Districts Recreation Precinct Feasibility Study Report.
- Formally consider the recommendations of the Working Group

A project to provide for better connectivity to and around the Deloraine Community Complex, which picks up on the note in the table above regarding better site access and links with the school, has been included in the Lyons electorate list. A similar project has been previously been included in the Deloraine Outline Development Plan.

The draft priority project lists are attached.

Council officers recognise that there are a number of important community projects that could have been included and as such will continue to monitor other grant opportunities at both State and Federal level to ensure that we are working to progress them.

**AUTHOR:** Martin Gill  
GENERAL MANAGER

## 12) Recommendation

***It is recommended that Council endorse the Bass and Lyons Priority Projects in the table below for presentation to endorsed candidates of the political parties:***

Bass Electorate Projects valued over \$500,000		
No.	Project	Cost \$
1	Prospect Vale Park Upgrade and installation of drainage and irrigation	\$0.75m
2	Prospect Vale Park Construction of internal car parking and road network	\$1.5m
3	Hadspen Pedestrian access over South Esk River	\$3.0m
4	Hadspen Reticulated water supply infrastructure upgrade	\$1.8m
5	Hadspen New Roundabout (Scott and Bartley Street)	\$1.0m
6	Hadspen Combined Recreation & Stormwater Infrastructure	\$0.85m
7	Carrick Upgrade of Waste Water Treatment Plant	\$15m
Bass Electorate Projects valued up to \$500,000		
No.	Project	Cost \$
1	Hadspen Erosion Treatment and parkland development of South Esk riverbank	\$400,000
2	Blackstone Heights Upgrade Blackstone Heights Park	\$100,000
3	Blackstone Heights Extension of footpath network	\$400,000

4	Prospect Vale Entrance/Gateway treatment	\$100,000
5	Prospect Vale Park Upgrade of lighting infrastructure	\$250,000
<b>Lyons Electorate Projects valued over \$500,000</b>		
No.	Project	Cost \$
1	Bracknell Construction of reticulated sewerage	\$5m
2	Westbury Development of multipurpose function centre	\$5m
3	Carrick Upgrade of Waste Water Treatment Plant	\$15m
4	Meander Valley Great Western Tiers Touring Route Signage	\$0.5m
5	Bracknell Reconstruction of Bracknell Memorial Hall	\$0.6
6	Deloraine Pedestrian and cyclist connectivity project	\$1.0m
<b>Lyons Electorate Projects valued up to \$500,000</b>		
No.	Project	Cost \$
1	Meander Valley Short Walks Strategy	\$100,000
2	Mole Creek Refurbishment of Memorial Hall	\$60,000
3	Westbury Upgrade of Stormwater drainage system	\$300,000
4	Deloraine Lighting for River paths	\$250,000

## **DECISION:**

## Bass Electorate

### Projects +\$500,000

#### Legend

COP: Council Owned project

PP: Partner Project Council will partner with others to plan, advocate or undertake project

AP: Advocacy Project

Project	Total \$	Council Role	Comments
Prospect Vale Park Upgrade and installation drainage and irrigation of playing surfaces	<b>\$750,000</b>	COP	<ul style="list-style-type: none"><li>• Identified in Prospect Vale Park Development Plan</li><li>• Included in Future Capital Works Program</li><li>• To improve participation</li></ul>
Prospect Vale Park Construction of internal car parking and road network to improve circulation and safety for users	<b>\$1.5m</b>	COP	<ul style="list-style-type: none"><li>• Identified in Prospect Vale Park Development Plan</li><li>• Concept design completed</li></ul>
Hadspen Pedestrian access over Highway Bridge Esk River (Meander Valley Highway) to link east and west Hadspen.	<b>\$3m</b>	PP	<ul style="list-style-type: none"><li>• Identified in Hadspen Outline Development Plan</li><li>• Important community link and pedestrian safety improvement</li></ul>
Hadspen Reticulated water supply infrastructure upgrade to facilitate residential growth:	<b>\$1.8m</b>	AP	<ul style="list-style-type: none"><li>• Part of Hadspen Urban Growth Area Infrastructure Provision project</li><li>• Design and preliminary costing completed</li></ul>

Project	Total \$	Council Role	Comments
<ul style="list-style-type: none"> <li>New Reservoir 1.15Ml</li> <li>Trunk Main from Prospect Vale</li> </ul>			<ul style="list-style-type: none"> <li>Will service projected population growth in Hadspen</li> </ul>
Hadspen <ul style="list-style-type: none"> <li>New roundabout – entry to Hadspen Urban Growth Area to facilitate residential growth</li> </ul>	<b>\$1m</b>	PP	<ul style="list-style-type: none"> <li>Part of Hadspen Urban Growth Area Infrastructure Provision project</li> </ul>
Hadspen Combined Recreation & Stormwater Infrastructure Hadspen <ul style="list-style-type: none"> <li>Water Sensitive Urban Design within linear parks and pedestrian and cycle trails</li> </ul>	<b>\$850,000</b>	COP	<ul style="list-style-type: none"> <li>Part of Hadspen Urban Growth Area Infrastructure Provision project</li> </ul>
Carrick Upgrade of Waste Water Treatment Plant to facilitate residential growth	<b>\$15m</b>	AP	<ul style="list-style-type: none"> <li>Part of Hadspen Urban Growth Area Infrastructure Provision project</li> <li>Required to facilitate development in the Hadspen Urban Growth Area</li> <li>Design development initial costing completed and signed off by TasWater</li> </ul>

## Projects up to \$500,000

### Legend

COP: Council Owned project

PP: Partner Project Council will partner with others to plan, advocate or undertake project

AP: Advocacy Project

Project	Total \$	Council Role	Comments
Hadspen Erosion Treatment of South Esk riverbank and foreshore parkland development	<b>\$400,000</b>	COP	<ul style="list-style-type: none"> <li>Erosion remediation treatment at the Hadspen Lions Park to stabilise the riverbank and improve passive recreation use at the area</li> <li>Design completed</li> </ul>
Blackstone Heights Upgrade of Blackstone Heights Park <ul style="list-style-type: none"> <li>Additional recreation infrastructure and landscaping to improve recreation use</li> </ul>	<b>\$100,000</b>	COP	<ul style="list-style-type: none"> <li>Identified project in Prospect Vale Blackstone Heights Structure Plan</li> </ul>
Blackstone Heights Extension of footpath network to improve pedestrian connectivity	<b>\$400,000</b>	COP	<ul style="list-style-type: none"> <li>Identified project in Prospect Vale Blackstone Heights Structure Plan</li> <li>Continue ongoing investment in footpath network</li> </ul>
Prospect Vale Bass Highway Off Ramp –	<b>\$100,000</b>	PP	<ul style="list-style-type: none"> <li>Identified project in Prospect Vale Blackstone Heights Structure Plan</li> </ul>

Project	Total \$	Council Role	Comments
<ul style="list-style-type: none"> <li>Entrance/gateway beautification project</li> </ul>			<ul style="list-style-type: none"> <li>Request from local businesses to improve entrance experience</li> </ul>
Prospect Vale Park Upgrade of lighting infrastructure to improve recreation participation	<b>\$250,000</b>	COP	<ul style="list-style-type: none"> <li>Identified in Prospect Vale Park Development Plan</li> <li>Facilitate night-time sport</li> <li>Council has committed budget</li> <li>To facilitate female participation</li> </ul>

**Priority Projects**  
**State Election**  
**Meander Valley Council**

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**Lyons Electorate**  
**Projects +\$500,000**

Legend

COP: Council Owned project

PP: Partner Project Council will partner with others to plan, advocate or undertake project

AP: Advocacy Project

<b>Project</b>	<b>Total \$</b>	<b>Council Role</b>	<b>Comments</b>
Bracknell Construction of reticulated sewerage to address environmental concerns within the community	<b>\$5m</b>	AP	<ul style="list-style-type: none"> <li>• Council has funded design development</li> <li>• Council has discussed project procurement and funding options with TasWater</li> </ul>
Westbury Development of multipurpose function centre Westbury Recreation Ground	<b>\$5m</b>	COP	<ul style="list-style-type: none"> <li>• Council has commenced design development phase</li> <li>• Council has committed to funding project</li> </ul>
Carrick Upgrade of Waste Water Treatment Plant	<b>\$15m</b>	AP	<ul style="list-style-type: none"> <li>• Part of Hadspen Urban Growth Area Infrastructure Provision project</li> <li>• Required to facilitate development in the Hadspen Urban Growth Area</li> <li>• Design development initial costing completed and signed off by TasWater</li> </ul>

**Priority Projects**  
**State Election**  
**Meander Valley Council**

<b>Project</b>	<b>Total \$</b>	<b>Council Role</b>	<b>Comments</b>
Meander Valley Great Western Tiers touring route signage replacement	<b>\$500,000</b>	PP	<ul style="list-style-type: none"> <li>Identified in Meander Valley Destination Action Plan</li> </ul>
Bracknell Reconstruction Bracknell Memorial Hall to ensure sustainable community use & roofing improvements to adjoining boys and girls gymnasium	<b>\$600,000</b>	COP	<ul style="list-style-type: none"> <li>Building has reached the end of useful life and requirements within Asset Management plan to provide safe building</li> </ul>
Deloraine Pedestrian and Cyclist connectivity project <ul style="list-style-type: none"> <li>Linking key community assets including schools and Community Complex to promote healthy living and passive recreation</li> </ul>	<b>\$1m</b>	COP	<ul style="list-style-type: none"> <li>Identified in Deloraine Outline Development Plan</li> </ul>

**Priority Projects**  
**State Election**  
**Meander Valley Council**

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**Projects up to \$500,000**

Legend

COP: Council Owned project

PP: Partner Project Council will partner with others to plan, advocate or undertake project

AP: Advocacy Project

<b>Project</b>	<b>Total \$</b>	<b>Council Role</b>	<b>Comments</b>
Meander Valley Short Walks Strategy <ul style="list-style-type: none"> <li>• Develop masterplan</li> <li>• design upgrade program</li> </ul>	<b>\$100,000</b>	PP	<ul style="list-style-type: none"> <li>• Initiative identified in Destination Action Plan</li> </ul>
Mole Creek Refurbishment of Mole Creek Memorial Hall to facilities community activity and use	<b>\$60,000</b>	COP	<ul style="list-style-type: none"> <li>• Identified in future capital works program</li> </ul>
Westbury Upgrade of stormwater drainage system to manage flooding within urban areas	<b>\$300,000</b>	COP	<ul style="list-style-type: none"> <li>• Identified in Westbury Outline Development Plan</li> <li>• Identified in future capital works program</li> </ul>
Deloraine Lighting for Meander River paths to improve community safety and recreation use	<b>\$250,000</b>	COP	<ul style="list-style-type: none"> <li>• Identified in Deloraine ODP</li> </ul>



Mayor, Councillors and General Manager Meander Valley Council  
PO Box 102  
WESTBURY TAS 7303

Index No. <b>509-01-022</b>			
Doc No.			
RCV'D	<b>-8 JAN 2018</b>	MVC	
Action Officer	<b>MY MG</b>	Dept.	<b>G</b>
EO		OD	<b>✓</b>

5 January 2018

Dear Mayor, Councillors and General Manager,

We write regarding the proposed Deloraine & Districts Recreation Precinct and further to our letter received by Council on 18 December 2017.

As you are all aware, Council, along with the Deloraine & Districts Community Bank Branch of the Bendigo Bank and the State Government have contributed financially, so as to undertake a feasibility study into how sport, recreational and social activity needs may better be met in the years and decades to come.

The feasibility study has been finalised and is now ready for consideration at a Council meeting.

As you will note in the report, significant unmet need has been identified; as well various facilities in the Deloraine district have been shown to be substandard and not fit for purpose.

Whilst there are significant capital costs associated with upgrading and relocating the facilities, doing nothing is a hazardous option. Maintenance costs to sustain the existing facilities in their current state will escalate year on year. At the same time health outcomes will be diminished and community participation rates significantly less than they would otherwise be.

In addition to the recommendations from the Working Group that you have already received, we ask that you consider including a request for a funding commitment towards the Deloraine & Districts Recreation Precinct as part of the Meander Valley Council's 2018 Tasmanian Government Election Priority List.

The Working Group recognise that the attraction of multiple funding sources is needed for a project of this significance. With the most likely date for the Tasmanian Government Election being March 2018 the Working Group are keen to ensure that a funding opportunity in the form of an election commitment from both the Tasmanian Liberal Party and the Tasmanian Labor Party is capitalised on.

We are pleased to advise that representatives of community and sporting organisations in the Deloraine community have met with representatives of Lyons from both major parties. Both parties have indicated their strong interest and given indicative support of the project, but are eager to see formal support from the Meander Valley Council for the Deloraine & Districts Recreation Precinct.

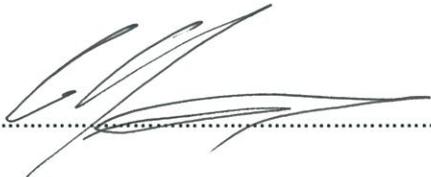
The Deloraine and districts has a strong sport, recreation and community culture, with high participation levels, but with infrastructure aging, and some no longer fit for purpose we fear current participation cannot be maintained. Extensive work has been undertaken on the feasibility study, and we believe there is a sensible pathway forward. To be able to achieve this we recognise that multi-

tiers of funding are required and strongly encourage the Meander Valley Council to include this important project on the Meander Valley Council's Election Priority List.

We look forward to your consideration of this important matter.

Yours sincerely

Community Representatives

  
.....Cory Youd

  
.....Douglas Tangney

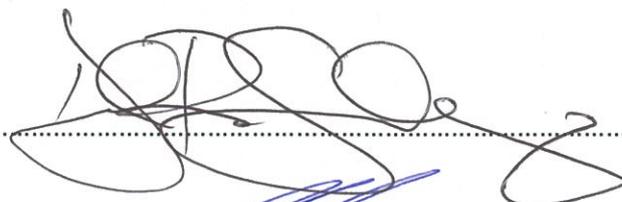
  
.....Laura Richardson

  
.....Shaun Donohue

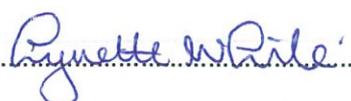
Deloraine and Districts Community Bank Branch of Bendigo Bank Representative

  
..... Darren Rumble

Meander Valley Council Officers

  
.....Daniel Smedley

  
.....Kris Eade

  
.....Lynette While

## **GOV 2 COUNCIL AUDIT PANEL RECEIPT OF MINUTES AND ANNUAL PERFORMANCE EVALUATION RECOMMENDATIONS**

### **1) Introduction**

The purpose of this report is for Council to receive the minutes of the Council Audit Panel meeting held on 19 December 2017 and the annual performance evaluation recommendations presented by the Audit Panel Chairman.

### **2) Background**

Council's Audit Panel met on 19 December 2017 with the minutes attached for Council's information and receipt. The Audit Panel undertook a formal performance evaluation in May 2017 and presented a self-assessment at the Audit Panel meeting on 27 June 2017. The Audit Panel Chairman presented recommendations following the performance evaluation at the meeting on 19 December 2017 in accordance with section 11.7 of Council's Audit Panel Charter.

### **3) Strategic/Annual Plan Conformance**

Further the objectives of Council's Community Strategic Plan 2014 to 2024:

- Future direction (5) - Innovative leadership and community governance

### **4) Policy Implications**

Not Applicable.

### **5) Statutory Requirements**

Sections 85, 85A and 85B of the Local Government Act 1993 and the Local Government (Audit Panels) Order 2014.

### **6) Risk Management**

Not Applicable.

### **7) Consultation with State Government and other Authorities**

Not Applicable.

## **8) Community Consultation**

Not Applicable.

## **9) Financial Impact**

Not Applicable.

## **10) Alternative Options**

Not Applicable.

## **11) Officers Comments**

The attached minutes of the Audit Panel meeting held on 19 December 2017 have been endorsed by the Audit Panel Chairman and are provided for Council's information. The annual Audit Panel performance evaluation recommendations were tabled at the meeting on 19 December 2017 and are provided for Council's information. Both the minutes and performance evaluation recommendations are required under Council's Audit Panel Charter.

**AUTHOR:** Martin Gill  
GENERAL MANAGER

## **12) Recommendation**

***It is recommended that Council:***

- 1. receive the minutes of the Council Audit Panel meeting held on 19 December 2017***
- 2. receive the annual performance evaluation recommendations tabled at the Council Audit Panel meeting held on 19 December 2017***

## **DECISION:**



## Audit Panel Minutes

**Meeting Time & Date: 10am 19 December 2017**

**Venue: Meander Valley Council**

**Present:**

Chairman Steve Hernyk

Councillor Andrew Connor

Mr Chris Lyall

**In Attendance:**

Martin Gill, General Manager

Justin Marshall, Senior Accountant

Jon Harmey, Director Corporate Services

Sam Bailey, Risk & Safety Officer

Lynette While, Director Community & Development Services

Susan Ellston, Finance Officer

Dino De Paoli, Director Infrastructure Services

**Apologies:**

Nil.

**ORDER OF BUSINESS**

**ITEM**

**1. Declaration of Pecuniary Interests/conflict of interest**

Nil.

**2. Adoption of Previous Minutes**

It was resolved that the minutes of the meeting held on 26 September 2017 be received and confirmed.

**3. Outstanding from previous meeting - Action Sheet**

The Panel reviewed the Action Sheet and discussed the following items -

**3.1. Review process to manage insurable risks and existing insurance cover.**

Director Corporate Services reported on the Insurance renewal process – Received & Noted - Remove from Action List

**3.2 Review Delegation process and exercise of these.**

Delegation Listing required for review by Panel - Carry Forward to next Audit Panel Meeting

**3.3 Policy No. 81 – Social Media.**

Refer Item 6 - Remove from Action List

**3.4 Internal Audit.**

Internal Audit Plan is proceeding - Remove from Action List

**3.5 Performance Review.**

Refer Item 23 - Remove from Action List

**3.6 Review Asset Management Strategy.**

Circulate AMP's and provide an update of actions in relation to improvement plans and the SAMP - Carry Forward to next Audit Panel Meeting

**3.7 Review Asset management Policy.**

Align review cycle of Policy and SAMP - Carry Forward to next Audit Panel Meeting

**3.8 Policy No. 67 – Personal Information Protection.**

Council Workshop required - Carry Forward to next Audit Panel Meeting

**4. Review Audit Panel Annual Meeting Schedule and Work Plan**

- No matters for discussion.

**Governance and Strategy**

**5. Review Annual Plan**

- General Manager presented a verbal report.

Received and Noted.

**6. Review policies & procedures**

The following Policies were reviewed –

**- No 74 – Conservation Covenant Incentive Scheme**

Director Community & Development Services presented a verbal report.

Received and Noted.

**Recommended to Council for approval.**

**- No 81 – Social Media – Carried forward from last meeting**

Ongoing discussions with wording to occur.

Received and Noted.

The following Policies were Noted –

**- No.37 – Vegetation Management**

Received and Noted.

**7. Review performance of plans, strategies and policies including performance against identified benchmarks.**

- General Manager presented a verbal report.

Received and Noted

**Financial and Management Reporting**

**8. Review most current results and report any relevant findings to Council**

- The financial Reports were tabled as per circulation in the November Briefing Reports to Councillors.

Received and Noted.

**9. Review any business unit or special financial reports**

- No Matters to Report.

**10. Review the impact of changes to Australian Account Standards**

- No Matters to Report.

## Internal Audit

### 11. Consider any available audit reports

- Internal Audits completed and to be presented at next Audit Panel Meeting.

Received and Noted.

### 12. Review management's implementation of audit recommendations

- Paper to be prepared for removing outstanding items.

Received and Noted.

## External Audit

### 13. Consider any available audit reports

- External Reports were circulated and acknowledged.

All Reports were Received and Noted.

### 14. Review management's implementation of audit recommendations

- Verbal Report

Received and Noted

### 15. Consider any performance audit reports that will be undertaken by the Tas Audit Office and address implications for the Council

- None to report

## Risk Management and Compliance

### 16. Annual review of risk management framework policies

- Risk Register (strategic and operational) is progressing. At completion it will be presented to the Risk Management Committee for review.

Received & Noted

### 17. Receive material risk management reports (risk profile, risk management and treatment and periodical/rotational risk review)

- Refer Item 16

Received & Noted

### 18. Monitor ethical standards and any related transactions to determine the systems of control are adequate and review how ethical and lawful behaviour and culture is promoted within the Council

- Staff personal reviews have been reorganized to streamline the process. Policies regarding cultural reviews need revisiting.

Received & Noted.

### 19. Review Business Continuity Plan

<p>– <i>Echelon Australia</i> hosted some scenarios to test the BCP with recommendations and outcomes to examine. Further testing to continue next year.</p> <p>Received &amp; Noted</p>
<p><b>20. Review W H &amp; S Management process</b> – <i>See Item 16</i></p>
<p><b>21. Monitor any major claims or lawsuits by or against the Council and complaints against the Council</b></p> <p>– None to report</p>
<p><b>22. Oversee the investigation of any instances of suspected cases of fraud or other illegal and unethical behaviour</b></p> <p>– None to report</p>
<p><b>Audit Panel Performance</b></p>
<p><b>23. Audit Panel Performance Review</b> –Chairman presented papers with some recommendations to be considered.</p> <p>Received &amp; Noted</p>
<p><b>Other Business</b></p>
<p><b>Meeting close</b> – 11:30am</p>
<p><b>Next Meeting</b> – Tuesday 27<sup>th</sup> February 2018 @ 10:00 am</p>

# Meander Valley Council Audit Panel Performance Evaluation Report



**May 2017**

# Audit Panel performance evaluation

Attached is a composite evaluation of panel members' responses.

The following are areas where assessments are low and warrant discussion to identify actions for improvement:-

Question No.	Evaluation score
5	3.5
8	3.5
10	2.5
13	3.5
14	3.5
22	3.0
28	3.5
30	3.0
34	3.0
36	3.5
37	3.0
38	3.0
39	3.5
40	3.5
41	3.5
43	3.5
46	3.0
47	3.0
49	3.0
50	3.0
51	3.0
52	3.5

For each of the following statements, select a number between 1 and 5, with 1 indicating that you strongly disagree and 5 indicating that you strongly agree with the statement. Leave blank if the point is not applicable or you do not have enough information to rank the organization's Audit Panel on a particular statement.

Composition and quality	<i>Strongly disagree</i>					<i>Strongly agree</i>	<i>Composite Assessment</i>
1. Audit Panel members have the appropriate qualifications to meet the objectives of the Audit Panel's charter, including appropriate financial literacy.	1	2	3	4	5	4.5	
2. The Audit Panel demonstrates integrity, credibility, trustworthiness, active participation, an ability to handle conflict constructively, strong interpersonal skills, and the willingness to address issues proactively.	1	2	3	4	5	4.5	
3. The Audit Panel demonstrates appropriate industry knowledge and includes a diversity of experiences and backgrounds.	1	2	3	4	5	4.5	
4. Members of the Audit Panel meet all applicable independence requirements.	1	2	3	4	5	4.5	
5. The Audit Panel participates in a continuing education program to enhance its members' understanding of relevant accounting, reporting, regulatory, auditing, and industry issues.	1	2	3	4	5	3.5	
6. The Audit Panel monitors compliance with corporate governance regulations and guidelines.	1	2	3	4	5	4.0	
7. The Audit Panel reviews its charter to determine whether its responsibilities are described adequately and recommends changes to the Council for approval.	1	2	3	4	5	4.5	
8. New Audit Panel members participate in an orientation program to educate them on the Council, their responsibilities, and the Council's financial reporting and accounting practices.	1	2	3	4	5	3.5	
9. The Audit Panel chairman is an effective leader.	1	2	3	4	5	5.0	
10. The Audit Panel, in conjunction with the nominating committee (or its equivalent), creates a succession and rotation plan for Audit Panel members, including the Audit Panel chairman.	1	2	3	4	5	2.5	

Understanding the business, including risks	<i>Strongly disagree</i>				<i>Strongly agree</i>	<i>Composite Assessment</i>
11. The Audit Panel considers or knows that the full Council or other committees take into account significant risks that may directly or indirectly affect financial reporting. Examples include: <ul style="list-style-type: none"> <li>• Regulatory and legal requirements</li> <li>• Concentrations (e.g., suppliers and customers)</li> <li>• Financing and liquidity needs</li> <li>• Financial exposures</li> <li>• Business continuity</li> <li>• Council reputation</li> <li>• Financial strategy execution</li> <li>• Financial management's capabilities</li> <li>• Management override</li> <li>• Fraud control</li> <li>• Council pressures, including "tone at the top"</li> </ul>	1	2	3	4	5	4.0
12. The Audit Panel considers, understands, and approves the process implemented by management to effectively identify, assess, and respond to the organisation's risks.	1	2	3	4	5	4.0
13. The Audit Panel understands and approves management's fraud risk assessment and has an understanding of identified fraud risks.	1	2	3	4	5	3.5
14. The Audit Panel considers the Council's performance versus that of its peers in a manner that enhances comprehensive risk oversight by using reports provided directly by management to the Audit Panel. These may include benchmarking information comparing the Council's financial performance and ratios with peers, industry trends, analyst estimates, and budget analysis with explanations for areas where significant differences are apparent.	1	2	3	4	5	3.5

Process and procedures	Strongly disagree					Strongly agree	Composite Assessment
15. The Audit Panel reports its proceedings and recommendations to the Council after each committee meeting.	1	2	3	4	5	5.0	
16. The Audit Panel develops a calendar that dedicates the appropriate time and resources needed to execute its responsibilities.	1	2	3	4	5	4.5	
17. Audit Panel meetings are conducted effectively, with sufficient time spent on significant or emerging issues.	1	2	3	4	5	5.0	
18. The level of communication between the Audit Panel and relevant parties is appropriate; the Audit Panel chairman encourages input on meeting agendas from committee and Council members, management, the internal auditors, and the independent auditor.	1	2	3	4	5	4.5	
19. The agenda and related information (e.g., prior meeting minutes, press releases and financial statements) are circulated in advance of meetings to allow Audit Panel members sufficient time to study and understand the information.	1	2	3	4	5	4.0	
20. Written materials provided to Audit Panel members are relevant and concise.	1	2	3	4	5	4.0	
21. Meetings are held with enough frequency to fulfill the audit committee's duties and at least quarterly, which should include periodic visits to council locations with members of management.	1	2	3	4	5	4.0	
22. Regularly, Audit Panel meetings include separate private sessions with management and the internal and independent auditors.	1	2	3	4	5	3.0	
23. The Audit Panel maintains adequate minutes of each meeting	1	2	3	4	5	4.0	
24. The Audit Panel respects the line between oversight and management of the financial reporting process.	1	2	3	4	5	4.5	
25. Audit Panel members come to meetings well prepared.	1	2	3	4	5	4.5	

Oversight of the financial reporting process, including internal controls	<i>Strongly disagree</i>					<i>Strongly agree</i>	<i>Composite Assessment</i>
26. The Audit Panel considers the quality and appropriateness of financial accounting and reporting, including the transparency of disclosures.	1	2	3	4	5	4.0	
27. The Audit Panel reviews the Council's significant accounting policies.	1	2	3	4	5	4.5	
28. The Audit Panel understands and approves the process used by management to identify and disclose related-party transactions.	1	2	3	4	5	3.5	
29. The Audit Panel has a process for reviewing periodical and annual earnings reports, and other significant financial information with management and the independent auditor	1	2	3	4	5	4.0	
30. The Audit Panel oversees the organization's external financial reporting and internal control over financial reporting.	1	2	3	4	5	3.0	
31. The Audit Panel reviews the processes related to financial statement certifications made by the General Manager.	1	2	3	4	5	4.0	
32. The Audit Panel receives sufficient information to assess and understand management's process for evaluating the organization's system of internal controls (e.g., financial reporting and disclosure controls, operation controls, compliance controls) and also believes that management's scope of internal control testing adequately supports its internal control assessment.	1	2	3	4	5	4.0	
33. The Audit Panel understands and gives appropriate consideration to the internal control testing conducted by management, the internal auditors, and the independent auditor to assess the process for detecting internal control issues or fraud. Any significant deficiencies or material weaknesses that are identified are addressed, reviewed, and monitored by the Audit Panel.	1	2	3	4	5	4.0	
34. The Audit Panel makes inquiries of the independent auditor, internal auditors, and management on the depth of experience and sufficiency of the Council's accounting and finance staff.	1	2	3	4	5	3.0	
35. The Audit Panel reviews the management recommendation letters written by the independent and internal auditors and monitors the process to determine that all significant matters are addressed.	1	2	3	4	5	4.0	
36. The Audit Panel oversees that management takes action to achieve resolution when there are repeat comments from auditors, particularly those related to internal controls.	1	2	3	4	5	3.5	
37. Adjustments to the financial statements that resulted from the audit are reviewed by the Audit Panel regardless of whether they were recorded by management.	1	2	3	4	5	3.0	
38. The Audit Panel is consulted when management is seeking a second opinion on an accounting or auditing matter.	1	2	3	4	5	3.0	

Oversight of audit functions	<i>Strongly disagree</i>					<i>Strongly agree</i>	<i>Composite Assessment</i>
39. The Audit Panel understands the coordination of work between the independent and internal auditors and clearly articulates its expectations of each.	1	2	3	4	5	3.5	
40. The Audit Panel regularly reviews the adequacy of the internal audit function (e.g. the charter; audit plan; budget; compliance; and number, quality, and continuity of staff).	1	2	3	4	5	3.5	
41. The internal audit reporting lines established with the Audit Panel promote an atmosphere where significant issues that might involve management will be brought to the attention of the Audit Panel.	1	2	3	4	5	3.5	
42. The Audit Panel appropriately considers internal audit reports, management's responses, and steps toward improvement.	1	2	3	4	5	4.0	
43. The Audit Panel considers the independent audit plan and provides recommendations.	1	2	3	4	5	3.5	
44. The Audit Panel reviews the audit fees paid to the independent auditors.	1	2	3	4	5	4.0	
45. The Audit Panel comprehensively reviews management's representation letters to the independent auditor.	1	2	3	4	5	4.0	
46. The Audit Panel reviews other professional services that relate to financial reporting (e.g., consulting, legal and tax strategy services) provided by outside consultants.	1	2	3	4	5	3.0	
47. When deemed appropriate, the Audit Panel has private sessions with management and the internal and independent auditors that result in candid discussion of pertinent issues.	1	2	3	4	5	3.0	

Ethics and compliance	<i>Strongly disagree</i>					<i>Strongly agree</i>	<i>Composite Assessment</i>
48. Audit panel committee members oversee the process and are notified of communications received from governmental or regulatory agencies related to alleged violations or areas of noncompliance.	1	2	3	4	5	4.0	
49. The Audit Panel oversees management's procedures for enforcing the Council's code of conduct.	1	2	3	4	5	3.0	
50. The Audit Panel determines that there is <b>a</b> senior-level person designated <b>to understand</b> relevant legal and regulatory requirements.	1	2	3	4	5	3.0	
51. The Audit Panel oversees, where they exist, the organisation's hotline or whistleblower process, reviews the log of incoming calls that relate to possible fraudulent activity, and understands the procedures to prohibit retaliation against whistleblowers.	1	2	3	4	5	3.0	

Monitoring activities	<i>Strongly disagree</i>					<i>Strongly agree</i>	<i>Composite Assessment</i>
52. The Council provides the Audit Panel with sufficient funding to fulfill this objectives and engage external parties for matters requiring external expertise.	1	2	3	4	5	3.5	



**FOR ACTION**

**AGENDA ITEM NO.**

**23**

MEETING DATE: 19 December 2017  
SUBJECT: **Audit Panel Performance Review**  
REPORT FROM: Steven Heryk – Chairman of panel

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**OBJECTIVE**

To suggest performance improvement actions for the Audit Panel.

**REPORT SUMMARY**

**BACKGROUND**

The Panel undertook a formal performance evaluation for the June 2017 Audit Panel meeting, (copy of evaluation attached).

That evaluation identified the Panel could improve its performance in the following areas:-

- With attendances at continuing education programs and orientation programs to improve knowledge
- The Panel consider the Council's performance versus that of its peers e.g. benchmarking to compare the Council's performance and ratios with peers.
- The Panel conduct private sessions with External Auditors as needed and makes enquiry of management on the depth of experience and sufficiency of the Council staff.
- The Panel better understands the role of internal audit vs. external audit and the end of year external audit process.
- The Panel receive information in relation to internal controls evaluation by management and its testing.
- The Panel review professional services that relate to financial reporting e.g. consulting, legal and tax provided by outside consultants.

- The Panel enhance oversight of ethical practices and procedures.

## **ACTIONS PROPOSED**

- Panel members to consider attendances at seminars provided by Tas Audit Office and LGAT to improve knowledge.
- Management to provide relevant benchmarking of Council performance and ratios with peers after release of Annual Financials of Councils and TAO report to Parliament.
- Agenda for meetings to contain item that facilitates private sessions with External Auditors and Panel is to enquire of management the depth of experience and sufficiency of Council staff.
- Panel members to discuss inter-relationship of external and internal audit activities and year end external audit adjustments and processes followed by external audit.
- Internal audit activities to begin to be delivered on by management.
- Panel annual work plan to incorporate presentation of any outside consultant reports for Panel information
- Panel continue to make periodical enquiry that there is evidence via such sources as supporting documents and representations that reflect Management reinforcement of ethical culture e.g. extracts of management/team meetings, management reporting to Panel meetings of relevant incident reporting/ whistle-blower/notifications dealing with possible fraudulent activity/code of conduct breaches/non-compliance with legislation.

## **RECOMMENDATION**

The Audit Panel recommends that the actions proposed be adopted and reports them to Council.

## **DECISION**

**Attachment:** 1. Audit panel Performance Self Assessment of May 2017.

## **CORP 1 FINANCIAL REPORTS TO 31 DECEMBER 2017**

### **1) Introduction**

The purpose of this report is to present Council's financial reports for the period ending 31 December 2017.

### **2) Background**

The financial reports to 31 December 2017 are presented for Council's attention and include:

1. Consolidated operating statement, with accompanying operating statements for the key operational areas of Council. These compare actual results with budget.
2. Exceptions and trends report.
3. A detailed list of capital works project expenditure to date.
4. A detailed list of capital resealing project expenditure to date.
5. A detailed list of capital gravelling project expenditure to date.
6. A summary of rates outstanding, including a comparison with the level of outstanding rates for the same period last year.
7. Cash reconciliation & investments summary.

### **3) Strategic/Annual Plan Conformance**

The Annual Plan requires the financial reports to December 2017 be presented at the January 2018 Council meeting.

Furthers the objectives of Council's Community Strategic Plan 2014 to 2024:

- Future direction (5) - Innovative leadership and community governance

### **4) Policy Implications**

Not applicable.

### **5) Statutory Requirements**

Not applicable.

### **6) Risk Management**

Not applicable.

## **7) Consultation with State Government and other Authorities**

Not applicable.

## **8) Community Consultation**

Not applicable.

## **9) Financial Impact**

Not applicable.

## **10) Alternative Options**

Not applicable.

## **11) Officers Comments**

The financial performance for six months of the financial year is discussed in the Exception and Trends Report, which is attached.

**AUTHOR:** Justin Marshall  
SENIOR ACCOUNTANT

## **12) Recommendation**

**It is recommended that Council receive the following financial reports for the period ended 31 December 2017:**

- 1. Consolidated operating statement with accompanying operating statements for the key operational areas of Council.**
- 2. Exception and trends report.**
- 3. A detailed list of capital works project expenditure to date.**
- 4. A detailed list of capital resealing project expenditure to date.**
- 5. A detailed list of capital gravelling project expenditure to date.**
- 6. A summary of rates outstanding.**
- 7. Cash reconciliation & investments summary.**

## **DECISION:**



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Total Council Operations</b>			
<b>Operating Revenue</b>			
Rate Revenue	11,880,438	11,890,600	99.91%
Fees & User Charges	602,704	1,126,500	53.50%
Contributions & Donations	67,933	420,000	16.17%
Interest	405,550	751,000	54.00%
Grants & Subsidies	3,876,339	6,272,600	61.80%
Other Revenue	328,716	1,023,300	32.12%
<b>Total Operating Revenue</b>	<b>\$ 17,161,681</b>	<b>\$ 21,484,000</b>	<b>79.88%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	673,773	1,203,800	55.97%
Corporate Services	942,122	2,006,200	46.96%
Infrastructure Services	1,350,029	3,363,100	40.14%
Works	1,817,482	3,682,300	49.36%
Community & Development Services	1,192,057	2,661,300	44.79%
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 5,975,462</b>	<b>\$ 12,916,700</b>	<b>46.26%</b>
Interest	105,660	241,300	43.79%
Depreciation	2,526,000	5,052,000	50.00%
Payments to Government Authorities	284,051	1,136,200	25.00%
Administration Allocated	-	-	
Other Payments	58,887	250,200	23.54%
<b>Total Operating Expenditure</b>	<b>\$ 8,950,061</b>	<b>\$ 19,596,400</b>	<b>45.67%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 8,211,620</b>	<b>\$ 1,887,600</b>	



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>General Administration</b>			
<b>Operating Revenue</b>			
Rate Revenue	-	-	
Fees & User Charges	107,398	172,500	62.26%
Contributions & Donations	764	2,000	38.18%
Interest	-	-	
Grants & Subsidies	-	-	
Other Revenue	3,108	1,500	207.20%
<b>Total Operating Revenue</b>	<b>\$ 111,270</b>	<b>\$ 176,000</b>	<b>63.22%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	572,759	987,300	58.01%
Corporate Services	749,350	1,597,700	46.90%
Infrastructure Services	72,597	244,800	29.66%
Works	4,007	5,200	77.06%
Community & Development Services	53,229	90,100	59.08%
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 1,451,943</b>	<b>\$ 2,925,100</b>	<b>49.64%</b>
Interest	-	-	
Depreciation	99,800	199,600	50.00%
Payments to Government Authorities	-	-	
Administration Allocated	(28,565)	(80,200)	35.62%
Other Payments	500	30,000	1.67%
<b>Total Operating Expenditure</b>	<b>\$ 1,523,678</b>	<b>\$ 3,074,500</b>	<b>49.56%</b>
<b>Operating Surplus/(Deficit)</b>	<b>(\$ 1,412,409)</b>	<b>(\$ 2,898,500)</b>	<b>48.73%</b>



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Roads Streets and Bridges</b>			
<b>Operating Revenue</b>			
Rate Revenue	-	-	
Fees & User Charges	-	64,500	0.00%
Contributions & Donations	-	200,000	0.00%
Interest	-	-	
Grants & Subsidies	1,474,042	2,813,300	52.40%
Other Revenue	2,250	-	
<b>Total Operating Revenue</b>	<b>\$ 1,476,292</b>	<b>\$ 3,077,800</b>	<b>47.97%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	-	-	
Corporate Services	-	-	
Infrastructure Services	74,581	192,400	38.76%
Works	1,154,345	2,177,700	53.01%
Community & Development Services	-	-	
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 1,228,926</b>	<b>\$ 2,370,100</b>	<b>51.85%</b>
Interest	-	-	
Depreciation	1,596,700	3,193,400	50.00%
Payments to Government Authorities	-	-	
Administration Allocated	-	-	
Other Payments	-	100,000	0.00%
<b>Total Operating Expenditure</b>	<b>\$ 2,825,626</b>	<b>\$ 5,663,500</b>	<b>49.89%</b>
<b>Operating Surplus/(Deficit)</b>	<b>(\$ 1,349,334)</b>	<b>(\$ 2,585,700)</b>	<b>52.18%</b>



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Health and Community and Welfare</b>			
<b>Operating Revenue</b>			
Rate Revenue	2,577,829	2,572,900	100.19%
Fees & User Charges	211,735	424,600	49.87%
Contributions & Donations	20,000	164,000	12.20%
Interest	107,410	211,300	50.83%
Grants & Subsidies	1,824,776	2,006,500	90.94%
Other Revenue	72,583	86,200	84.20%
<b>Total Operating Revenue</b>	<b>\$ 4,814,333</b>	<b>\$ 5,465,500</b>	<b>88.09%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	101,014	216,500	46.66%
Corporate Services	166,158	368,000	45.15%
Infrastructure Services	910,605	2,291,800	39.73%
Works	367,583	992,500	37.04%
Community & Development Services	391,639	1,025,500	38.19%
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 1,936,999</b>	<b>\$ 4,894,300</b>	<b>39.58%</b>
Interest	105,660	241,300	43.79%
Depreciation	264,700	529,400	50.00%
Payments to Government Authorities	284,051	1,136,200	25.00%
Administration Allocated	28,462	79,600	35.76%
Other Payments	38,405	77,600	49.49%
<b>Total Operating Expenditure</b>	<b>\$ 2,658,276</b>	<b>\$ 6,958,400</b>	<b>38.20%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 2,156,057</b>	<b>(\$ 1,492,900)</b>	<b>-144.42%</b>



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Land Use Planning and Building</b>			
<b>Operating Revenue</b>			
Rate Revenue	-	-	
Fees & User Charges	183,966	280,400	65.61%
Contributions & Donations	-	-	
Interest	-	-	
Grants & Subsidies	-	-	
Other Revenue	33,535	37,000	90.63%
<b>Total Operating Revenue</b>	<b>\$ 217,501</b>	<b>\$ 317,400</b>	<b>68.53%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	-	-	
Corporate Services	-	-	
Infrastructure Services	108,439	229,300	47.29%
Works	-	-	
Community & Development Services	483,348	1,076,300	44.91%
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 591,786</b>	<b>\$ 1,305,600</b>	<b>45.33%</b>
Interest	-	-	
Depreciation	9,400	18,800	50.00%
Payments to Government Authorities	-	-	
Administration Allocated	-	-	
Other Payments	-	-	
<b>Total Operating Expenditure</b>	<b>\$ 601,186</b>	<b>\$ 1,324,400</b>	<b>45.39%</b>
<b>Operating Surplus/(Deficit)</b>	<b>(\$ 383,686)</b>	<b>(\$ 1,007,000)</b>	<b>38.10%</b>



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Recreation and Culture</b>			
<b>Operating Revenue</b>			
Rate Revenue	-	-	
Fees & User Charges	99,606	184,500	53.99%
Contributions & Donations	33,352	54,000	61.76%
Interest	-	-	
Grants & Subsidies	41,000	348,000	11.78%
Other Revenue	19,162	16,000	119.76%
<b>Total Operating Revenue</b>	<b>\$ 193,119</b>	<b>\$ 602,500</b>	<b>32.05%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	-	-	
Corporate Services	23,056	33,500	68.82%
Infrastructure Services	165,113	401,400	41.13%
Works	462,976	892,600	51.87%
Community & Development Services	263,842	475,900	55.44%
<b>Maintenance &amp; Working Expenses</b>	<b>\$ 914,986</b>	<b>\$ 1,803,400</b>	<b>50.74%</b>
Interest	-	-	
Depreciation	365,550	731,100	50.00%
Payments to Government Authorities	-	-	
Administration Allocated	-	-	
Other Payments	19,330	41,600	46.47%
<b>Total Operating Expenditure</b>	<b>\$ 1,299,867</b>	<b>\$ 2,576,100</b>	<b>50.46%</b>
<b>Operating Surplus/(Deficit)</b>	<b>(\$ 1,106,747)</b>	<b>(\$ 1,973,600)</b>	<b>56.08%</b>



# Meander Valley Council

## 2018 Operating Statement as at 31-Dec-2017

	Actual 2018	Budget 2018	% of Budget
<b>Unallocated and Unclassified</b>			
<b>Operating Revenue</b>			
Rate Revenue	9,302,609	9,317,700	99.84%
Fees & User Charges	-	-	
Contributions & Donations	13,818	-	
Interest	298,140	539,700	55.24%
Grants & Subsidies	536,521	1,104,800	48.56%
Other Revenue	198,079	882,600	22.44%
<b>Total Operating Revenue</b>	<b>\$ 10,349,167</b>	<b>\$ 11,844,800</b>	<b>87.37%</b>
<b>Operating Expenditure</b>			
<b>Departments</b>			
Governance	-	-	
Corporate Services	3,557	7,000	50.82%
Infrastructure Services	18,694	3,400	549.83%
Works	(171,429)	(385,700)	44.45%
Community & Development Services	-	(6,500)	0.00%
<b>Maintenance &amp; Working Expenses</b>	<b>(\$ 149,177)</b>	<b>(\$ 381,800)</b>	<b>39.07%</b>
Interest	-	-	
Depreciation	189,850	379,700	50.00%
Payments to Government Authorities	-	-	
Administration Allocated	103	600	17.09%
Other Payments	652	1,000	65.25%
<b>Total Operating Expenditure</b>	<b>\$ 41,427</b>	<b>(\$ 500)</b>	<b>-8285.50%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 10,307,739</b>	<b>\$ 11,845,300</b>	<b>87.02%</b>

# Capital Project Report

## 2018 Financial Year



08-Jan-2018 03:00:22

	<i><b>Brought Forward Amount</b></i>	<i><b>Current Amount</b></i>	<i><b>Total Amount</b></i>	<i><b>Budget Amount</b></i>	<i><b>Variance Amount</b></i>	<i><b>Percentage of Budget</b></i>
<b>Administration</b>						
<b>100 - Administration</b>						
5039 Deloraine Office/Serv Tas Building - Costs of Sale 10/11	\$9,950.01	\$0.00	\$9,950.01	\$0.00	-\$9,950.01	0.00%
5041 Council Chambers - Foyer Doors 16/17	\$1,384.20	\$635.87	\$2,020.07	\$7,500.00	\$5,479.93	26.93%
5101 Workstations and Peripherals	\$0.00	\$24,026.56	\$24,026.56	\$23,000.00	-\$1,026.56	104.46%
5102 Network Infrastructure	\$0.00	\$3,916.43	\$3,916.43	\$36,800.00	\$32,883.57	10.64%
5111 Software and Upgrades	\$14,900.00	\$7,700.00	\$22,600.00	\$88,200.00	\$65,600.00	25.62%
5115 Conquest Software Upgrade 14/15	\$5,059.71	\$0.00	\$5,059.71	\$45,000.00	\$39,940.29	11.24%
5116 Mobile Inspection Software 16/17	\$14,186.78	\$7,146.44	\$21,333.22	\$34,000.00	\$12,666.78	62.74%
5127 MVC Website Upgrade	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	0.00%
5128 New Projector - Council Chambers	\$0.00	\$0.00	\$0.00	\$4,000.00	\$4,000.00	0.00%
100 - Administration Sub Total	\$45,480.70	\$43,425.30	\$88,906.00	\$253,500.00	\$164,594.00	35.07%
<b>100 - Administration Sub Total</b>	<b>\$45,480.70</b>	<b>\$43,425.30</b>	<b>\$88,906.00</b>	<b>\$253,500.00</b>	<b>\$164,594.00</b>	<b>35.07%</b>

## Roads Streets and Bridges

### 201 - Roads and Streets

5506 Priestleys Lane - Birralee	\$0.00	\$8,023.55	\$8,023.55	\$30,000.00	\$21,976.45	26.75%
5660 Fern Bank Rd - Osmaston	\$0.00	\$6,968.05	\$6,968.05	\$20,000.00	\$13,031.95	34.84%
5722 Franklin St - Westbury	\$0.00	\$69,873.21	\$69,873.21	\$70,000.00	\$126.79	99.82%
5779 Monds Lne - Carrick 15/16	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00	0.00%
5813 Jane St - Bracknell	\$16,466.23	\$82.63	\$16,548.86	\$80,000.00	\$63,451.14	20.69%
5825 Emu Bay Rd - Deloraine	\$0.00	\$114.71	\$114.71	\$60,000.00	\$59,885.29	0.19%
5829 Morrison St - Deloraine	\$0.00	\$0.00	\$0.00	\$45,600.00	\$45,600.00	0.00%
5852 Goderick East - Deloraine 12/13	\$0.00	\$0.00	\$0.00	\$54,000.00	\$54,000.00	0.00%

# Capital Project Report

## 2018 Financial Year



08-Jan-2018 03:00:22

	<b>Brought Forward Amount</b>	<b>Current Amount</b>	<b>Total Amount</b>	<b>Budget Amount</b>	<b>Variance Amount</b>	<b>Percentage of Budget</b>
5856 Towerhill St - Deloraine	\$0.00	\$3,720.38	\$3,720.38	\$115,000.00	\$111,279.62	3.24%
5859 Parsonage St - Deloraine	\$0.00	\$20,029.04	\$20,029.04	\$12,250.00	-\$7,779.04	163.50%
5863 Goderick West - Deloraine	\$0.00	\$29,449.85	\$29,449.85	\$17,000.00	-\$12,449.85	173.23%
5888 Winifred Jane Cres - Hadspen	\$0.00	\$25,224.33	\$25,224.33	\$24,000.00	-\$1,224.33	105.10%
5893 Pitcher Pd - Prospect Vale	\$0.00	\$6,252.37	\$6,252.37	\$15,000.00	\$8,747.63	41.68%
5942 Bordin St - Prospect Vale	\$0.00	\$1,493.25	\$1,493.25	\$20,000.00	\$18,506.75	7.47%
5952 Jardine Cr - Prospect Vale	\$0.00	\$13,528.27	\$13,528.27	\$20,000.00	\$6,471.73	67.64%
5956 Bradford Av - Prospect Vale	\$0.00	\$152.98	\$152.98	\$20,000.00	\$19,847.02	0.76%
5975 Adelaide St - Westbury	\$0.00	\$450.28	\$450.28	\$50,000.00	\$49,549.72	0.90%
5976 Taylor St - Westbury	\$0.00	\$40,308.60	\$40,308.60	\$40,000.00	-\$308.60	100.77%
5980 Dexter St Footpath, Adelaide St to William St - Westbury	\$641.66	\$35,015.37	\$35,657.03	\$35,000.00	-\$657.03	101.88%
5983 Old Bass Highway, Westbury 16/17	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00	0.00%
5984 Old Bass Highway - Carrick	\$0.00	\$23,403.05	\$23,403.05	\$20,000.00	-\$3,403.05	117.02%
5990 Meander Valley Road - Deloraine	\$0.00	\$98,600.94	\$98,600.94	\$80,000.00	-\$18,600.94	123.25%
6102 Blackstone Rd - Blackstone Heights 16/17	\$494.81	\$425.27	\$920.08	\$110,000.00	\$109,079.92	0.84%
6113 Caveside Rd - Caveside	\$0.00	\$123,266.52	\$123,266.52	\$115,000.00	-\$8,266.52	107.19%
6125 R2R 2018 Dairy Plains Rd - Western Creek	\$0.00	\$369,506.71	\$369,506.71	\$380,000.00	\$10,493.29	97.24%
6134 Racecourse Dr - Deloraine 16/17	\$0.00	\$0.00	\$0.00	\$11,000.00	\$11,000.00	0.00%
6138 Lansdowne Pl - Deloraine	\$0.00	\$12,740.04	\$12,740.04	\$45,000.00	\$32,259.96	28.31%
6171 Liena Rd - Liena	\$11,614.47	\$0.00	\$11,614.47	\$40,000.00	\$28,385.53	29.04%
6172 Gulf Rd - Liffey	\$298,007.65	\$854,676.03	\$1,152,683.68	\$1,000,000.00	-\$152,683.68	115.27%
6176 Meander Main Rd - Meander	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	0.00%
6195 R2R 2018 Gannons Hill Rd - Moltema	\$0.00	\$107,474.35	\$107,474.35	\$160,000.00	\$52,525.65	67.17%
6223 Dynans Bridge Rd - Weegena	\$1,533.25	\$0.00	\$1,533.25	\$6,000.00	\$4,466.75	25.55%
6224 R2R 2018 Weegena Rd - Weegena	\$0.00	\$95,009.12	\$95,009.12	\$100,000.00	\$4,990.88	95.01%
6247 Whitemore Rd - Whitemore	\$0.00	\$4,864.34	\$4,864.34	\$55,000.00	\$50,135.66	8.84%
6259 Blackspot Railton Rd, Kimberley	\$16,272.68	\$30,148.23	\$46,420.91	\$285,000.00	\$238,579.09	16.29%
6272 East Barrack St - Deloraine	\$0.00	\$2,204.60	\$2,204.60	\$25,000.00	\$22,795.40	8.82%
6276 Westbury Rd - Prospect: Transport Study Projects	\$0.00	\$0.00	\$0.00	\$1,609,500.00	\$1,609,500.00	0.00%

# Capital Project Report

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	<i><b>Brought Forward Amount</b></i>	<i><b>Current Amount</b></i>	<i><b>Total Amount</b></i>	<i><b>Budget Amount</b></i>	<i><b>Variance Amount</b></i>	<i><b>Percentage of Budget</b></i>
6283 Westbury Rd - Cycling Lanes 13/14	\$15,873.50	\$0.00	\$15,873.50	\$50,000.00	\$34,126.50	31.75%
6284 New Footpath Developments - Westbury 15/16	\$0.00	\$0.00	\$0.00	\$115,668.00	\$115,668.00	0.00%
6285 New Footpath Developments - Blackstone	\$0.00	\$8,260.59	\$8,260.59	\$393,500.00	\$385,239.41	2.10%
6288 Westbury Rd - PVP Entrance Roundabout 15/16	\$38,214.17	\$3,002.61	\$41,216.78	\$50,000.00	\$8,783.22	82.43%
6289 Mt Leslie Rd - St Patricks Parking Improvements 16/17	\$45,116.07	\$500.50	\$45,616.57	\$215,000.00	\$169,383.43	21.22%
6294 Westbury Roads Connectivity Program 16/17	\$0.00	\$0.00	\$0.00	\$258,500.00	\$258,500.00	0.00%
6295 Railton Road - Underpass	\$0.00	\$37.18	\$37.18	\$50,000.00	\$49,962.82	0.07%
6695 Nutt Street - Deloraine	\$0.00	\$275.60	\$275.60	\$45,000.00	\$44,724.40	0.61%
<b>201 - Roads and Streets Sub Total</b>	<b>\$444,234.49</b>	<b>\$1,995,082.55</b>	<b>\$2,439,317.04</b>	<b>\$6,027,018.00</b>	<b>\$3,587,700.96</b>	<b>40.47%</b>
<b>210 - Bridges</b>						
5204 Liffey River Liffey/Bracknell	\$27,882.33	\$23,005.41	\$50,887.74	\$30,000.00	-\$20,887.74	169.63%
5205 Liffey River Pitts Lane	\$0.00	\$12,867.61	\$12,867.61	\$12,400.00	-\$467.61	103.77%
5228 Mersey River Liena Road	\$0.00	\$81,935.58	\$81,935.58	\$100,000.00	\$18,064.42	81.94%
5237 Ration Tree Creek Echo Valley Road 16/17	\$0.00	\$37.19	\$37.19	\$260,000.00	\$259,962.81	0.01%
5247 R2R 2018 Western Creek Fellows Road	\$2,055.30	\$5,658.73	\$7,714.03	\$60,000.00	\$52,285.97	12.86%
5266 Un-Named Creek R/Vale-Selbourne	\$37.59	\$8,977.00	\$9,014.59	\$10,000.00	\$985.41	90.15%
5267 R2R 2018 Western Creek Montana Road	\$4,930.64	\$193,175.56	\$198,106.20	\$205,000.00	\$6,893.80	96.64%
5279 Dry Creek Mayberry Road	\$24.16	\$72,901.82	\$72,925.98	\$25,000.00	-\$47,925.98	291.70%
5290 Mersey River Union Bridge Road	\$1,555,453.34	\$1,245,675.45	\$2,801,128.79	\$2,489,800.00	-\$311,328.79	112.50%
5348 Cubits Creek Western Creek Road	\$37.59	\$3,386.39	\$3,423.98	\$5,000.00	\$1,576.02	68.48%
5363 Allsops Creek Bankton Road	\$0.00	\$5,527.13	\$5,527.13	\$80,000.00	\$74,472.87	6.91%
5369 Myrtle Creek Myrtle Creek Road	\$4,773.09	\$0.00	\$4,773.09	\$0.00	-\$4,773.09	0.00%
<b>210 - Bridges Sub Total</b>	<b>\$1,595,194.04</b>	<b>\$1,653,147.87</b>	<b>\$3,248,341.91</b>	<b>\$3,277,200.00</b>	<b>\$28,858.09</b>	<b>99.12%</b>
<b>200 - Roads Streets and Bridges Sub Total</b>	<b>\$2,039,428.53</b>	<b>\$3,648,230.42</b>	<b>\$5,687,658.95</b>	<b>\$9,304,218.00</b>	<b>\$3,616,559.05</b>	<b>61.13%</b>

# Capital Project Report

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	<i>Brought Forward Amount</i>	<i>Current Amount</i>	<i>Total Amount</i>	<i>Budget Amount</i>	<i>Variance Amount</i>	<i>Percentage of Budget</i>
<b>Health and Community Welfare</b>						
<b>310 - Animal Control</b>						
6705 Westbury Council Offices - Dog Pens & Parking	\$0.00	\$102.67	\$102.67	\$15,000.00	\$14,897.33	0.68%
310 - Animal Control Sub Total	\$0.00	\$102.67	\$102.67	\$15,000.00	\$14,897.33	0.68%
<b>315 - Cemeteries</b>						
6306 Deloraine Lawn Cemetery Seating, Bins & Garden 16/17	\$0.00	\$0.00	\$0.00	\$28,700.00	\$28,700.00	0.00%
6308 Deloraine Lawn Cemetery Shelter 16/17	\$0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00	0.00%
315 - Cemeteries Sub Total	\$0.00	\$0.00	\$0.00	\$43,700.00	\$43,700.00	0.00%
<b>316 - Community Amenities</b>						
6520 Public Wifi at Council Buildings Project 15/16	\$4,149.97	\$2,920.21	\$7,070.18	\$45,000.00	\$37,929.82	15.71%
6521 Westbury Rec Grd - Public Toilets 15/16	\$14,416.32	\$111,793.17	\$126,209.49	\$100,000.00	-\$26,209.49	126.21%
6522 Main St, Hadspen - Bus Shelter 16/17	\$2,770.98	\$20,114.10	\$22,885.08	\$15,000.00	-\$7,885.08	152.57%
6523 CCTV Security Cameras Westbury & Deloraine	\$0.00	\$37.19	\$37.19	\$60,000.00	\$59,962.81	0.06%
316 - Community Amenities Sub Total	\$21,337.27	\$134,864.67	\$156,201.94	\$220,000.00	\$63,798.06	71.00%
<b>317 - Street Lighting</b>						
6551 Northern Lights - LED Street Light Replacement	\$0.00	\$27,435.55	\$27,435.55	\$340,800.00	\$313,364.45	8.05%
317 - Street Lighting Sub Total	\$0.00	\$27,435.55	\$27,435.55	\$340,800.00	\$313,364.45	8.05%
<b>321 - Tourism &amp; Area Promotion</b>						
7831 Folk Museum - Rising Damp Corrective Works	\$6,486.40	\$1,423.45	\$7,909.85	\$100,000.00	\$92,090.15	7.91%
7832 Westbury Sihlouette Trail Lighting	\$1,306.70	\$0.00	\$1,306.70	\$5,000.00	\$3,693.30	26.13%
321 - Tourism & Area Promotion Sub Total	\$7,793.10	\$1,423.45	\$9,216.55	\$105,000.00	\$95,783.45	8.78%

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	<i><b>Brought Forward Amount</b></i>	<i><b>Current Amount</b></i>	<i><b>Total Amount</b></i>	<i><b>Budget Amount</b></i>	<i><b>Variance Amount</b></i>	<i><b>Percentage of Budget</b></i>
<b>322 - Economic Services</b>						
7851 HUGAP Sewerage Infrastructure Design	\$194,329.27	\$60,169.06	\$254,498.33	\$0.00	-\$254,498.33	0.00%
7852 HUGAP Water Infrastructure Design	\$27,617.26	\$3,417.81	\$31,035.07	\$0.00	-\$31,035.07	0.00%
7853 HUGAP Electrical Load Design	\$19,638.58	\$7.07	\$19,645.65	\$0.00	-\$19,645.65	0.00%
7854 HUGAP Road Infrastructure	\$18,550.95	\$31,818.61	\$50,369.56	\$0.00	-\$50,369.56	0.00%
7855 HUGAP Stormwater Infrastructure	\$1,797.92	\$927.70	\$2,725.62	\$0.00	-\$2,725.62	0.00%
322 - Economic Services Sub Total	\$261,933.98	\$96,340.25	\$358,274.23	\$0.00	-\$358,274.23	0.00%
<b>335 - Household Waste</b>						
6602 Westbury Land fill Site	\$0.00	\$18,553.86	\$18,553.86	\$110,800.00	\$92,246.14	16.75%
6605 Mobile Garbage Bins	\$0.00	\$0.00	\$0.00	\$30,000.00	\$30,000.00	0.00%
6611 Mobile Organics Bins	\$12,717.56	\$3,847.66	\$16,565.22	\$300,000.00	\$283,434.78	5.52%
6612 Design of Cluan Tip Rehabilitation 16/17	\$30,699.87	\$12.39	\$30,712.26	\$20,000.00	-\$10,712.26	153.56%
6613 Weighbridge Deloraine Landfill 16/17	\$0.00	\$0.00	\$0.00	\$60,000.00	\$60,000.00	0.00%
6614 Deloraine Landfill - Security Fence	\$0.00	\$27,950.49	\$27,950.49	\$25,000.00	-\$2,950.49	111.80%
335 - Household Waste Sub Total	\$43,417.43	\$50,364.40	\$93,781.83	\$545,800.00	\$452,018.17	17.18%
<b>351 - Storm Water Drainage</b>						
6404 East St, Carrick Stormwater	\$0.00	\$6,190.06	\$6,190.06	\$20,000.00	\$13,809.94	30.95%
6405 Elizabeth St Bracknell Stormwater	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	0.00%
6406 Louisa St Bracknell Stormwater	\$0.00	\$0.00	\$0.00	\$14,000.00	\$14,000.00	0.00%
6409 West Barrack St, Deloraine - Stormwater	\$0.00	\$11,822.80	\$11,822.80	\$12,000.00	\$177.20	98.52%
6410 Joscelyn St, Hagley - Stormwater	\$0.00	\$82.63	\$82.63	\$40,000.00	\$39,917.37	0.21%
6411 Lonsdale Lane, Westbury - Stormwater	\$0.00	\$82.63	\$82.63	\$40,000.00	\$39,917.37	0.21%
6414 Winifred-Jane Cres, Hadspen - Stormwater 14/15	\$7,335.10	\$0.00	\$7,335.10	\$40,000.00	\$32,664.90	18.34%
6417 Tyler House, Prospect - Stormwater 14/15	\$4,447.88	\$7,563.62	\$12,011.50	\$40,000.00	\$27,988.50	30.03%
6418 West Goderich St - Stormwater	\$0.00	\$12,039.24	\$12,039.24	\$8,000.00	-\$4,039.24	150.49%

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	<b>Brought Forward Amount</b>	<b>Current Amount</b>	<b>Total Amount</b>	<b>Budget Amount</b>	<b>Variance Amount</b>	<b>Percentage of Budget</b>
6431 Dexter St Stormwater	\$6,249.13	\$67,904.71	\$74,153.84	\$70,000.00	-\$4,153.84	105.93%
6433 Jane St, Bracknell Stormwater 15/16	\$0.00	\$4,167.65	\$4,167.65	\$0.00	-\$4,167.65	0.00%
6460 Henrietta St Bracknell Stormwater	\$0.00	\$0.00	\$0.00	\$6,000.00	\$6,000.00	0.00%
6470 William St Westbury - Stormwater 16/17	\$971.00	\$12,449.12	\$13,420.12	\$36,000.00	\$22,579.88	37.28%
6479 Kipling Cr - Hadspen Stormwater 15/16	\$7,806.49	\$0.00	\$7,806.49	\$196,100.00	\$188,293.51	3.98%
6489 Liffey St Carrick Stormwater	\$76,065.98	\$27.00	\$76,092.98	\$47,800.00	-\$28,292.98	159.19%
6490 Deloraine Community Complex – Stormwater Improvements	\$6,877.39	\$340.03	\$7,217.42	\$10,000.00	\$2,782.58	72.17%
6491 Clayton Place Stormwater	\$4,433.41	\$59,798.81	\$64,232.22	\$72,000.00	\$7,767.78	89.21%
6493 Gulf Rd, Liffey - Stormwater	\$0.00	\$23,922.05	\$23,922.05	\$0.00	-\$23,922.05	0.00%
6494 Side Entry Pit Replacements 15/16	\$3,091.43	\$8,749.95	\$11,841.38	\$16,000.00	\$4,158.62	74.01%
6495 Urban Stormwater Drainage – Program Budget	\$0.00	\$0.00	\$0.00	\$65,700.00	\$65,700.00	0.00%
6496 Open Drain Program, Blackstone Heights 15/16	\$0.00	\$0.00	\$0.00	\$100,000.00	\$100,000.00	0.00%
6497 Open Drain Program, Carrick	\$0.00	\$0.00	\$0.00	\$92,200.00	\$92,200.00	0.00%
6498 Open Drain Program, Westbury	\$0.00	\$0.00	\$0.00	\$40,000.00	\$40,000.00	0.00%
6499 Open Drain Program, Bracknell	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	0.00%
<b>351 - Storm Water Drainage Sub Total</b>	<b>\$117,277.81</b>	<b>\$215,140.30</b>	<b>\$332,418.11</b>	<b>\$985,800.00</b>	<b>\$653,381.89</b>	<b>33.72%</b>
<b>300 - Health and Community Welfare Sub Total</b>	<b>\$451,759.59</b>	<b>\$525,671.29</b>	<b>\$977,430.88</b>	<b>\$2,256,100.00</b>	<b>\$1,278,669.12</b>	<b>43.32%</b>

### Recreation and Culture

#### 505 - Public Halls

7428 Bracknell Hall - Bracing Building Structure 16/17	\$4,203.08	\$303.77	\$4,506.85	\$35,000.00	\$30,493.15	12.88%
7433 Selbourne Hall - Re-wiring	\$0.00	\$12,852.00	\$12,852.00	\$15,000.00	\$2,148.00	85.68%
7434 Selbourne Hall - Roofing Of Entrance	\$0.00	\$11,168.97	\$11,168.97	\$15,000.00	\$3,831.03	74.46%
7435 Meander Hall - Partial Roof Replacement	\$0.00	\$20,293.77	\$20,293.77	\$25,000.00	\$4,706.23	81.18%
<b>505 - Public Halls Sub Total</b>	<b>\$4,203.08</b>	<b>\$44,618.51</b>	<b>\$48,821.59</b>	<b>\$90,000.00</b>	<b>\$41,178.41</b>	<b>54.25%</b>

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	<i><b>Brought Forward Amount</b></i>	<i><b>Current Amount</b></i>	<i><b>Total Amount</b></i>	<i><b>Budget Amount</b></i>	<i><b>Variance Amount</b></i>	<i><b>Percentage of Budget</b></i>
<b>515 - Swimming Pools and Other</b>						
7505 Caveside Pool Replace Fence	\$0.00	\$389.11	\$389.11	\$22,000.00	\$21,610.89	1.77%
515 - Swimming Pools and Other Sub Total	\$0.00	\$389.11	\$389.11	\$22,000.00	\$21,610.89	1.77%
<b>525 - Recreation Grounds &amp; Sports Facilities</b>						
7610 Westbury Sports Ctr - Electrical Upgrade	\$0.00	\$12.39	\$12.39	\$22,000.00	\$21,987.61	0.06%
7649 Deloraine Community Complex - Male Changeroom Refurb. 16/17	\$6,451.38	\$65,022.09	\$71,473.47	\$70,000.00	-\$1,473.47	102.10%
7667 Westbury Rec Ground - New Function Ctr Development	\$0.00	\$2,054.42	\$2,054.42	\$5,000,000.00	\$4,997,945.58	0.04%
7668 Westbury Rec Ground - Building Design & Upgrade 14/15	\$130,566.38	\$20,337.16	\$150,903.54	\$1,148,781.00	\$997,877.46	13.14%
7669 Westbury Rec Grd - Bus Shelter & BBQ 15/16	\$6,135.09	\$49,516.94	\$55,652.03	\$40,000.00	-\$15,652.03	139.13%
7671 PVP Development Plan - Sportsgrounds Upgrade	\$0.00	\$0.00	\$0.00	\$124,900.00	\$124,900.00	0.00%
7678 PVP Main Access & Parking 15/16	\$96,299.00	\$2,056.70	\$98,355.70	\$100,000.00	\$1,644.30	98.36%
7681 Carrick Cenotaph Refurbishment	\$0.00	\$4,611.23	\$4,611.23	\$0.00	-\$4,611.23	0.00%
7685 PVP - Solar Photovoltaic Panel and Battery Storage System	\$0.00	\$14,167.63	\$14,167.63	\$0.00	-\$14,167.63	0.00%
7686 Westbury Skate Park - Drinking Fountain	\$0.00	\$9,881.82	\$9,881.82	\$10,000.00	\$118.18	98.82%
7687 PVP AFL & Soccer Sports Lighting	\$0.00	\$20,446.67	\$20,446.67	\$152,100.00	\$131,653.33	13.44%
525 - Recreation Grounds & Sports Facilities Sub Total	\$239,451.85	\$188,107.05	\$427,558.90	\$6,667,781.00	\$6,240,222.10	6.41%
<b>545 - Sundry Cultural Activities</b>						
7908 MVPAC Roof Renewal 16/17	\$1,014.86	\$12.39	\$1,027.25	\$60,000.00	\$58,972.75	1.71%
545 - Sundry Cultural Activities Sub Total	\$1,014.86	\$12.39	\$1,027.25	\$60,000.00	\$58,972.75	1.71%
<b>565 - Parks and Reserves</b>						
8011 Blackstone Wetlands Footbridge (No.453) 16/17	\$0.00	\$819.69	\$819.69	\$40,000.00	\$39,180.31	2.05%
8012 Deloraine Train Park - Play Equip/Retaining Wall 16/17	\$0.00	\$25,009.23	\$25,009.23	\$44,800.00	\$19,790.77	55.82%
8014 Deloraine Riverbank - New Walkway at Cenotaph	\$0.00	\$7,497.27	\$7,497.27	\$60,000.00	\$52,502.73	12.50%

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	<i><b>Brought Forward Amount</b></i>	<i><b>Current Amount</b></i>	<i><b>Total Amount</b></i>	<i><b>Budget Amount</b></i>	<i><b>Variance Amount</b></i>	<i><b>Percentage of Budget</b></i>
8015 Pitcher Parade Dog Run Improvements	\$0.00	\$465.92	\$465.92	\$24,000.00	\$23,534.08	1.94%
8017 Deloraine Rotary Park - Relocate Mountain Man	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	0.00%
8018 Chudleigh Memorial Hall - Playground Renewal	\$0.00	\$31,329.79	\$31,329.79	\$30,000.00	-\$1,329.79	104.43%
8019 Westbury Village Green - Table & Seating	\$0.00	\$31,948.49	\$31,948.49	\$30,000.00	-\$1,948.49	106.49%
8020 Bordin St Reserve - Park Improvements	\$0.00	\$14,737.25	\$14,737.25	\$65,000.00	\$50,262.75	22.67%
8024 West Parade Carpark - Install New Light	\$0.00	\$37.19	\$37.19	\$15,000.00	\$14,962.81	0.25%
8027 Molecombe Dr, Prospect - Playground Renewal	\$0.00	\$21,624.94	\$21,624.94	\$30,000.00	\$8,375.06	72.08%
8031 Deloraine Riverbank - Walkway Renewal 16/17	\$18,644.90	\$25,180.28	\$43,825.18	\$50,000.00	\$6,174.82	87.65%
8053 Blackstone Park - Sale of Public Land	\$1,369.78	\$0.00	\$1,369.78	\$0.00	-\$1,369.78	0.00%
8054 Mace St Reserve - Disposal Costs 14/15	\$738.18	\$0.00	\$738.18	\$0.00	-\$738.18	0.00%
8057 Hadspen Development Reserve Land Purchase 16/17	\$0.00	\$0.00	\$0.00	\$260,000.00	\$260,000.00	0.00%
8064 MVPAC Reserve - New Handrail	\$0.00	\$5,009.36	\$5,009.36	\$5,000.00	-\$9.36	100.19%
8079 Hadspen Lions Park - Erosion Control & Landscaping	\$0.00	\$17,214.82	\$17,214.82	\$50,000.00	\$32,785.18	34.43%
8094 Deloraine Train Park - Drinking Fountain	\$0.00	\$6,412.10	\$6,412.10	\$12,000.00	\$5,587.90	53.43%
8095 Molecombe Dr, Prospect - New Walkway	\$0.00	\$20,137.22	\$20,137.22	\$20,000.00	-\$137.22	100.69%
8096 Carrick Cenotaph - New Light Pole	\$0.00	\$0.00	\$0.00	\$10,000.00	\$10,000.00	0.00%
565 - Parks and Reserves Sub Total	\$20,752.86	\$207,423.55	\$228,176.41	\$750,800.00	\$522,623.59	30.39%
<b>500 - Recreation and Culture Sub Total</b>	<b>\$265,422.65</b>	<b>\$440,550.61</b>	<b>\$705,973.26</b>	<b>\$7,590,581.00</b>	<b>\$6,884,607.74</b>	<b>9.30%</b>

### Unallocated and Unclassified

#### 625 - Management and Indirect O/Heads

8803 Minor Plant Purchases	\$0.00	\$21,864.69	\$21,864.69	\$37,800.00	\$15,935.31	57.84%
8814 Deloraine Works Depot - Flooring & Heating	\$0.00	\$3,599.18	\$3,599.18	\$5,000.00	\$1,400.82	71.98%
625 - Management and Indirect O/Heads Sub Total	\$0.00	\$25,463.87	\$25,463.87	\$42,800.00	\$17,336.13	59.50%

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	<i>Brought Forward Amount</i>	<i>Current Amount</i>	<i>Total Amount</i>	<i>Budget Amount</i>	<i>Variance Amount</i>	<i>Percentage of Budget</i>
<b>655 - Plant Working</b>						
8701 4.5 Tonne Truck (Plant 926)	\$0.00	\$1,860.00	\$1,860.00	\$60,000.00	\$58,140.00	3.10%
8705 Truck Replacement (Plant 931)	\$0.00	\$62,560.64	\$62,560.64	\$60,000.00	-\$2,560.64	104.27%
8713 Trailer 13t (New Plant)	\$0.00	\$29,942.00	\$29,942.00	\$30,000.00	\$58.00	99.81%
8716 Ute CSR	\$0.00	\$17,736.24	\$17,736.24	\$20,000.00	\$2,263.76	88.68%
8717 Flocon Hotmix Truck (Plant 916) 16/17	\$0.00	\$225,366.42	\$225,366.42	\$230,000.00	\$4,633.58	97.99%
8726 4.5 Tonne Tip Truck (No.975)	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	0.00%
8727 4.5 Tonne Tip Truck (No.978)	\$0.00	\$0.00	\$0.00	\$5,000.00	\$5,000.00	0.00%
8728 4.5 Tonne Tip Truck (No.977)	\$0.00	\$0.00	\$0.00	\$45,000.00	\$45,000.00	0.00%
8732 Reel Mower (New Plant)	\$0.00	\$22,727.27	\$22,727.27	\$25,000.00	\$2,272.73	90.91%
8733 Tractor Replacement (Plant 800)	\$0.00	\$74,546.51	\$74,546.51	\$100,000.00	\$25,453.49	74.55%
8738 Dual Cab Ute (No.212)	\$0.00	\$26,536.42	\$26,536.42	\$29,000.00	\$2,463.58	91.50%
655 - Plant Working Sub Total	\$0.00	\$461,275.50	\$461,275.50	\$609,000.00	\$147,724.50	75.74%
<b>675 - Other Unallocated Transactions</b>						
8707 Fleet Vehicle Purchases	\$0.00	\$9,976.01	\$9,976.01	\$86,000.00	\$76,023.99	11.60%
675 - Other Unallocated Transactions Sub Total	\$0.00	\$9,976.01	\$9,976.01	\$86,000.00	\$76,023.99	11.60%
<b>600 - Unallocated and Unclassified Sub Total</b>	<b>\$0.00</b>	<b>\$496,715.38</b>	<b>\$496,715.38</b>	<b>\$737,800.00</b>	<b>\$241,084.62</b>	<b>67.32%</b>
<b>Total Capital Project Expenditure</b>	<b>\$2,802,091.47</b>	<b>\$5,154,593.00</b>	<b>\$7,956,684.47</b>	<b>\$20,142,199.00</b>	<b>\$12,185,514.53</b>	<b>39.50%</b>

# Capital Resealing Report

## 2018 Financial Year



07-Jan-2018 20:13:50

	<i>Actual Amount</i>	<i>Budget Amount</i>	<i>Variance Amount</i>	<i>Percentage of Budget</i>
<b>Roads Streets and Bridges</b>				
<b>201 - Roads and Streets</b>				
5722 Franklin St - Westbury	\$43,097.73	\$0.00	-\$43,097.73	0.00%
5750 Alport St - Kimberley	\$1,409.62	\$0.00	-\$1,409.62	0.00%
5767 Johnstones Lane - Deloraine	\$1,489.86	\$0.00	-\$1,489.86	0.00%
5770 Settlers Road - KIMBERLEY	\$93.83	\$0.00	-\$93.83	0.00%
5800 Bay View Drive - Blackstone Heights	\$115,014.29	\$0.00	-\$115,014.29	0.00%
5801 Baker Ct - Blackstone Heights	\$47,166.54	\$0.00	-\$47,166.54	0.00%
5825 Emu Bay Rd - Deloraine	\$4,172.04	\$0.00	-\$4,172.04	0.00%
5826 Church St West - Deloraine	\$1,566.22	\$0.00	-\$1,566.22	0.00%
5827 Barrack St East - Deloraine	\$3,685.40	\$0.00	-\$3,685.40	0.00%
5828 Barrack St West - Deloraine	\$5,472.64	\$0.00	-\$5,472.64	0.00%
5854 Weston St - Deloraine	\$1,535.18	\$0.00	-\$1,535.18	0.00%
5858 Gleadow St - Deloraine	\$1,911.18	\$0.00	-\$1,911.18	0.00%
5888 Winifred Jane Cres - Hadspen	\$8,510.75	\$0.00	-\$8,510.75	0.00%
5899 Mace St - Prospect Vale	\$120,309.24	\$0.00	-\$120,309.24	0.00%
5904 Lola Ct - Prospect Vale	\$9,562.78	\$0.00	-\$9,562.78	0.00%
5972 Lonsdale Prom - Westbury	\$2,644.71	\$0.00	-\$2,644.71	0.00%
5984 Old Bass Highway - Carrick	\$12,636.30	\$0.00	-\$12,636.30	0.00%
5990 Meander Valley Road - Deloraine	\$28,111.44	\$0.00	-\$28,111.44	0.00%
6100 Priestleys Lane - Birralee	\$7,724.25	\$0.00	-\$7,724.25	0.00%
6110 Bridgenorth Rd - Bridgenorth	\$516.08	\$0.00	-\$516.08	0.00%
6113 Caveside Rd - Caveside	\$7,475.76	\$0.00	-\$7,475.76	0.00%
6136 Dunhams Rd - Deloraine	\$7,828.68	\$0.00	-\$7,828.68	0.00%
6165 Warm Springs Rd - Kimberley	\$320.79	\$0.00	-\$320.79	0.00%
6166 Morrison St - Kimberley	\$5,965.21	\$0.00	-\$5,965.21	0.00%
6195 R2R 2018 Gannons Hill Rd - Moltema	\$23,227.54	\$0.00	-\$23,227.54	0.00%
6207 Quamby Brook Rd - Quamby Brook	\$7,089.17	\$0.00	-\$7,089.17	0.00%
6224 R2R 2018 Weegen Rd - Weegen	\$12,568.61	\$0.00	-\$12,568.61	0.00%
6247 Whitmore Rd - Whitmore	\$12,550.10	\$0.00	-\$12,550.10	0.00%
6299 Reseals General Budget Allocation	\$0.00	\$1,197,600.00	\$1,197,600.00	0.00%
<b>Capital Resealing Projects - Grand Total</b>	<b>\$493,655.94</b>	<b>\$1,197,600.00</b>	<b>\$703,944.06</b>	<b>41.22%</b>

# Capital Graveling Report

## 2018 Financial Year



07-Jan-2018 20:12:57

	<i>Actual Amount</i>	<i>Budget Amount</i>	<i>Variance Amount</i>	<i>Percentage of Budget</i>
<b>Roads Streets and Bridges</b>				
<b>201 - Roads and Streets</b>				
5670 Avenue - Parkham	\$234.33	\$0.00	-\$234.33	0.00%
5799 Gravel Resheeting General Budget Alloc	\$0.00	\$200,000.00	\$200,000.00	0.00%
<b>Capital Graveling Expenditure Total</b>	<b>\$234.33</b>	<b>\$200,000.00</b>	<b>\$199,765.67</b>	<b>0.12%</b>

## OPERATING STATEMENT - EXCEPTION & TRENDS REPORT

### Consolidated Operating Statement

The Operating Statement for the first half of the financial year is within management's forecasts. There are some exceptions from Councils budget adopted in June 2017 and developing trends which are discussed further in the Analysis by Function sections.

### REVENUE

**Rate Revenue** – All Rate Revenue is recognised for the year with only additional rates received on supplementary valuations between now and the financial year end to be included. The rate debtor balances outstanding at 31 December 2017 appears in Report 6.

**Fees & User Charges** – Is within budget and is expected to remain within budget at year end.

**Contributions & Donations** – Is well below budget however when new subdivision assets taken over by Council are recognised at financial year end, is expected to be within budget.

**Interest** – Is within budget and is expected to remain within budget at year end.

**Grants & Subsidies** – Is slightly above budget expectations, due primarily to the timing of grant receipts. This is expected to be within budget by year end.

**Other Revenue** – Is well below budget to the end of December principally due to the small amount of annual TasWater distributions that have been received to this point in time.

### EXPENSES

#### Departments

**Governance** – within budget expectations

**Corporate Services** – within budget expectations

**Infrastructure Services** – slightly below budget expectations

**Works** – within budget expectations

**Community & Development Services** – within budget expectations

**Interest** – Two of the four annual Tascorp loan interest instalments have been incurred. The annual recognition for unwinding of the Westbury and Deloraine tip rehabilitation provisions is recognised under interest and will be accounted for at year end which has caused this item to be under budget at December.

**Depreciation** – Is accurately calculated and accounted for at year end however a proportionate amount (50%) of the budget has been allocated for the purposes of the Operating Statement report.

**Payments to Government Authorities** – Only one of the four instalments for the Fire Levy has been incurred to December, which has caused this item to be under budget.

**Other Payments** – Is below budget. This item is largely notional accounting values of infrastructure assets written off upon reconstruction or disposal, this is accounted for as part of the year end procedures. The Tasmanian Audit Office fees and Community Grants are also recognised in Other Payments. This item is expected to be within budget at year end.

## Analysis by Function

### Administration

<b>Revenue</b>	<b>\$ 111,270</b>	<b>63.22 %</b>
<b>Expenses</b>	<b>\$ 1,523,678</b>	<b>49.56 %</b>

Revenue is above budget to December, primarily due to property sales related activities including the 337 property certificate fees income in Fees & User Charges being slightly above expectations.

Expenses for *Community & Development Services* are slightly above budget in line with the employee expenses required to prepare the 337 certificates. Expenses for *Governance* are slightly above budget due to payment of LGAT subscriptions and conference for the year. Other Payments includes the Tasmanian Audit Office fees which will be fully expensed by year end.

### Roads, Street and Bridges

<b>Revenue</b>	<b>\$ 1,476,292</b>	<b>47.97 %</b>
<b>Expenses</b>	<b>\$ 2,825,626</b>	<b>49.89 %</b>

Fees & User Charges income is the annual heavy vehicle licence fees distribution from the State Government which has not been received to date but expected in the March quarter. Grants & Subsidies reflect the receipt of 50% of the annual Grants Commission allocation, \$609,003 of the annual Commonwealth Roads to Recovery funding and \$350,000 of grant funding for the Union Bridge reconstruction. Contributions & Donations includes subdivision road assets taken over from developers and is expected to be in line with budget when accounted for at year end.

Roads & Streets maintenance expenditure is within budget expectations to this point of the year. Bridge maintenance expenditure is below budget but expected to be within budget expectations by year end. Other Payments are budgeted amounts for road and bridge infrastructure that is written off upon reconstruction or disposal, this will be accounted for at financial year end.

### Health, Community and Welfare

<b>Revenue</b>	<b>\$ 4,814,333</b>	<b>88.09 %</b>
<b>Expenses</b>	<b>\$ 2,658,276</b>	<b>38.20 %</b>

Revenue is well above budget to date, this is due to the full recognition of all Waste Management Service Charges and Fire Levies for the year. The Contributions & Donations income will increase to be within budget once stormwater infrastructure assets from new subdivisions are recognised and contributions from community cars are accounted for at year end. Interest income is two interest payments received from Aged Care Deloraine. A corresponding expense is shown in interest expenses for Council's funds on paid to Tascorp. Grant revenue includes \$1,766,353 from the Commonwealth being the first claim for natural disaster relief funding for the June 2016 floods.

Expenditure is below budget to this point of the year. *Infrastructure* is below budget due in part to the December's monthly invoices not being received for garbage and recycling collection and provision street lighting. Also, the Western Tiers Walking Infrastructure project has not yet commenced. *Works* is below budget due in part to street cleaning and stormwater maintenance being less than expected to date. *Community & Development Services* is below budget partly due to the new Business Development Officer position not yet being filled.

## Analysis by Function

Payments to Government Authorities is the State Fire Levy, one of the four instalments has been paid to December. Interest Expense is payments to Tascorp as described above however also includes a budget for the accounting transactions of unwinding the liability for Council to rehabilitate tip sites at Cluan and Deloraine.

### Land Use Planning & Building

<b>Revenue</b>	<b>\$ 217,501</b>	<b>68.53 %</b>
<b>Expenses</b>	<b>\$ 601,186</b>	<b>45.39 %</b>

Fees & User Charges are development approval and building approval fees which have exceeded expectations to date. Other Revenue includes plumbing surveying services provided to Northern Midlands Council, which are above budget expectations.

*Community & Development Services* expenditure is slightly below budget to date due to building inspections and plumbing expenses being less than anticipated.

### Recreation and Culture

<b>Revenue</b>	<b>\$ 193,119</b>	<b>32.05 %</b>
<b>Expenses</b>	<b>\$ 1,299,867</b>	<b>50.46 %</b>

Contributions from property developers in lieu of public open space due to subdivision activity, has exceeded budget. Grants & Subsidies includes funds received from the State Government towards the Four Springs universally accessible angling platform.

Overall expenditure is within budget. *Corporate Services* expenditure includes all property insurance premiums and land tax paid in the first half of the year. *Infrastructure* includes one third of the annual Deloraine pool management contract's seasonal costs paid to date. *Works* includes top dressing of sports ovals following completion of the winter season. *Community & Development Services* includes costs associated with the Deloraine recreation precinct feasibility study. Other Payments include community grants in the recreation area, with a greater amount of grants allocated to recreation than in the community development function to this point.

### Unallocated & Unclassified

<b>Revenue</b>	<b>\$ 10,349,167</b>	<b>87.37 %</b>
<b>Expenses</b>	<b>\$ 41,427</b>	<b>N/A</b>

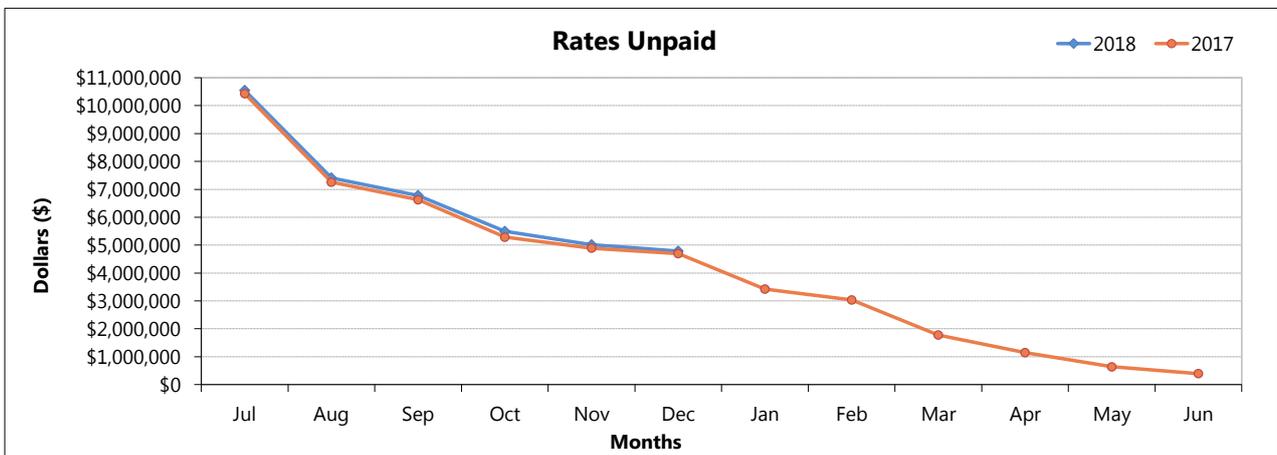
Rate Revenue is the general rates component of the general rates raised for the year. Contributions & Donations is a long service leave entitlement contribution received in respect of a new Works employee who was formerly an employee of City of Launceston Council. Interest income is slightly above budget expectations. The first two instalments of Financial Assistance Grants from the State Grants Commission have been received. Other Revenue includes Council's ownership distributions from TasWater with \$164,831 received to date, however the full amount is expected to be received at year end.

Departmental expenditure is principally accounting entries to balance depreciation across the functions of Council and gravel inventory allocations. This expenditure will trend closer to budget at year end.

## Meander Valley Rates Report as at 31/12/2017

	2018	2017
<b>Rate Balance Carried Forward from previous Year</b>	\$ 395,556	\$ 353,305
		\$ -
<b>2017/18 Rates Raised</b>	\$ 11,880,363	\$ 11,447,128
<b>Interest</b>	\$ 25,622	\$ 25,089
<b>Plus Adjustments</b>	\$ 36,957	\$ 13,132
<b>Payments Received</b>	\$ (7,549,113)	\$ (7,142,300)
<b>Rates Control Account Balance</b>	<u><u>\$ 4,789,385</u></u>	<u><u>\$ 4,696,354</u></u>

**% of Rates Unpaid** **38.93%** **39.71%**

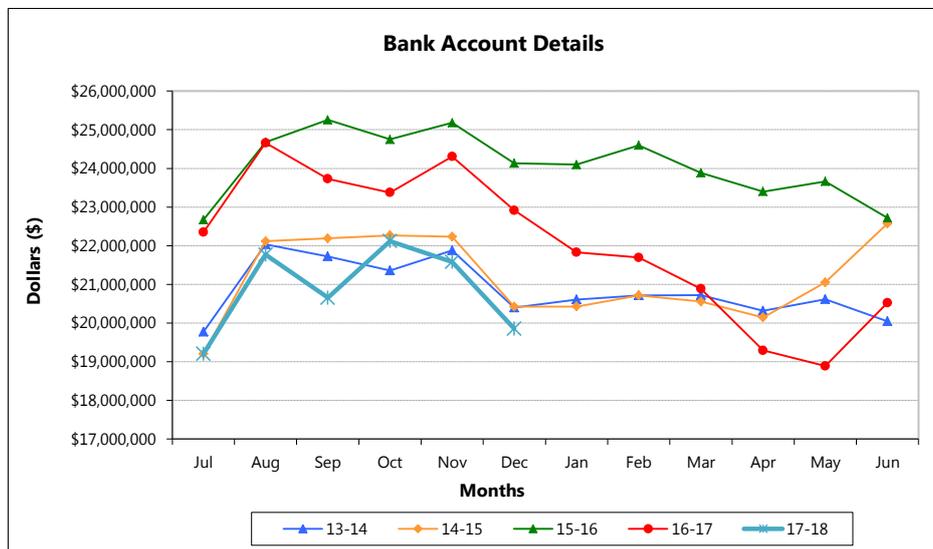


## Meander Valley Council Cash Reconciliation as at 31-December-2017

	2017-18	2016-17
<b>Balance Carried Forward from previous Year</b>	\$ 20,521,466	\$ 22,723,207
<b>Add Deposits</b>	\$ 13,560,007	\$ 13,338,984
<b>Less Payments</b>	-\$ 14,230,723	-\$ 13,146,719
<b>Balance as per Bank Account</b>	<b><u>\$ 19,850,750</u></b>	<b><u>\$ 22,915,472</u></b>

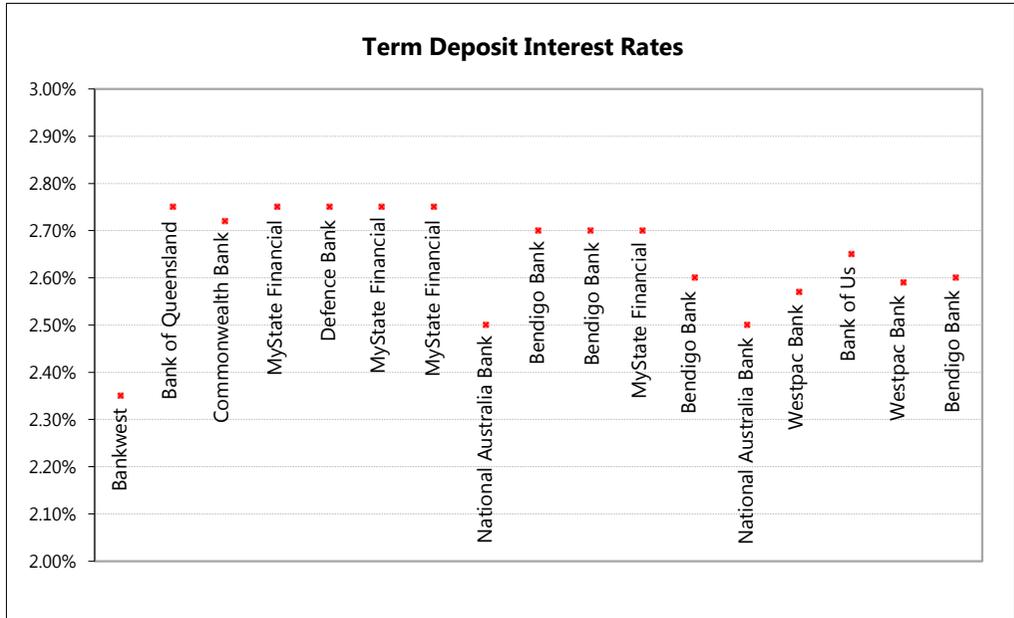
Made up of:	Amount	Interest Rate
Cash at Bank	475,069	0.75%
Bankwest at Call Account	1,100,000	1.75%
Commonwealth Bank at Call Account	100	0.70%
Commonwealth Bank Term Deposits	2,000,000	2.72%
National Bank	1,877,762	2.50%
Westpac Bank	2,000,000	2.57-2.59%
Bendigo Bank	4,264,700	2.60-2.70%
Bank of Queensland	1,000,000	2.75%
Defence Bank	1,000,000	2.75%
MyState Financial	4,133,119	2.70-2.75%
Bankwest	1,000,000	2.35%
Bank of Us	1,000,000	2.65%
	<b><u>\$ 19,850,750</u></b>	

Less expenditure commitments:	
2018 Operating expenditure outstanding	-7,960,340
2018 Capital expenditure outstanding	-13,141,939
Add assets:	
2018 Operating income outstanding	4,072,319
2018 Rate debtors outstanding	4,789,385
Estimated Commonwealth Flood Reimbursement	653,147
Part 5 agreement amounts receivable	1,319,125
2017 Audited loans receivable	3,600,000
Less liabilities:	
2017 Audited tip rehabilitation	-3,445,079
2017 Audited employee leave provisions	-1,606,714
2017 Audited loans payable	-3,600,000
<b>Adjusted Cash Balance</b>	<b><u>\$ 4,530,654</u></b>



Date: 31-December-2017

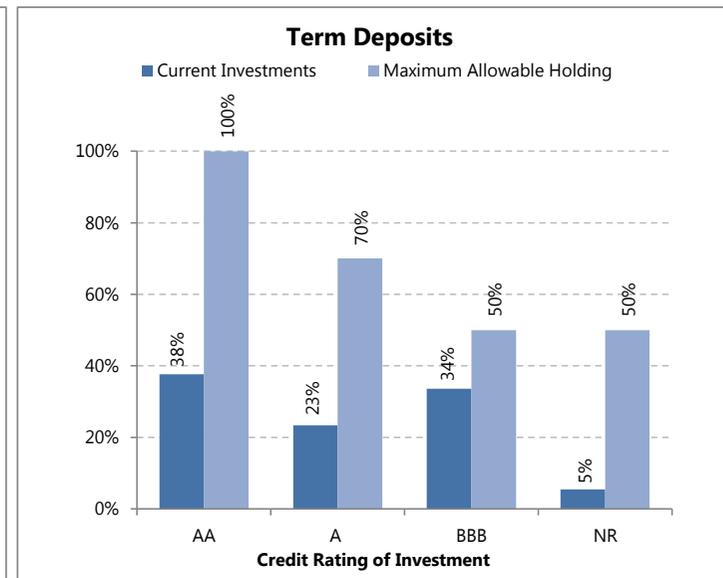
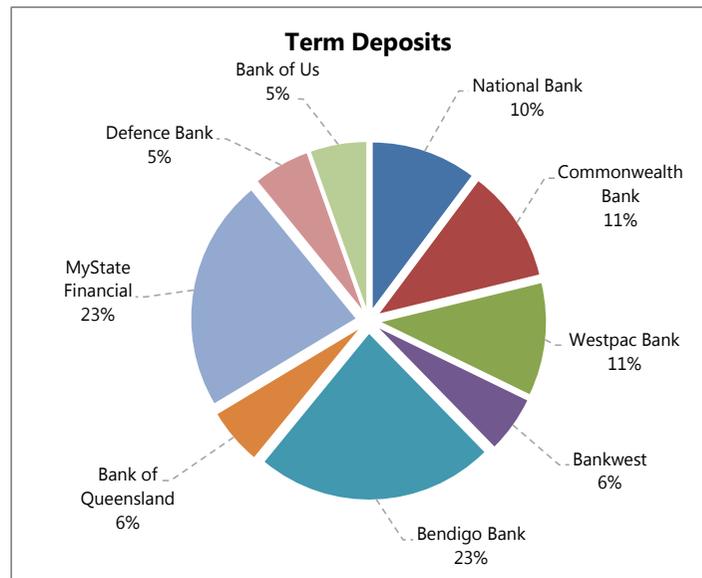
Institution	Deposit	Rate %	Entered	Due
Bankwest	1,000,000	2.35%	1/11/2017	2/01/2018
Bank of Queensland	1,000,000	2.75%	4/01/2017	4/01/2018
Commonwealth Bank	2,000,000	2.72%	16/01/2017	16/01/2018
MyState Financial	1,000,000	2.75%	2/03/2017	2/03/2018
Defence Bank	1,000,000	2.75%	8/04/2017	8/04/2018
MyState Financial	1,000,000	2.75%	12/06/2017	12/06/2018
MyState Financial	1,000,000	2.75%	15/06/2017	15/06/2018
National Australia Bank	834,034	2.50%	28/09/2017	28/06/2018
Bendigo Bank	1,000,000	2.70%	12/07/2017	12/07/2018
Bendigo Bank	1,000,000	2.70%	18/07/2017	18/07/2018
MyState Financial	1,133,119	2.70%	28/08/2017	28/08/2018
Bendigo Bank	1,027,500	2.60%	14/09/2017	14/09/2018
National Australia Bank	1,043,727	2.50%	29/10/2017	29/10/2018
Westpac Bank	1,000,000	2.57%	27/11/2017	27/11/2018
Bank of Us	1,000,000	2.65%	8/12/2017	7/12/2018
Westpac Bank	1,000,000	2.59%	14/12/2017	14/12/2018
Bendigo Bank	1,237,200	2.60%	15/12/2017	17/12/2018
<hr/>				
<b>18,275,581</b>				



Average Interest Rate 2.64%

**Term Deposits with institutions**

Institution	Credit Rating	Amount
National Bank	AA	1,877,762
Commonwealth Bank	AA	2,000,000
Westpac Bank	AA	2,000,000
Bankwest	AA	1,000,000
Bendigo Bank	A	4,264,700
Bank of Queensland	BBB	1,000,000
MyState Financial	BBB	4,133,119
Defence Bank	BBB	1,000,000
Bank of Us	NR	1,000,000
<hr/>		<b>\$ 18,275,581</b>



**ITEMS FOR CLOSED SECTION OF THE MEETING:**

Councillor xx moved and Councillor xx seconded ***“that pursuant to Regulation 15(2)(g) of the Local Government (Meeting Procedures) Regulations 2015, Council close the meeting to the public to discuss the following items.”***

**GOV 3 CONFIRMATION OF MINUTES**

Confirmation of Minutes of the Closed Session of the Ordinary Council Meeting held on 12 December 2017.

**GOV 4 LEAVE OF ABSENCE**

(Reference Part 2 Regulation 15(2)(h) Local Government (Meeting Procedures) Regulations 2015)

The meeting moved into Closed Session at x.xxpm

The meeting re-opened to the public at x.xxpm

Cr xxx moved and Cr xxx seconded ***“that the following decisions were taken by Council in Closed Session and are to be released for the public’s information.”***

The meeting closed at .....

.....  
CRAIG PERKINS (MAYOR)

