



Redland
CITY COUNCIL

AGENDA

GENERAL MEETING

Wednesday, 14 December 2016
commencing at 9.30am

The Council Chambers
35 Bloomfield Street
CLEVELAND QLD

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1 DECLARATION OF OPENING

On establishing there is a quorum, the Mayor will declare the meeting open.

Recognition of the Traditional Owners

Council acknowledges the Quandamooka people who are the traditional custodians of the land on which we meet. Council also pays respect to their elders, past and present, and extend that respect to other indigenous Australians who are present.

2 RECORD OF ATTENDANCE AND LEAVE OF ABSENCE

Motion is required to approve leave of absence for any Councillor absent from today's meeting.

3 DEVOTIONAL SEGMENT

Member of the Ministers' Fellowship will lead Council in a brief devotional segment.

4 RECOGNITION OF ACHIEVEMENT

Mayor to present any recognition of achievement items.

5 RECEIPT AND CONFIRMATION OF MINUTES**5.1 GENERAL MEETING MINUTES 23 NOVEMBER 2016**

Motion is required to confirm the Minutes of the General Meeting of Council held on 23 November 2016.

6 MATTERS OUTSTANDING FROM PREVIOUS COUNCIL MEETING MINUTES

There are no matters outstanding.

7 PUBLIC PARTICIPATION

In accordance with s.31 of POL-3127 Council Meeting Standing Orders:

1. In each meeting (other than special meetings), a period of 15 minutes may be made available by resolution to permit members of the public to address the local government on matters of public interest relating to the local government. This period may be extended by resolution.
2. Priority will be given to members of the public who make written application to the CEO no later than 4.30pm two days before the meeting. A request may also be made to the chairperson, when invited to do so, at the commencement of the public participation period of the meeting.
3. The time allocated to each speaker shall be a maximum of five minutes. The chairperson, at his/her discretion, has authority to withdraw the approval to address Council before the time period has elapsed.
4. The chairperson will consider each application on its merits and may consider any relevant matter in his/her decision to allow or disallow a person to address the local government, e.g.
 - a) Whether the matter is of public interest;
 - b) The number of people who wish to address the meeting about the same subject

- c) The number of times that a person, or anyone else, has addressed the local government previously about the matter;
 - d) The person's behaviour at that or a previous meeting' and
 - e) If the person has made a written application to address the meeting.
5. Any person invited to address the meeting must:
- a) State their name and suburb, or organisation they represent and the subject they wish to speak about;
 - b) Stand (unless unable to do so);
 - c) Act and speak with decorum;
 - d) Be respectful and courteous; and
 - e) Make no comments directed at any individual Council employee, Councillor or member of the public, ensuring that all comments relate to Council as a whole.

8 PETITIONS AND PRESENTATIONS

Councillors may present petitions or make presentations under this section.

9 MOTION TO ALTER THE ORDER OF BUSINESS

The order of business may be altered for a particular meeting where the Councillors at that meeting pass a motion to that effect. Any motion to alter the order of business may be moved without notice.

10 DECLARATION OF MATERIAL PERSONAL INTEREST OR CONFLICT OF INTEREST ON ANY ITEMS OF BUSINESS

Councillors are reminded of their responsibilities in relation to a Councillor's material personal interest and conflict of interest at a meeting (for full details see sections 172 and 173 of the *Local Government Act 2009*). In summary:

If a Councillor has a material personal interest in a matter before the meeting:

The Councillor must—

- *inform the meeting of the Councillor's material personal interest in the matter; and*
- *leave the meeting room (including any area set aside for the public), and stay out of the meeting room while the matter is being discussed and voted on.*

The following information must be recorded in the minutes of the meeting, and on the local government's website—

- *the name of the Councillor who has the material personal interest, or possible material personal interest, in a matter;*
- *the nature of the material personal interest, or possible material personal interest, as described by the Councillor.*

A Councillor has a **material personal interest** in the matter if any of the following persons stands to gain a benefit, or suffer a loss, (either directly or indirectly) depending on the outcome of the consideration of the matter at the meeting—

- (a) the Councillor;
 - (b) a spouse of the Councillor;
 - (c) a parent, child or sibling of the Councillor;
-

- (d) a partner of the Councillor;
- (e) an employer (other than a government entity) of the Councillor;
- (f) an entity (other than a government entity) of which the Councillor is a member;
- (g) another person prescribed under a regulation.

If a Councillor has a conflict of interest (a *real conflict of interest*), or could reasonably be taken to have a conflict of interest (a *perceived conflict of interest*) in a matter before the meeting:

The Councillor must—

- *deal with the real conflict of interest or perceived conflict of interest in a transparent and accountable way.*
- *Inform the meeting of—*
 - (a) *the Councillor's personal interests in the matter; and*
 - (b) *if the Councillor participates in the meeting in relation to the matter, how the Councillor intends to deal with the real or perceived conflict of interest.*

The following must be recorded in the minutes of the meeting, and on the local government's website—

- (a) *the name of the Councillor who has the real or perceived conflict of interest;*
- (b) *the nature of the personal interest, as described by the Councillor;*
- (c) *how the Councillor dealt with the real or perceived conflict of interest;*
- (d) *if the Councillor voted on the matter—how the Councillor voted on the matter;*
- (e) *how the majority of persons who were entitled to vote at the meeting voted on the matter.*

A *conflict of interest* is a conflict between—

- (a) *a Councillor's personal interests (including personal interests arising from the Councillor's relationships, for example); and*
- (b) *the public interest;*

that might lead to a decision that is contrary to the public interest.

11 REPORTS TO COUNCIL

11.1 OFFICE OF CEO

11.1.1 NOVEMBER 2016 MONTHLY FINANCIAL REPORT

This report is being finalised.

11.1.2 REVIEW OF CORPORATE POLICY - POL-3028 – APPLICATION OF WATER CHARGES POLICY**Objective Reference:** A2082450**Attachments:** [Current Corporate Policy POL-3028 Application of Water Charges](#)
[Updated Corporate Policy POL-3028 Application of Water Charges](#)**Authorising / Responsible Officer:****Deborah Corbett-Hall**
Chief Financial Officer**Report Author:****Noela Barton**
Finance Manager, Financial Operations

PURPOSE

This report presents to Council a review of Corporate policy *POL-3028 Application of Water Charges Policy*.

BACKGROUND

30 May 2012 – Corporate policy *POL-3028 Application of Water Charges Policy* was adopted by Council and took effective from 1 July 2012 with the return of the water business.

ISSUES

Section 14(1)(c) of the *South-East Queensland Water and Wastewater Code* requires a SEQ service provider to have policies, practices and procedures about fees and charges. The policy should set out how Redland City Council applies water charges. The review found the policy did not communicate all relevant information regarding the application of water charges for the customer.

It was found there is information concerning the application of water charges contained in the annually adopted Revenue Statement that was absent from the policy. This information should also be represented in the policy for the customer for completeness.

Along with this, it was considered the policy did not clearly articulate how water charges are applied to strata titled properties pre and post 1 January 2008. It did not cover the situations where a water charge will not be applied or give any detail concerning the metering of fire services.

The attached updated policy clearly articulates how water consumption and fixed water charges will be applied and the situations where a charge will not be applied.

STRATEGIC IMPLICATIONS

Legislative Requirements

South-East Queensland Water (Distribution and Retail Restructuring) Act 2009

Section 4(2)(b) enables Redland City Council to deliver water and wastewater services to customers in their local government area from 1 July 2012.

Local Government Act 2009

Section 92 defines a utility charge as a charge for a service, facility or activity for utility services, one of which is water.

Section 94 provides that a Council may levy a utility charge.

Local Government Regulation 2012

Section 99(1) provides that a Council may levy utility charges on any basis it considers appropriate.

Body Corporate and Community Management Act 1997

Section 195 and 196 provide for the method of application of utility charges for Community Title Scheme land.

Building Units and Group Titles Act 1980

Section 64 provides for the method of application of utility charges for Building Unit and Group Title Scheme land.

Water Supply (Safety and Reliability) Act 2008

Section 144 and 145 regulates water used for firefighting purposes.

Risk Management

Section 14(1)(c) of the *South-East Queensland Water and Wastewater Code* requires a SEQ service provider to have policies, practices and procedures about fees and charges. The attached updated Corporate policy *POL-3028 Application of Water Charges Policy* reduces the risk to Council of publishing incomplete information on Utility charges that may or may not apply to water customers.

Financial

Adoption of the attached draft Corporate policy *POL-3028 Application of Water Charges Policy* will have no financial impact.

People

Nil impact expected.

Environmental

Nil impact expected.

Social

Nil impact expected.

Alignment with Council's Policy and Plans

This report aligns with Council's Corporate Plan 2015-2020 key outcomes:

8.5 Inclusive and ethical governance: Council uses meaningful tools to engage with the community on diverse issues so that the community is well informed and can contribute to decision making.

CONSULTATION

The following stakeholders were consulted during the review of the policy:

- Financial Operations' officers
- Chief Financial Officer
- Group Manager Water and Waste Operations

OPTIONS**Option 1**

That Council resolves to:

1. Note the review of Corporate Policy POL-3028 Application of Water Charges Policy; and
2. Adopt the attached updated POL-3028 Application of Water Charges Policy.

Option 2

That Council resolves to request further information

OFFICER'S RECOMMENDATION

That Council resolves to:

1. Note the review of Corporate Policy POL-3028 Application of Water Charges Policy; and
2. Adopt the attached updated POL-3028 Application of Water Charges Policy.

Application of water charges

Head of Power

- Section 94 of the *Local Government Act 2009* gives council the power to levy utility charges
- Sections 193 and 195 of the *Body Corporate and Community Management Act (1997)* give Council the power to charge utility charges to each owner of each lot
- *Water Supply (Safety and Reliability) Act 2008*
- *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*

Policy Objective

The objective of this policy is to establish the framework for applying water access and consumption charges determined at the annual budget meeting.

Policy Statement

Council is committed to:

1. a 2-part tariff for the provision of water services, namely to levy water charges consisting of an access component and a consumption component;
2. categorising water charges into residential, concessional (non-profit clubs, organisations and associations), non residential and Council;
3. charging residential, non-residential and Council lots by applying an access charge based on meter size and a consumption charge based on per kilolitre usage. The average daily consumption based on the meter reading from the beginning and end of the consumption period will be used as the basis for consumption charge calculations;
4. applying an access charge on each meter. Where a lot has no meter installed, the access charge will be determined as if a standard 20mm meter was installed;
5. charging non-profit clubs, organisations and associations water consumption as concessional, based on a per kilolitre usage. The average daily consumption based on the meter reading from the beginning and end of the consumption period will be used as the basis for charge calculations. No access charge will apply;
6. applying residential water access charges on a per lot basis except where adjoining lots in the same ownership name are amalgamated for rating purposes and either-
 - the main roof structure of an occupied dwelling is constructed over the adjoining boundary line of those lots, or

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- one of the adjoining lots would, if sold separately, be unable to lawfully accommodate a dwelling, or
- one of the adjoining lots would not be issued a building permit unless an existing approved structure was removed;

then water charges will be applied against such adjoining lots as if they are one lot. All other adjoining lots will be charged water charges on a per lot basis;

7. considering land being used for rural land as contiguous when separated by a road. Rural land will not be considered contiguous where connection is made to separate parcels of land. The access charge will be applied on a per meter connection basis;

8. charging for premises under the *Body Corporate and Community Management Act (1997)*:

Community title schemes (CTSs) existing or under construction prior to 31 December 2007

The main meter will be read and used for the purpose of water consumption charge calculations.

Water consumption charges will be based on the reading of the main meter and applied by lot entitlement.

An access charge will be levied on the main meter and applied by lot entitlement.

CTSs with mandatory sub-metering after 1 January 2008 (refer *Water and Other Legislation Amendment Act 2007*)

The main meter and mandatory sub-meters will be read and used for the purpose of water consumption charge calculations.

Water consumption charges for each sub-meter will be based on the reading of that sub-meter and applied to the individual unit holder.

The balance between main meter reading and the total of the mandatory sub-meter readings will be applied to the body corporate.

Where the volume for the balance is a negative value, the charge against the body corporate will be applied as zero.

9. metering all fire services.

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Application of Water Charges

Version Information

Head of Power

Section 4(2)(b) of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009* provides for Redland City Council to deliver water services subject to this Act to customers in their local government area from 1 July 2012.

Section 92 of the *Local Government Act 2009* defines a utility charge as a charge for a service, facility or activity for utility services, one of which is water.

Section 94 of the *Local Government Act 2009* provides that a Council may levy utility charges.

Section 99(1) of the *Local Government Regulation 2012* provides that a Council may levy utility charges on any basis they consider appropriate.

Section 195 and 196 of the *Body Corporate and Community Management Act 1997* provides for the method of application of utility charges for Community Title Scheme land.

Section 64 of the *Building Units and Group Titles Act 1980* provides for the method of application of utility charges for Building Unit and Group Title Scheme land.

Section 144 and 145 of the *Water Supply (Safety and Reliability) Act 2008* regulates water used for firefighting purposes.

Policy Objective

The objective of this policy is to establish the framework for applying water access and consumption charges determined at the annual budget meeting.

Definitions

Water connection tariffs —

- Residential – land used predominately for residential purposes i.e. premises at which someone lives. This tariff includes mobile home parks registered under the *Manufactured Homes (Residential Parks) Act 2003*.
- Non-residential – land used predominantly for commercial or industrial purposes. This tariff includes camping, caravan and tourist parks licenced under Local Law 7 or 17 that are not registered as a mobile home park under the *Manufactured Homes (Residential Parks) Act 2003*.
- Concessional – land owned or leased by a religious or community organisation, association or club that is able to demonstrate they meet the definition of:
 - a) an entity that is not for profit; and
 - b) under its constitution is formed for a purpose which does not include the distribution of profit or gain of its individual members or owners; and
 - c) exists for any lawful purpose that provides a public benefit, at large or in a particular locality, which improves community welfare, education or safety (This includes sporting or recreational clubs with less than 2,000 members); and
 - d) has no restrictions on membership that is in contravention of the Queensland Anti-Discrimination Act 1991.
- Council – land held by Redland City Council either freehold or as Trustee.

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Department: Office of CEO
Group: Financial Services
Approved by:
Date of Approval:

Effective date:
Version: 2
Review date:
Page: 1 of 4

Sole-occupancy unit – in relation to a building means—

- a) a room or other part of the building for occupation by one or a joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier, including, for example—
 - i. a dwelling; or
 - ii. a room or suite of associated rooms in a building classified under the Building Code of Australia as a class 2, 4, 5, 6, 7 or 8 building; or
- b) any part of the building that is a common area.

Firefighting purposes – includes training for firefighting and routine testing of firefighting equipment.

Egress — the action of going out of or leaving a place.

Policy Statement

Council is committed to the following:

1. Apply a two part tariff for the provision of water services:
 - i. a fixed access charge based on meter size; and
 - ii. a consumption charge based on kilolitre usage.

Consumption

2. Categorise water consumption charges into water connection tariffs of residential, non-residential, concessional and Council. Where the premises are used for mixed use (i.e. residential and non-residential or concessional) the predominant use of the land will determine the water connection tariff.
3. Calculate water consumed between the last meter reading and the current meter reading by multiplying the total kilolitres consumed for the period by the adopted charge rate.
4. Separate water consumption for the purposes of billing into the State bulk water price and the Local Government distribution and retailer price in compliance with section 99AV of the *South-East Queensland Water (Distribution and Retail Restructuring) Act 2009*.
5. Comply with section 140 of the *Water Supply (Safety and Reliability) Act 2008* for premises that have more than one sole-occupancy unit where the land is not scheme land under the *Body Corporate and Community Management Act 1997* and meters are installed to measure the supply of water to each sole-occupancy unit. In these instances the owner of the premise will be billed for water consumption on the reading from the main meter and informed of the volume of water supplied through each sub-meter during the billing period.
6. Apply water charges in communal arrangements that exist under a Community Title Scheme, Building Unit or Group Title Plan in the following manner:

Community Title Scheme land established prior to 1 January 2008 or under construction, but not completed, prior to 31	Water consumption charges will be applied consistent with section 196 of the <i>Body Corporate and Community Management Act 1997</i> . <ol style="list-style-type: none">i. The main meter will be read and used for the purpose of water consumption charge calculations.ii. Lot owners are liable for a share of the total amount payable for
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December 2007	<p>water consumption that passes through the main meter, which will be applied by lot entitlement.</p> <p>iii. A fixed access charge will be levied on the main meter and apportioned by lot entitlement to each lot owner.</p>
Community Title Scheme land established after 1 January 2008.	<p>Water consumption charges will be applied consistent with section 195 of the <i>Body Corporate and Community Management Act 1997</i>.</p> <p>i. The main meter and all internal meters will be read and used for the purpose of water consumption charge calculations.</p> <p>ii. Any volume variance between the calculated water consumption on the main meter and the total of the calculated water consumption for the internal meters will be billed to the body corporate. Where the volume variance is a negative value:</p> <p>a. no adjustment will be made to the total of the calculated water consumption for the internal meters; and</p> <p>b. the variance will be treated as zero.</p> <p>iii. The water consumption charge applied to each individual unit holder will be calculated on their own individual internal metered water supply.</p> <p>iv. A fixed access charge will be levied on the main meter and apportioned by lot entitlement to each lot owner.</p>
Building Unit and Group Title Scheme Land	<p>Water consumption charges will be applied consistent with section 64 of the <i>Building Units and Group Titles Act 1980</i>.</p> <p>i. The body corporate will not be liable for water consumption charges, except when the right to recover charges from the body corporate exists where a lot or part of a lot becomes common property upon registration of a plan of resubdivision or amalgamation or notice of conversion.</p> <p>ii. The main meter will be read and used for the purpose of water consumption charge calculations.</p> <p>iii. Lot owners are liable for a share of the total amount payable for water consumption that passes through the main meter, which will be applied by lot entitlement.</p> <p>iv. A fixed access charge will be levied on the main meter and apportioned by lot entitlement to each lot owner.</p>

7. Not charge for water taken for firefighting purposes, which is consistent with section 144(1) of the *Water Supply (Safety and Reliability) Act 2008*. Council reserves the right to fix either a meter or a seal to any private firefighting system.

Fixed Water Access Charge

8. Apply fixed water access charges on a per meter/lot basis where the lot can be serviced by the reticulated water system. Where a lot has no meter installed, the fixed water access charge will be determined as if a standard 20mm meter was installed.

The exceptions to application of a fixed water access charge on a per meter/lot basis are:

- i. Adjoining residential lots in the same ownership name are amalgamated for rating purposes and either:
 - the main roof structure of an occupied dwelling is constructed over the adjoining boundary line of those lots; or
 - one of the adjoining lots would, if sold separately, be unable to lawfully accommodate a dwelling; or
 - one of the adjoining lots would not be issued a building permit unless an existing approved structure was removed.

In this instance, the fixed water access charge will be applied against such adjoining lots as if they were one lot.

- ii. Treat rural land used for farming purposes held in the same ownership name where the lots are separated by a road as contiguous lots, except where the lots have separate water meter connections contiguity will not be applied.

9. Apply a fixed water access charge per meter connection for rural land that is contiguous and the land is used for farming purposes where connection is made to separate parcels of land.

10. Apply a fixed water access charge to sporting and recreational clubs where poker machines are a source of revenue to the club.

11. Not charge a fixed water access charge where:

- a) The land associated to the property is undeveloped and landlocked, i.e. there is no private or public access or egress to the property.
- b) The property is categorised for the purpose of Differential General Rating as Rating Category 10 (Constrained Land).
- c) The property:
 - i. cannot be serviced by the reticulated water system because of physical constraints; or
 - ii. can be serviced by the reticulated water system, but is not currently connected because the property owner has not requested connection; and
 - the property boundary is greater than 25 meters from the nearest water main; and
 - it is not planned for an extension of the reticulation water network in the current or next financial year which will bring the network within 25 meters of the property boundary line.


12. Not charge a fixed water access charge for a fire bypass meter.

Version Information

Version number	Date	Key Changes
2	Dec 2016	Policy updated for ease of understanding for the customer and to include all known variances in the current application of water charges.

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11.2 ORGANISATIONAL SERVICES**11.2.1 REDLAND CITY EVENTS STRATEGY AND ACTION PLAN 2017-2022**

Objective Reference:	A124442 Reports and Attachments (Archives)
Attachment:	<u>Draft Redland City Events Strategy and Action Plan 2017–2022</u>
Authorising Officer:	 Nick Clarke General Manager Organisational Services
Responsible Officer:	Tracey Walker Group Manager Communication, Engagement & Tourism
Report Author:	Kristen Banks Service Manager Communication, Engagement & Tourism

PURPOSE

The *Redland City Events Strategy and Action Plan 2017 – 2022* sets out how event organisers, the tourism industry, Council and other organisations can actively work together to advance events in the Redlands in the areas of infrastructure opportunities; event promotion and networking opportunities; and event coordination, development and investment opportunities.

BACKGROUND

Developing an Events Strategy for the Redlands is a key action of the *Redland City Tourism Strategy and Action Plan 2015 – 2020* as well as the *Redland City Council Corporate Plan 2015 – 2020*.

Redland City Council commissioned Krista Hauritz Tourism & Events to assist in developing a new five-year Events Strategy and supporting Action Plan.

The purpose of developing this Events Strategy is to provide:

- a strategic direction and focus for events in Redlands based on market trends and consultation
- an assessment of events for the Redlands, including opportunities and challenges
- a framework and recommendations for how Redland City Council could best enable, along with event stakeholders, the growth of events for the economic and social benefit of Redland City.

The *Redland City Events Strategy and Action Plan 2017 – 2022* is informed by stakeholder feedback as well as a market trend assessment.

ISSUES

The *Redland City Events Strategy and Action Plan 2017 – 2022* recognises Redlands' competitive advantages for events, including open green spaces, being located on Moreton Bay within 35 minutes' drive from Brisbane CBD, its diverse landscape including islands and hinterland, and rich cultural heritage.

It also highlights that growing events for the Redlands could lead to social and economic benefits, including employment for local youth, local profiling and participation of the arts.

The Events Strategy provides the framework to help Redland City become a nationally recognised event destination.

It sets out the strategic event approach for the Redlands to focus on:

- existing, recurring events including community-run events and where possible, working to lift them to signature/destination event status
- attracting new events that lift the profile of the Redlands and/or contribute significantly to the economy, particularly during low and shoulder periods
- encouraging events to build on Redlands' hero experiences and competitive advantage to reflect the area's unspoilt nature, bay and islands
- enabling events to better reflect Redlands locations through the facilitation of event space activation across the City.

The intent is that in five years' time:

- Redland City will be home to at least one signature/destination event that is distinctly Redlands and is recognised nationally.
- Redlands will have capacity to support events with improved infrastructure including a dedicated events venue that can cater for more than 15,000 people and is not in conflict with other uses.
- Events will partner and collaborate, share resources and undertake co-promotion.
- Working with Redland City Council to organise an event will be a seamless process, with a well-utilised event portal.
- Connectivity to event venues on the mainland and islands will be improved.
- Packaging of events, accommodation, transport and activities will provide a value-add and enhance the event attendees' overall experience and maximise visitor spend within the Redlands.

Issues for events in the Redlands as well as a SWOT analysis are included in the *Redland City Events Strategy and Action Plan 2017 – 2022*.

STRATEGIC IMPLICATIONS

Legislative Requirements

Nil.

Risk Management

An Events Strategy supported by industry will assist Redland City to capitalise on its events and tourism opportunities and to deliver economic benefits. The specific risks to the events industry are included in the *Redland City Events Strategy and Action Plan 2017 – 2022*. Many have been mitigated by a range of actions, while opportunities have been maximised.

Financial

Actions included in the Events Strategy as being undertaken are either included in the 2016-17 Budget or will be put forward for inclusion in future budgets. There are also a range of items that indicate they will be investigated and may be included in future years.

The Communication, Engagement and Tourism budget will be used to fund the majority of actions in the Events Strategy.

People

The *Redland City Events Strategy and Action Plan 2017 – 2022* has been developed in consultation with a range of Council officers who have provided information on the actions being developed – or undertaken – in their areas.

External consultation with events and tourism stakeholders has also taken place. See “Consultation” below.

Environmental

Nil.

Social

Events provide jobs for local people, stimulate the Redlands economy through the attraction of visitors and help generate community pride.

Alignment with Council's Policy and Plans

The *Redland City Events Strategy and Action Plan 2017 – 2022* aligns with the following Council Policy and Plans:

- *Redland City Tourism Strategy and Action Plan 2015 – 2020*
- *Redlands 2030 Community Plan: Creating Our Future*
- *Redland City Council Corporate Plan 2015 – 2020*
- *Redland City Council 2016 – 2017 Operational Plan*
- *Redland City Economic Development Framework 2014 – 2041*
- *Redlands – Open for Business and Investment*
- *Redlands Rural Futures Strategy 2013* (not adopted by Redland City Council)
- *A Festival and Events Strategy for the Redlands 2008*.

CONSULTATION

When developing this Events Strategy and supporting Action Plan, the key requirement of Council – and industry stakeholders – has been to focus on tangible outcomes within a realistic timeframe rather than an exhaustive list of items that may not be achievable.

The process used to develop these documents involved the following:

- face-to-face industry consultation (three workshops) to determine what event stakeholders and industry operators required in the Events Strategy and Action Plan
- structured meetings with Councillors and Council officers to discuss the vision for events, infrastructure, events development and interrelationship with operators
- benchmarking against seven local government authorities in Australia to identify best practice for event processes and facilitation
- Councillor workshop
- face-to-face industry meetings and liaison with stakeholders to review the draft *Redland City Events Strategy and Action Plan 2017 – 2022* and make any amendments sought by industry.

OPTIONS

1. That Council resolves to adopt the *Redland City Events Strategy and Action Plan 2017 – 2022*.
2. That Council resolves to adopt the *Redland City Events Strategy and Action Plan 2017 – 2022* with amendments.
3. That Council resolves to not adopt the *Redland City Events Strategy and Action Plan 2017 – 2022*.

OFFICER'S RECOMMENDATION

That Council resolves to adopt the *Redland City Events Strategy and Action Plan 2017 – 2022* as attached.





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Message from the Mayor

Events can provide a wealth of benefits to Redland City.

Located on Moreton Bay, with open spaces and in such close proximity to Brisbane and the Gold Coast, host of the Commonwealth Games in 2018, the Redlands is ideally placed to attract event goers. Coupled with our warm hospitality, community pride, arts and culture, the Redlands has much to offer in terms of becoming a premier events destination.

Undoubtedly, festivals, events and social activities bring together, and support, greater connectivity between cross-sections of the community.

Growing the City's existing events, and attracting new events, is a focus for the Redlands.

Development of an Events Strategy to help Redlands benefit from events is an action of key Council strategic documents – the *Redland City Tourism Strategy and Action Plan 2015–2020* and *Redland City Council Corporate Plan 2015–2020*.

This five-year *Redland City Events Strategy and Action Plan 2017 – 2022* provides a collective vision for the Redlands to be renowned as one of Australia's most event-friendly destinations, with a balanced calendar of events across the City that attract increased visitation, bolster the economy and reflect our community and cultural fabric.

It is informed by stakeholder feedback and market trend assessment to provide an overview of current event trends.

The Events Strategy and supporting Action Plan sets out how events operators, businesses, Council and other agencies can work together to achieve the vision

by seizing opportunities for infrastructure, event promotion and networking as well as event coordination, development and investment.

Initiatives such as the formation of a 'Red Team' will give event organisers a pathway to meet with relevant stakeholders from Council and other agencies to pitch ideas, discuss requirements and learn about available support including a new suite of online resources, development opportunities and funding sources.

Enhanced partnerships and collaboration will be paramount to the success of developing local events and leveraging opportunities such as those presented by the upcoming Commonwealth Games, the largest event to occur in Australia this decade.

In addition, we are working towards having at least one signature event that is synonymous with the identity of Redland City and is recognised nationally.

We want residents and visitors alike to enjoy a variety of long-running and new memorable events that are distinctly Redlands – and to keep coming back time and time again.

Events are everyone's business.

Cr Karen Williams
Mayor of Redland City



Introduction

Redland City Council (Council) has developed a five-year Events Strategy and supporting Action Plan for the period 2017–2022. It is an action of the *Redland City Tourism Strategy and Action Plan 2015–2020*, which was adopted by Council on 17 June 2015.

The purpose of developing this Events Strategy is to provide:

- a strategic direction and focus for events in Redlands based on market trends and consultation
- an assessment of events for the Redlands, including opportunities and challenges
- a framework and recommendations for how Redland City Council could best enable, along with event stakeholders, the growth of events for the economic and social benefit of Redland City.

Council commissioned Krista Hauritz Tourism & Events to assist

in developing the documents. The process used to develop these documents involved the following:

- face-to-face consultation with the community, including three event workshops at Cleveland, North Stradbroke Island and Russell Island
- face-to-face consultation with council officers, including a workshop with cross-Council department representation
- liaison with event organisers and regional and state tourism organisations
- benchmarking against seven local government authorities in

Australia to identify best practice for event processes and facilitation, including organisation structure and resourcing

- preparation of a draft Event Strategy and Action Plan, and finalisation of the document after feedback from Council and industry operators.

This *Redland City Events Strategy and Action Plan 2017–2022* recognises Redlands' competitive advantages for events, including open green spaces, being located on Moreton Bay within 35 minutes' drive from Brisbane CBD, its diverse landscape including

islands and hinterland, and rich cultural heritage.

It also highlights that growing events for the Redlands could lead to social, environmental and economic benefits, including employment for local youth, local profiling and participation of the arts.

This Events Strategy provides the impetus to make Redland City become nationally recognised as a regional event destination.

As a living document, the Events Strategy will be reviewed by Council, the Redlands Tourism Subcommittee and Redlands Economic Development Advisory Board.

START



Strategic direction

Vision

Redlands is renowned as one of Australia's most event-friendly destinations, with a balanced calendar of events across the City that attract increased visitation, bolster the economy and reflect our community and cultural fabric.

Strategic approach

The strategic event approach for the Redlands is to focus on:

- existing, recurring events including community-run events and where possible, working to lift them to signature/destination event status
- attracting new events that lift the profile of the Redlands and/or contribute significantly to the economy, particularly during low and shoulder periods
- encouraging events to build on Redlands' hero experiences and competitive advantage to reflect the area's unspoilt nature, bay and islands.
- enabling events to better reflect Redlands locations through the facilitation of event space activation across the City.

In five years' time

- Redland City will be home to at least one signature/destination event that is distinctly Redlands.
- Redlands will have capacity to support events with improved infrastructure including a dedicated events facility that can cater for more than 15,000 people and is not in conflict with other uses.
- Events will partner and collaborate, share resources and undertake co-promotion.
- Working with Redland City Council to organise an event will be a seamless process, with a well-utilised event portal.
- Connectivity to event venues on the mainland and islands will have improved.
- Packaging of events, accommodation, transport and activities will provide a value-add and enhance the event attendees' overall experience as well as maximise visitor spend within the Redlands.

Strategic links

The *Redland City Events Strategy and Action Plan 2017–2022* has been developed in consideration of – and aims to leverage from – the following local (Redland City), regional (Brisbane Region), state (Queensland) and national strategies:

Redland City

- **Redland City Tourism Strategy and Action Plan 2015–2020:** the local tourism industry's blueprint for the future. It sets out how the tourism industry and Council can work together to seize opportunities in tourism investment and development, destination marketing and events as well as supporting infrastructure and coordination.
- **Redland City Economic Development Framework 2014–2041:** a framework designed for business to be driven by an Economic Development Advisory Board, giving business a central role in the future economic growth of the City. The Tourism (Accommodation and Food Services) sector is represented on the Board.
- **Redlands – Open for Business and Investment:** a snapshot of Redlands' demand drivers for business including demographics, industry profile and projected investment trends.

- **Redlands 2030 Community Plan: Creating Our Future:** a plan to achieve the Redland community's vision for the future. It was developed by more than 3000 community members, business people and local organisations and was supported by Redland City Council staff and elected representatives.
- **Redland City Council Corporate Plan 2015–2020:** guides the development of Council's Operational Plan and Budget. The Corporate Plan's structure, its underlying values and overarching mission of sustainability (of our diverse places and strong communities) is strongly informed by the Community Plan. Events are specifically listed in the plan as follows:
 4. Quandamooka Country: Promote traditional knowledge and increase the profile of Aboriginal heritage through signage, cultural tourism and community events.
 6. Supportive and vibrant economy

- 6.2 Redland City delivers events, activities and performances that bring economic and social benefits to the community.
Performance indicator: Attendance numbers and economic return at events across the City.
Our commitment: Develop a new events strategy that delivers economic development through a balanced and sustainable calendar of events across the City.
 7. Strong and connected communities: Festivals, events and activities bring together and support greater connectivity between cross-sections of the community.
- **Redland City Council 2016–2017 Operational Plan:** sets out the work Council plans to do to contribute to the Corporate Plan and the Community Plan.
 - **Redlands Planning Scheme:** currently being reviewed to update it for 2015 and beyond. This blueprint for the future development of the City will be known as 'Redland City Plan'.

- **Redlands Transport Plan 2016:** 15-year integrated transport strategy for developing sustainable transport systems in the Redlands. To be reviewed.
- **North Stradbroke Island Economic Transition Strategy:** A strategy for North Stradbroke Island supported by 16 actions that aim to drive sustainable tourism, expand education and training opportunities and foster business develop and growth when sand mining is discontinued from 2019.
- **Redlands Rural Futures Strategy 2013:** a report noted by Redland City Council that includes information on the rural economy and uses of rural space in the Redlands. Not adopted
- **A Festivals and Events Strategy for the Redlands 2008:** a report that demonstrated Council's commitment to achieving sustainable festivals and events and to strengthen the role of events as opportunities for cultural expression.

Brisbane and South East Queensland

- **Brisbane 2022 New World City Action Plan:** an economic agenda to identify and prioritise the city's actions toward 2022 and beyond.
- **Brisbane Visitor Economy Strategy A Signature/Destination Tourism Plan for Brisbane 2014–2020:** a strategy that underpins the partnership of Brisbane's tourism industry, Greater Brisbane councils and the Queensland Government and the shared commitment necessary to meet the goal of growing the value of the industry to \$8.4 billion by 2020, and creating 80,000 FTE employment opportunities.
- **South East Queensland Regional Plan 2009–2031:** a statutory regional plan that is currently being reviewed.

Queensland

- **Advancing Tourism 2016–20:** the Queensland Government's plan to grow tourism and jobs. It seeks to capitalise on the opportunity afforded by unprecedented growth in tourism to increase market share and boost tourism jobs by targeting four priority areas – grow quality products, events and experiences; invest in infrastructure and access;

build a skilled workforce and business capabilities; and seize the opportunity in Asia.

- **Queensland Ecotourism Plan 2015–2020:** provides the framework for building a thriving ecotourism industry and delivering new ecotourism experiences in Queensland's spectacular national and marine parks and other natural areas.
- **Signature/Destination Success: the 20-year Plan for Queensland Tourism:** a plan that outlines how the tourism industry in Queensland can be competitive and successful in the long-term as well as increase visitor expenditure to \$30 billion by 2020.
- **Tourism and Events Queensland Strategic Plan 2015–2019:** highlighting *It's Live* – Event and Signature/Destination Optimisation – to provide a platform to take Queensland's signature/destination focused events calendar to market and optimise the value of Tourism and Events Queensland investment in events that promote Queensland's signature/destinations.
- **The Queensland Plan:** a plan created by Queenslanders for Queensland that provides a 30-year roadmap for the state's growth and prosperity.



Redland Bayside Bluesfest



Events in the Redlands – a snapshot

Location

From the bush to the bay, covering 537 square kilometres, Redland City is part of South East Queensland, located 35 minutes or 26km from Brisbane and a one-hour drive or 76km from the Gold Coast.

Redlands is the gateway to North Stradbroke Island, Coochiemudlo Island and the Southern Moreton Bay Islands.

Population

In the 2011 census, Redlands had an estimated population of 148,614, with Alexandra Hills having the highest population with 16,698 residents, followed by Capalaba with 16,634 residents, Cleveland with 14,420 residents and Birkdale with 13,865 residents [1].

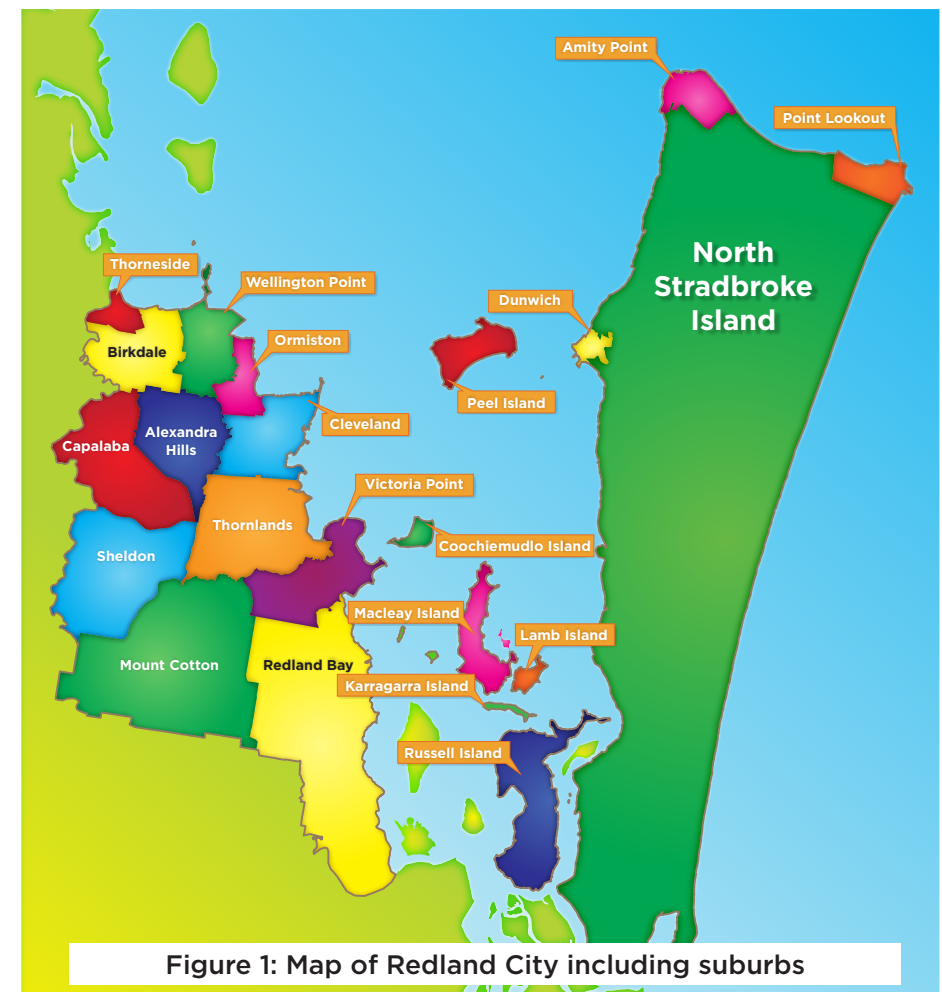


Figure 1: Map of Redland City including suburbs



Redland Diabetes Walk

Definition of events and hierarchy

What is an event?

According to *A Festival & Events Strategy for the Redlands (2008)* the Queensland Government describes events as having the following characteristics:

- can be one-off, annual or occur more frequently
- are open to the public or a specific interest group
- have pre-determined opening and closing dates and times
- may not require permanent structures
- may be staged in a single venue or multiple venues
- could be conducted on a single day or over a number of days
- focus on one area/recreation activity or a number of activities
- can include participants from different age groups or ability levels [2].

The City of Casey, Victoria (2008) highlights that there are several types of events that can be private, enterprise driven or community-based including entertainment events (free or ticketed), exhibitions and expos (to view, buy or sell products or services), festivals (cultural celebrations), fundraisers (for a charity or cause), major events (more than 5000 attendees) as well as meetings, conferences and conventions (to exchange information or for education purposes) [2].

Event hierarchy

The following event hierarchy can be used to identify events that contribute to the triple bottom line for Redlands, that is, those that deliver social, environmental and economic benefits to the City.

Tier 1 – Signature/destination events

Signature/destination events have been specifically identified for the role they can play in giving Redland City and the community a genuine competitive advantage where, over time, the events and the signature/destination become inseparable. This type of event identifies with the spirit or ethos of a town, city or region, becoming synonymous with the name of the place. The event showcases the uniqueness of the town to create interest and attract attention from attendees outside the region [3].

These events are “distinctly Redlands”. Most are recurring events that generate triple bottom line benefits and attract local, regional, national and even international media coverage. Examples of signature/destination events are the Tamworth Country Music Festival and Toowoomba Carnival of Flowers.

Objectives:

- More than 5000 attendees
- Synergy with City image and natural assets
- Local, regional, national and international media promotion.

Tier 2 – Significant events

These are major events in terms of their scale and the level of media interest. These events can attract significant visitor numbers, boosting the local economy and tourism, and provide social, community and cultural benefits [3]. These events are usually one-off or occasional events that may not be unique to the region. Major events may have a local, regional, state, national or international profile such as concerts, the PGA Golf Tour, Queensland Triathlon Series that includes Raby Bay and the Australian Junior Surfing Titles held at Point Lookout, North Stradbroke Island.

Objectives:

- More than 1000 attendees
- Vibrant and diverse activations
- Local, regional and national media promotion.

Tier 3 – Local events

Local events are targeted at local audiences and are staged primarily for their social, fun and entertainment value due to their unusual nature or unique setting [3]. The events celebrate locations and attract some visitors from outside the City. The events generate triple bottom line benefits and attract local and regional media coverage such as the 4 Islands Festival.

Objectives:

- Drive community engagement
- Local and regional media promotion.

Council-run corporate events including citizenship ceremonies are out-of-scope of this event hierarchy.



Pirate Island

Market trend assessment

Events and festivals are a global phenomenon in a competitive industry that has experienced rapid growth. Consumers are spending more disposable income on travel and attend – and expect more – from events and festivals.

An assessment of global and national events as well as festival and consumer trends that could potentially impact Redland City's ability to sustainably grow events has been undertaken. These trends are based on personal insights from Krista Hauritz Tourism & Events, consumer mega trends and event trends sourced from Bernard Salt, *KPMG Demographics* [4], *Mintel Australia and New Zealand Consumer Trends (2015)* [5] and *Eventbrite New Trends Impacting Festival and Consumer Events (2015)* [6].

According to Tourism Research Australia's *Events: Driver of Regional Tourism Summary (2014)*:

- 87 per cent of Australians travelled domestically in the past two years
- More than half (56%) visited a regional destination
- Almost one-quarter of Australian have been to at least one event in a regional area in the past two years
- The most popular events were:
 - ◆ food and wine
 - ◆ music related
 - ◆ garden and botanical
 - ◆ sport (as a spectator)
 - ◆ art exhibitions [7].

For Redland City to be competitive, events and festivals within the City need to constantly evolve in line with current consumer trends to attract repeat and new attendees. These trends include:

- globalisation and homogenisation
- environmentally conscious consumers
- “it’s all about me”
- food culture
- hybridisation – specialised focus
- digital and online ticketing
- social media [7].

Globalisation and homogenisation

With an increased number of festivals and events held across Australia over the past decade, globalisation and homogenisation of events need to be considered. For example, many regional events across Queensland and Australia have similar live entertainment and experiences and even the same food stalls and performers. Over time, the homogenisation of some events could reduce their attractiveness, particularly in terms of attracting visitors from outside a region.

Implications for the Redlands

There is potential to work with event organisers to investigate further development of signature/destination events that are endemic to the Redlands and are not easily copied. Event organisers could also be encouraged to develop event experiences that meet consumer trends and build on experiences only available in the unique Redlands landscape.



Environmentally conscious consumers

Citizens wanting to reduce their carbon imprint will likely have a long-term impact on events. This could lead to people visiting events closer to home and attending events that are environmentally sustainable and/or contribute/give back to the environment.

Implications for the Redlands

There is opportunity to promote sustainable green and nature-based events, capitalising on the Redlands’ open spaces and island locations within close proximity to Brisbane, Australia’s third-largest city.



“It’s all about me”

Events and festivals are attracting a larger audience and attendees are expecting more in return in terms of quality and experience, and particularly personally tailored experiences. “Event experience” creates a legacy.

To meet the growing demand of consumers in a competitive industry, event promoters are offering multi-level VIP packages, season passes to a set of local events, behind-the-scenes access, fast-track admission, premium food and beverage packages and exclusive VIP restrooms to meet the demand for premium experiences [4]. According to Eventbrite, VIP experiences represent 10% of ticket sales and 25% of revenue [6].

Implications for the Redlands

Events in the Redlands must be safe, exciting and memorable. Event organisers should be encouraged to facilitate the development of experiences to meet the growing demand for personalised and premium experiences, such as exclusive, personally tailored, interactive and behind-the-scenes experiences that cannot be experienced anywhere else.

Food culture

According to Tourism Research Australia, food and wine events have the second highest value (behind music events) for attracting overnight visitors [7].

The growth of demand for quality food, “out-of-home” coffee consumption and paddock-to-plate (or ocean-to-plate) experiences has grown dramatically in the past decade. From the rise of the celebrity chef to cooking schools and reality cooking shows gaining top television ratings across Australia, consumers are expecting quality food experiences at festivals and events, regardless of the event genre, for example, consumer expectations for quality coffee and food at sporting events or music labels and restaurants collaborating to create mini-festivals in abandoned rail yards. Super foods were also a major Australian consumer trend in 2015, with festival attendees often citing in festival visitor surveys the desire for fresh, healthy food options at events.

Implications for the Redlands

Event organisers should be encouraged to provide quality food experiences at events and value-adds, especially highlighting paddock and ocean-to-plate experiences that are endemic to the Redlands, for example, fresh seafood and small rural production.

“Hybridisation”– specialised focus

A recent festival trend, called “hybridisation” in the niche sector, features consumer spending on their personal hobbies and passions. Hybridisation allows festivals to grow in a slow economy by adding complementary activities and attractions for attendees, for example, live music at trade expos, health and lifestyle activities at sporting events, and food and wine experiences at music events. This ultimately provides for a wider variety of experiences for the attendees.

Hybridisation can benefit a local community and stimulate tourism with overnight stays. An example of hybridisation is the Toowoomba Carnival of Flowers that has evolved to meet consumer demands by offering local produce cooking demonstrations, market stalls, music and tours in addition to the flower parade and flower displays, lasting 10 days. With a wide range of activities, attendees are likely to come with a larger group of friends and family, stay longer and spend more. Hybridisation provides opportunities for more diverse attractions and, potentially, a broader range of sponsors [8].

Implications for the Redlands

For events in the Redlands to remain competitive and become sustainable, they need to further enhance their niche experiences and, over time, could develop quality add-on bundling and packaging such as well-themed tours.

Digital and online ticketing

According to Mintel's *Australia and New Zealand Consumer Trends 2015*, two-thirds of Australians are using mobile internet for 90 minutes per day [5]. The innovation and advances in technology are changing how we do business and are impacting festivals and events.

Online sales allow event promoters to gather attendees’ geographic and demographic data and expected event attendance, which provides an opportunity to pre-plan to avoid logistic shortfalls. The collection of data can also be used to show which methods of marketing were successful, with direct links from the referral source such as online promotions, direct email promotion, social media, search engines or links from other websites.

Online statistic data can provide valuable information for evaluation of the success of the event, including which promotion methods attracted the highest sales and geographic information about the attendees. Online surveys are available from service providers, such as Survey Monkey and Eventbrite, can help event organisers to gather attendee feedback and to engage and establish loyalty with attendees. Combining data collection from an online booking through to attendee feedback provides event organisers with the opportunity to evaluate the entire events’ effectiveness, and to make improvements for the future [8].

Implications for the Redlands

Event organisers should be encouraged to make event information easily accessible online, including use of mobile-accessible websites, Australian Tourism Data Warehouse listings, digital programs, online ticketing and potentially online merchandise as well as through traditional methods.

Social media

Technology has driven changes in planning events and festivals, with social media having a tangible impact on marketing awareness and driving consumer attendance at events. Savvy festivals use social media platforms such as Facebook, Twitter, Instagram and live streaming to generate excitement, conversation and sharing, which builds a following and a wider audience then receives the promotion and ongoing marketing.

Social media has also had an impact on event or festival revenue with followers becoming promoters of the event and driving sales. Attendees post photos, videos or updates on feeds, or “like” a post that is then seen by each of their friends following their social media posts, which can increase sales of the event.

Eventbrite research estimates that sharing of Facebook posts equates to \$4.15 in future ticket sales and, on average, generated 15 views of the event ticketing page, while Twitter drives approximately 28 event page views and \$2.18 per tweeted share [6].

The following is an estimate of social media activity by festival goers:

- 65% tweet or post to social media during a live concert
- 56% upload photos of the event
- 31% write reviews of their experiences of the event and post the reviews online [6].

Implications for the Redlands

The promotion of social media sharing through quality WIFI availability at events, “selfie” opportunities and further enhance unique experiences in scenic locations to encourage social media sharing should be encouraged. It is also important to foster event organisers’ ability to maximise the benefits of social media, promoting signature/destination hash tags, and leveraging social media strategies with larger partners such as Redland City Council, Brisbane Marketing, Tourism and Events Queensland and Tourism Australia.



How Redlands fits with the Greater Brisbane and Queensland events scene

Redland City is included within the Brisbane region, as defined by Tourism and Events Queensland. The Redlands local government area is included in the “Greater Brisbane” destination of the Brisbane region (see Figure 2). For tourism and events, the regional tourism organisation is Brisbane Marketing and the state body is Tourism and Events Queensland.

Redland City Council is a member of Brisbane Marketing and was consulted for Brisbane Marketing’s Greater Brisbane Region’s *Brisbane Visitor Economy Strategy – A Destination Tourism Plan for Brisbane 2014–2020*. Three catalytic areas were identified:

1. Build on strong economic foundations

- Increase visitor spend by attracting out-of-region event attendance.
- Encourage and attract events to the Redlands.
- Actively assist event organisers to stage events in the Redlands.
- Encourage financially sustainable events that attract high-yield visitors.

2. Leverage the destination advantage

- Promote a higher profile of the Redlands through signature/destination events.
- Facilitate development of signature/destination events that embrace indigenous culture.
- Activate public spaces for festivals and events.

3. Embrace Greater Brisbane Region’s natural advantage

- Promote and attract events that embrace the natural environment of the Redlands.
- Encourage environmentally sustainable events and practices.

Through the “*It’s Live in Queensland*” campaign and the Queensland Destination Events Program (QDEP), this strategy aligns with the QDEP objectives, which includes supporting events that:

1. Generate local economic activity and development in the host destination
2. Attract external visitation to the destination
3. Drive social and community outcomes for the host destination, noting the important link between community outcomes and economic benefits
4. Enhance the profile and appeal of the host destination.

Figure 2: Areas within Greater Brisbane Region



Value of events

Events and festivals can provide significant benefits for the local community and visitors alike. Events are acknowledged as opportunities to stimulate tourism and economic growth by showcasing the destination and attracting visitors from outside the City.

A positive experience for a visitor at an event can prompt them to become a destination advocate, promoting an area, and potentially prompting a return visit during the off season.

Studies undertaken by Tourism Research Australia indicate that an event is the impetus for 57% of first-time visitors to a region and 69% of repeat visitors.

The research also shows that:

- three-quarters of event attendees are prompted to visit the region to attend an event and would not have travelled to the region if the event was not on
- events and festivals can highlight local attractions and unique tourism offerings that are affordable for attendees to access
- events create opportunities for local businesses to provide value for money and encourage event attendance by cross-promoting packages that include attractions, accommodation and transport [7].

Table 1 identifies social, cultural, economic and environmental benefits of events for Redland City.

Table 1: Benefits of events for Redland City

Social	Cultural	Economic	Environmental
<ul style="list-style-type: none"> • Opportunities to actively participate in community events • Potential to build skills through volunteering • Opportunities to contribute to the health and wellbeing of the community • Potential to build the community profile as an active community 	<ul style="list-style-type: none"> • Contributes to fostering a strong sense of community, local pride and cultural identity • Creates community 'identity' and cohesiveness • Opportunities for cultural enrichment, understanding and broader cultural outlook • Celebration of cultural heritage • Increased focus on cultural heritage • Opportunity for cultural expression • Facilitate recognition, remembrance, celebration and commemoration of significant occasions 	<ul style="list-style-type: none"> • Inject new funds into community • Multiplier effect of tourism dollar – showcasing the City • Opportunity for local business to develop partnerships • Employment opportunities for the local community • Can contribute to the growth of overnight stays in the City • Catalyst to attract major events to the region • Potential fundraising opportunities for community groups and organisations • Promotion of the City • Growth in tourism packages and other major event activities • Encourage improved regional infrastructure 	<ul style="list-style-type: none"> • Conservation of natural environment • Preparation for environmental impact • Improved environmental infrastructure • Opportunity to educate community and events organisers to protect local eco systems, flora and fauna • Signature/destination development • Nature-based experiences

Current events landscape

Feedback was sought by Council at several workshops (internal and community-based) to gain a better understanding of the benefits as well as challenges being faced by event organisers in the Redlands.

The following provides an overview of the feedback:

Infrastructure

There is a limited number of event venues with facilities i.e. power, water, electricity, amenities and parking that are not shared with other groups such as sports clubs.

Transport/geographic dispersal

Connectivity to events via public transport is limited events. Insufficient parking is a challenge for some event venues.

Event organisation

A significant number of events are organised by not-for-profit organisations with a smaller portion of events being run by local government and private enterprise (both locally and from outside the Redlands).

Human resources

Events tend to rely on community volunteers with limited professional event experience. There is also a high turnover rate due to “volunteer burnout”, which impacts the growth of events.

Processes

Some event organisers “shop” around Council as they may not understand processes around applications and/or are seeking support (cash and in-kind). These groups will benefit from support including training and assistance with applications.

Training and networking

Event organisers indicated a strong desire to attend event related training, particularly in funding and sponsorship event management, and to network with other event organisers. Regular boot camps and workshops, especially with event organisers, would be beneficial.

Collaboration

The majority of event organisers indicated a high desire to collaborate with other event organisers and local suppliers to share information, participate in joint marketing or value-add to enhance the attendees’ experience by bundling and packaging accommodation, transport and activities.

Signature/destination events

Workshop participants identified events as being important for the City and would like to see signature/destination events developed.

Competitive advantage

Promotion of location and natural assets (such as Moreton Bay) combined with culture and heritage could provide strong leveraging opportunities to develop a competitive advantage for events in the City. Other competitive advantages identified included:

- bay and islands – provide unique conditions for calm water-based events
- unique islands – North Stradbroke Island, Coochiemudlo Island and Southern Moreton Bay Islands
- green space – close to Brisbane CBD
- proximity – to Brisbane and the Gold Coast
- natural assets – provide a unique backdrop for events.

The Redlands currently hosts distinct events and festivals that could potentially be elevated to signature/destination events to build the City’s competitive advantage.



Benchmarking and case studies

An audit of seven local government areas from across Australia was undertaken to identify and benchmark structure, strategy and resourcing of events by other councils. The councils selected were predominately located on a bay and/or waterside within close proximity to a major city.

The audit included a face-to-face interview with Gold Coast City Council and phone and online research with the City of Fremantle, City of Greater Geelong, Hobson Bay City, City of Logan, City of Newcastle and Wollongong City.

Local government events audit

All councils audited had a dedicated events unit and identified the economic benefits of events for their local government area. Gold Coast, Geelong and Wollongong work in partnership with committees to attract and facilitate major events.

Gold Coast City Council and City of Newcastle act as a one-stop-shop for events in their areas. Gold Coast has an Events Advisory Committee to evaluate event applications, making it easier for the event organiser to meet relevant stakeholders at one time.

In summary, most of the councils:

- have a dedicated Events Unit with four-to-eight full-time staff
- utilise a website for online event sponsorship information and applications
- have variable open space and venue fees, with some councils charging per person i.e. more than 2000 people or by the hour
- waive fees for not-for-profit organisations or where a commercial event has community value and meets key assessment criteria.

The key findings are summarised in the **Table 2**.

Table 2: Local government audit of events unit structure and application process

Council	Number of staff and structure	Application process	Population
City of Fremantle	<ul style="list-style-type: none"> • 5 event staff • Event Coordinator • Event Officer • Booking Officer • Logistics Officer • Administration Assistant 	<ul style="list-style-type: none"> • Event information and application is online • Application is directed to the Events Unit • Events Unit distributes application to relevant departments for approval • Event organiser deals directly with food, waste and traffic departments • The Events Unit include contact numbers in the information they send to the event organiser for other units 	30,884
City of Greater Geelong	<ul style="list-style-type: none"> • 8 event staff • Coordinator • Team Leader • Senior Event Officer • 3 x Events Officers • Event Marketing Officer • Administration Officer 	<ul style="list-style-type: none"> • Event information and application is online • Application is directed to the Events Unit • Events Unit distributes application to relevant departments for approval • Local Laws Unit requires permit to hold event on Council land • Events Unit issue permit and approval after other units have approved 	229,926
City of Gold Coast [9]	<ul style="list-style-type: none"> • 8 event staff • 5–6 to run major Council/community events • Events run by external bodies – 2 staff • Administration Officer 	<ul style="list-style-type: none"> • Event information and application is online • One-stop-shop approval process • Approval committee with internal and external stakeholders convened 	546,047
Hobson Bay City [10]	<ul style="list-style-type: none"> • 3 event staff • Event Coordinator • Part Time – 22hrs • Marketing Officer – casual as required 	<ul style="list-style-type: none"> • Event information and application called expression of interest is online • Expression of interest is directed to Events Unit • Initial assessment to check space, what's on and if event fits criteria • Write to the client if more information is required • Sent to other departments for approval • Civic events are organised by other units in Council 	91,148
City of Logan	<ul style="list-style-type: none"> • 4 event staff • Program Leader • 3 x Event Officers 	<ul style="list-style-type: none"> • Event information and application is online • Applications are facilitated by the Local Laws and Environment Team • Events Unit do not approve applications • Event license is required and issued through Environment and Planning Branch 	315,110
City of Newcastle	<ul style="list-style-type: none"> • 4 event staff • Events Management Coordinator • Events Development Officer • Events Liaison Officer • Events Support Officer 	<ul style="list-style-type: none"> • Organisers contact Events Unit • Council officer enters data into Council system to generate application to stage an event – avoids duplication and double booking • Application engages Event Licensing • One-stop-shop approval – includes external group: fire, police and ambulance services 	288,733
Wollongong City	<ul style="list-style-type: none"> • 4 event staff • Events Unit Manager: • Events & Functions Coordinator • Public Relations and Event Support • Administration Support 	<ul style="list-style-type: none"> • Partial online application system – generic application for 8 approved parks • Events Unit manage the 8 approved sites and send to other department for relevant approvals while the Planning Team manages other sites • Larger events not in approved parks require the event organiser to develop a specific development application 	206,794

GATORADE QUEENSLAND TRI SERIES

presented by Scody



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GIANT

BROOKS

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RACKLEY SWIMMING

GIANT

BROOKS

GARMIN

ENGINE

Sunshine Coast

von Bibra AUTO VILLAGE

GARMIN

ENGINE

Sunshine Coast

Sunshine Coast COUNCIL

von Bibra AUTO VILLAGE

AUSTRALIA'S GOLD COAST

the event crew



Gatorade Tri Series

SWOT analysis

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • Geographic location • Close proximity to major capital city (Brisbane) and Gold Coast • Bay, islands, heritage and culture • Number of island destinations • Open, green spaces • Foreshore parks • Rich Aboriginal cultural heritage • Natural environment • Renowned for fresh seafood • Boutique agriculture produce • Climate/weather • Biodiversity • South-east Queensland catchment – growing populations of Gold Coast, Logan, Ipswich and Brisbane • Plethora of creative arts and people 	<ul style="list-style-type: none"> • Lack of higher end and larger scale accommodation to support visiting event attendees, particularly on mainland • Lack of facilities at venues • Lack of event venues with the capacity to gather for large attendee numbers • No dedicated Council-owned event space for large events i.e. more than 15,000 attendees • Limited venues suitable for conferences • Limited inter-regional ground transport • Limited parking • Planning/zoning restrictions • Lack of dedicated outdoor event venue/ infrastructure • Limited collaboration between event organisers • Event organisers predominately volunteer/ part-time, with limited professional event support and/or expertise • Volunteers risk burn-out • Limited partnering between event organisers and tourism operators • Limited historical data collection • Limited economic impact data • Limited resources to support events • Challenges in coordination • High cost of transport to North Stradbroke Island • High cost to transport equipment to the islands 	<ul style="list-style-type: none"> • Developing signature/destination event(s) • Create an easier approval process for event organisers through a main point of contact • Greater funding coordination and unity within Council via sponsorship and recording of all support including in-kind • Creation on an events team – “red team” that meets bi-monthly • Online portal for event organisers with a calendar, facilities and venues, local providers, suppliers and event toolkit • Redevelopment of Toondah Harbour with the inclusion of a conference centre to capture conference market • Event bundling and packaging with other operators to enhance the visitor experience • Capturing niche visitor markets i.e. those wanting to experience Redlands’ culture and heritage • Small corporate conferences and retreats with pop-up accommodation • Greater coordination and promotion of events through events calendar and Australian Tourism Data Warehouse • Opportunity to increase mid-week visitation through small business events/conferences on North Stradbroke Island • Embrace the bay, heritage and culture • Introduction of aviation park at Dunwich to create a Seaplane Festival • Creating networking and upskilling opportunities for event organisers • Famils for event organisers to promote the Redlands 	<ul style="list-style-type: none"> • Strong level of competition from signature/destinations such as the Gold Coast and Brisbane for events and conferences • Government agency restrictions (local and state government regulation i.e. national parks, environment protection and maritime) • Local resident attitude to events • Nearby mature and rejuvenated signature/destination events with greater event budgets and focus • Changed and/or reduced state and federal government focus and/or funding of events • Conflicting use and availability of parks and outdoor facilities for event organisers e.g. local sports meets and event use

Issues and gaps

To facilitate the success of the Event Strategy and ultimately promote the Redlands as a leading event destination, there are some identified issues and gaps.

These issues and gaps fall into the following categories:

Infrastructure	Event promotion and networking	Event coordination and support
<ul style="list-style-type: none"> • Lack of services in some open spaces i.e. water, power, lighting and amenities • Conflict of use for open spaces i.e. local sporting meets and external event users • Limited dedicated event facilities • Traffic management – planning, staffing and equipment • Availability of soft infrastructure (portable event equipment) i.e. barrier fencing, traffic cones and rubbish bins, particularly on the islands • Limited higher end and large scale accommodation • Lack of inter-region mainland public transport • Limited parking at some event venues and on mainland for island transfers • Transport to islands and costs • Transport on islands 	<ul style="list-style-type: none"> • Many events in Redland City are not externally visible or online • Council's online events calendar (What's On in the Redlands) and the Australian Tourism Data Warehouse are utilised by event organisers • Lack of awareness/take-up of upskilling opportunities for event organisers • Limited collaboration between event organisers and local businesses • Lack of event bundling and packaging with tourism operators • Organisers work independently and do not have a directory to contact each other • Some venue and local service providers can be a challenge to locate and contact 	<ul style="list-style-type: none"> • Many events are managed by volunteers with limited professional event experience or support, making it difficult to further develop potential signature/destination events • Inconsistent internal processes for event inquiries • Resources (human and other) to support events • Timeframes for permitting events • Financial support for event organisers – sponsorship (cash and in-kind) and fees and charges – and how these are recorded • Limited processes in place to assess and monitor event impacts • The Redlands is not synonymous with signature/destination events – throughout consultation most cited Day on the Green and Strawberry Festival (now RedFest) as well-known events

It is important to note that the responsibility of resolving these issues does not fall solely to Council – many will require the active participation of Redland City events operators.

Recommendations to resolve or convert these issues into opportunities for the Redlands are outlined as follows.

Opportunities

There are some key opportunities for Redlands event stakeholders and Council to focus on in order to activate and grow the City's events industry.

Infrastructure opportunities	Event promotion and networking opportunities	Event coordination, development and investment opportunities
<ul style="list-style-type: none"> • Dedicate an open space as an event facility with consideration for pop-up accommodation • Activate event spaces across the City • Consider developing a soft infrastructure pool of portable events equipment • Encourage intra-region transport for events, linking venues with public transport and services 	<ul style="list-style-type: none"> • Develop an event portal for Redland City (part of destination website) • Maximise Redlands event presence through the Australian Tourism Database Warehouse • Build partnerships between event organisers, local business suppliers, tourism operators and third party funding providers • Facilitate event organiser networking • Bundling and packaging of events with hero experiences and accommodation including pop-up accommodation and camping 	<ul style="list-style-type: none"> • Event support – attract and support events that meet the Redland City's event vision • Further streamline Council processes • Create an events unit • Create an events team – the “red team” • Implement event measuring tools and processes • Grow event organisers’ professional event capacity i.e. seminars and event boot camps • Encourage events to develop signature/destination event experiences • Leverage opportunities from the Gold Coast 2018 Commonwealth Games • Grow volunteer base • Develop an event attraction strategy



Splendour in the Grass, Byron Bay

Infrastructure opportunities

Dedicated facilities for events and activation of open spaces

Growing existing events and attracting new, larger events to Redland City is currently hampered by limited event facilities as well as conflicting use and availability of facilities for community and event organisers. For example, Norm Price Park (Redland Showgrounds) at Cleveland is used by several sports associations as well as large events such as RedFest.

To build on one of the City's competitive advantages – open green space so close to Brisbane – activation of the Redlands' open spaces and parks [11] for events across the City is recommended.

To successfully activate these open spaces, specific infrastructure needs to be considered, such as water, power, lighting, amenities including toilets and parking.

Priority of event use will also need to be clarified to overcome any conflict of use for open spaces i.e. local sporting meets and external event users.

More accommodation, including temporary pop-up accommodation, would be an attractor for conferences and events.

The opportunity for a dedicated conference centre with accommodation possibly at Toondah Harbour or Weinam Creek is detailed in the *Redland City Tourism Strategy and Action Plan 2015–2020* [12].

Case Study

North Byron Parklands (NBP) is located at Yelgun, in the north of the Byron Shire. It is host to two of Australia's major music events, Splendour in the Grass and Falls Festival. Privately owned, NBP is a 660-acre cultural arts and music events venue, established to cater for the growth of the music festivals, with Council approval to operate three music festivals with a capacity of 45,000 people at each event per annum. The current development application approval is under review to increase the capacity and number of events held each year.

With strong environmental underpinnings, NBP is dedicated to creating an eco-friendly, minimal footprint, sustainable space for the arts and broader community. It has won awards for its relocatable eco-friendly composting amenities that use saw dust to eliminate odours. Existing infrastructure at NBP consists of the 20 amenities blocks and one general store. Everything from power to water, sewerage, waste removal and temporary buildings are constructed and removed for each event.

During festivals at NBP, space is rented to pop-up accommodation providers with camping options for festival attendees ranging from budget to glamping with an onsite café, massage therapist, hairdresser and common area for guests.

All accommodation providers are responsible for supplying infrastructure such as amenities, water and sewerage tanks, power generators, lighting and bridges over causeways if required.

NBP facilitates construction of fencing, water deliveries, and twice-daily sewerage pump outs, all at the expense of the pop-up accommodation operator [13].

Event promotion and networking opportunities

Events portal

The development of an events portal as part of a destination website for Redland City could help provide a centralised point of contact for local and external event organisers as well as professional conference organisers.

The portal would be an important tool to assist event organisers wanting to stage events in the Redlands, to maximise the economic impacts from events and attract new events.

The portal should include:

- a calendar of events to act as an ‘opportunity calendar’ so event organisers could look to stage events in shoulder periods and reduce clashing of events, using the Australian Tourism Data Warehouse to integrate the event content feed
- event information kit
- event toolkit including destination images and footage
- directory of venues including open space capacity and facilities
- directory of event suppliers and local businesses
- tourism experiences and links to transport and accommodation options.

The portal could also potentially be a one-stop-shop for event organisers to seek local government approvals with online application forms.

It is recommended that the Australian Tourism Data Warehouse is used as a content feeder to also maximise the presence of Redlands events and tourism operators online.

Some examples of central event portals include Business Events Cairns (<http://businesseventscairns.org.au/>) and the Sunshine Coast Council’s website (<http://events.sunshinecoast.qld.gov.au/?v=planners>), which includes an event suppliers’ directory for Events Sunshine Coast.



Bayview Blast



Event coordination, development and investment opportunities

Roles and responsibilities for events

To realise the event vision to be renowned as one of Australia's most event-friendly destinations, a collective partnership between event organisers, the tourism industry, private enterprise and all levels of government and the community will be required.

The event roles for Redland City Council are many, including leader, provider, sponsor, facilitator and communicator.

Leader	Advocate, attract, support, plan and provide an event focus for the Redlands. Act as a catalyst for collaboration and partnerships between event organisers and suppliers.
Provider	Provide potential venues, open spaces and in-kind support for festivals and events that meet key criteria aligned with the event vision.
Sponsor	Evaluate opportunities to invest as an in-kind and/or cash sponsor in events aligned to the event vision and Council objectives.
Facilitator	Support events and grow local event capacity through training workshops, while maintaining compliance as an advisor through relationship management.
Communicator	Actively attract and promote new events (and retain suitable events) aligned with the event vision and leverage opportunities and partner with regional and state tourism and event organisations.

Responsibilities include:

Support	Providing event organisers with advice and information
Approval	Coordinating and facilitating the Council event approval process and act as a main point of contact for event organisers
Compliance	Providing event organisers with a clear understanding of event compliance requirements and legislative requirements of Council, and contacts for other relevant authorities
Safety	Actively facilitate risk management with event organisers to ensure the safety of event attendees and staff
Fees and charges	Appropriate fees and charges are in place for venue usage, application fees and permits
Advocacy and advice	Advising stakeholders during the event planning stage to deliver best-practice events
Sponsorship and grants	Clear parameters around support channels are in place, event organisers are encouraged to apply for funding through the Grants and Sponsorship program and Council's support for events is recognised
Event sustainability	Facilitating training to improve event organiser capacity to deliver well managed, budgeted, safe, accessible, sustainable, creative and innovative events that are responsive to the community needs and embrace the bay, islands and culture. Networking opportunities for event organisers and local suppliers to form partnerships are provided
Event attraction	Attracting suitable new events (and retaining suitable existing events), identifying opportunities to leverage significant community, social, cultural or economic benefits
Event delivery	Delivering Council events for the Redlands community i.e. Christmas by Starlight and citizenship ceremonies
Communication	Promoting Council and community events through the online "What's On in the Redlands" calendar, social media, links to Australian Tourism Data Warehouse, publications and other mediums
Event evaluation	Facilitating event monitoring and post evaluation of the impact of events and festivals with event organisers against key performance indicators

Events unit

To help grow the Redlands' events portfolio and realise the event vision, a dedicated events unit could be located within Council.

The events unit could provide a main point of contact for ease of communication and improve consistency in the approval process of events, increase service levels as well as identify opportunities for internal efficiencies.

As identified in the local government Council benchmarking, the majority of councils researched had an events unit with a minimum of four-to-eight staff dedicated to working on aspects of events that were focused on supporting event organisers and assisting to boost their local economy.

During the Redlands consultation and workshops, suggestions included that:

- a dedicated events unit with a minimum two full-time employees, recognising the year-round, out-of-hours nature of the role, is required
- future resourcing of the events unit should be based on the economic outcomes and benefits for the Redlands community generated by growth in events and their monitored economic impact
- the events unit could be positioned with several areas of Council
- a non-statutory events committee (a "red team") comprising relevant specialists from Council and other organisations could help facilitate the effectiveness of a Council events unit.

Events "red team"

Throughout local government benchmarking, consultation and workshops, an events team – that could be called the "red team" – was cited as an effective way to facilitate the effectiveness of a Council events unit.

Role of the team

The primary role of the team would be to meet with events organisers to hear them "pitch" an event that they would like to hold in the Redlands. The team would assist in advising the event organiser of any approvals/permits required for the event as well as potential support sources i.e. Council sponsorship (in-kind and/or cash and third party funding).

Meeting bi-monthly, and more frequently as required, the team would help evaluate event proposals to determine whether the event will align with the event vision and meet any necessary legislative requirements.

The team would also meet with Council-supported events for post evaluation and facilitate appropriate events in a pathway to growth, similar to Tourism and Events Queensland's E-12 program.

Team configuration

It is recommended to keep the team to a core group, with additional representatives invited to attend meetings when their knowledge or assistance is required for specific events. The team could include relevant Council staff and where appropriate representation from the organisations. These include:

Council	Other agencies
<ul style="list-style-type: none">• Communication, Engagement and Tourism• Environment Health• Risk Management• City Sport and Venues• Strengthening Communities• City Spaces• Economic Development	<ul style="list-style-type: none">• Queensland Police Service• Queensland Fire and Emergency Services• SES• Brisbane Marketing• Tourism and Events Queensland• Quandamooka Yoolooburrabee Aboriginal Corporation• Chambers of Commerce• Redlands Tourism Subcommittee• Redlands Economic Development Advisory Board

Assessment criteria and evaluation

Key criteria for consideration when assessing Council support for events, such as providing in-kind assistance and/or funding, needs to be clearly in line with the Redlands event vision and directly related to its strategic approach.

The priority areas for Council support should focus on events that meet and/or demonstrate potential growth in relation to the following assessment criteria:

Build awareness	<ul style="list-style-type: none"> • Profiles Redlands, attracts regional, state, national and possibly international media as well as social media coverage • Embraces the bay, islands and culture, contributing to signature/destination image
Attracts external visitation	<ul style="list-style-type: none"> • Attracts visitation from outside the City, increasing spend and length-of-stay • Offers value for money, taking consideration of Council's contribution as a percentage of the total event budget and the number of people, particularly from outside the City, who are anticipated to attend the event
Contributes to the City's economy	<ul style="list-style-type: none"> • Generates new investment and business • Demonstrates partnering with local businesses to stimulate local business activity and/or employment • Contributes to off-peak and shoulder seasons
Fosters community pride	<ul style="list-style-type: none"> • Encourages community support, participation and/or involvement in events • Embraces cultural heritage
Demonstrates good governance and sustainability	<ul style="list-style-type: none"> • Demonstrates financial sustainability (event sustainability) • Demonstrates commitment to safety and risk management • Provides an Event Management Plan and associated documentation
Positive experience	<ul style="list-style-type: none"> • Creates an event legacy with return visitation



Event support

Redland City Council runs a Grants and Sponsorship Program, with two funding rounds available each year. In special circumstances, Council will consider assessing sponsorship applications out-of-round. Grants and sponsorships must be acquitted by the event organiser.

As part of sponsorship applications or in dealings with Council, many event organisers request additional in-kind support such as use of equipment i.e. traffic cones and temporary fencing. Event organisers also regularly request for fees and charges to be waived such as permit application forms and venue hire fees. It would be beneficial for in-kind support to be captured centrally.

In addition, while it would be beneficial for Redland City to help the development of a signature/destination event(s) and have more significant events, it will be important to maintain a balance for support offered for existing and new local events.

Table 3 outlines potential support and facilitation for events that meet the event vision, objectives and assessment criteria.



Table 3: Potential support for event hierarchy

Hierarchy of event	Potential support
Tier 1 – Signature/destination events	<ul style="list-style-type: none"> • Sponsorship – in-kind and/or cash • Consideration of fees being waived as part of Council sponsorship • Networking opportunities • Listing on events portal and calendar • Training opportunities • Encourage the organiser to apply for E-12 program funding from Tourism and Events Queensland and other funding sources
Tier 2 – Significant events	<ul style="list-style-type: none"> • Sponsorship –in-kind and/or cash • Consideration of fees being waived as part of Council sponsorship • Networking opportunities • Listing on events portal and calendar • Training opportunities • Encourage organisers to apply for other funding sources
Tier 3 – Local events	<ul style="list-style-type: none"> • Potentially eligible for Council’s community grants program • Sponsorship –in-kind and/or cash • Consideration of fees being waived as part of Council sponsorship • Networking opportunities • Listing on events portal and calendar • Training opportunities • Other assistance i.e. possible mentoring

Third party funding options

All events are encouraged to partner and network with each other and also consider third party funding options.

Council's website currently includes for information about third party funding options for event organisers.

Table 4 outlines some of the third party funding options that event organisers and not-for-profit organisations may be eligible for. This list could be regularly updated by Council and included on the event portal and in the event toolkit to assist event organisers.

Table 4: Third party funding options

Organisation	Funding description	Online link
Tourism and Events Queensland	State events agency responsible for attracting, creating and growing events that will generate economic and social value for Queensland. Funding via major and regional events development programs.	http://teq.queensland.com/en-IE/Industry-Resources/Funding/Event-Funding
Arts Queensland	Grants are allocated through a number of programs, including the Regional Arts Development Fund. New funding programs include the Super Star Fund.	www.arts.qld.gov.au
Gambling Community Benefit Fund	Distributes grants to Queensland-based not-for-profit community groups to provide services and activities to benefit Queensland communities.	www.olgr.qld.gov.au/grants
Department of National Parks, Recreation, Sport and Racing	A range of funding programs is available to "active organisations", making it easier to access the funds needed to spread the words "Get Active Queensland". Funding falls under both major and minor infrastructure grant programs.	www.nprsr.qld.gov.au/funding
Queensland Arts Council	Supports the arts in regional, remote and very remote/isolated Australia, offering applicants the chance to be granted \$5000 to \$30,000 towards their artistic projects.	www.artslinkqld.com.au/regional-arts/regional-arts-fund/
Department of Aboriginal and Torres Strait Islander Multicultural Affairs	Grants are allocated to promote an understanding of multiculturalism, reduce prejudice and foster community participation.	www.datsima.qld.gov.au/datsima/grants-and-funding
Screen Queensland	Offers a range of funding initiatives for film development investment, multi-platform and games, micro budget movies, indigenous stories and training, professional development and travel grants.	www.screenqueensland.com.au
Festivals Australia	Provides funding to improve the presentation and quality of cultural activities in festivals, with a particular focus on regional events that stimulate economic benefits to the communities.	www.arts.gov.au/arts/festivals_australia
Indigenous Culture Support Program	Supports the maintenance and continued development of indigenous culture with a wide range of cultural projects, including traditional art and craft production, dance and theatre and community festivals showcasing indigenous talent.	http://arts.gov.au/indigenous/ics
Foundation for Rural and Regional Renewal	Specifically for smaller communities; population of 10,000 or less. Culture, Arts, Tourism and Heritage (CATCH) Program	www.frrr.org.au/grants/catch
Australian Sports Foundation	Specifically for sports groups raising funds	http://asf.org.au/fundraising-resources/

Measuring event impacts

To make informed decisions for Council event investment and to monitor event growth and performance, a system of measuring event impact is recommended. This could include a number of assessments, including economic, social and environmental impacts.

Economic impacts

Ideally, full economic impact studies should be undertaken by major events attracting more than, for example, 10,000 – 15,000 visitors. For events where Council is making a substantial cash and in-kind sponsorship, a requirement could be the undertaking of an event impact assessment from a list of pre-approved third party suppliers. However, this type of assessment could be cost prohibitive to event organisers.

Council currently uses the Tourism and Events Queensland event formula to calculate economic impact.

Evaluation measures could include:

- total attendance
- average number of days attended
- average time spent at the event
- % of local and % non-local attendees
- number of day visitors
- number of commercial accommodation stayers and number of non-commercial stayers
- average cost per bed night (per person)
- average daily spend (not including accommodation) [14].

To encourage the collation of standardised data, an event visitor survey could be developed and distributed to event organisers to conduct during and post events. It could help to determine whether the attendee will return to the City and if they will attend future events (event legacy).

It is recommended that Council investigates options for a localised formula to measure event value in Redland City.

Social impacts

The social and cultural aspects of events should also be considered and measured. This could include a combination of the following:

- **Council's Community Satisfaction Survey**

Questions could be added relating to events and the community's perception of them.

- **Cultural/local participation**

As part of sponsorship applications and post event reporting, information could be requested to be including local arts, cultural heritage and local participation in events.

- **Visitor surveys**

Cultural and social perception questions could be added to a standardised event visitor survey.

Environmental impacts

The environmental impacts of events are important to consider for the Redlands, particularly in locations around the bay and islands. Environmental impacts of events are typically measured by:

- waste
- water
- transport
- carbon footprint i.e. offset initiatives
- sustainability
- environmental contribution/awareness.

It is recommended to encourage events with sound environmental and sustainable practices.

Case Study

The Shire of Campaspe, located in northern Victoria, with a population of 15,000, has an Events Unit that acts as a single point of contact. Campaspe has limited event facilities available in the shire and an accommodation capacity of 8000, with a focus to help grow events.

There are no application/processing fees for event applications and not-for-profit events are provided waste and traffic management services at no cost.

The shire has taken a hands-on approach to monitoring the economic impact of their events. This includes:

- *selecting a number of major events throughout the year to survey*
- *Council undertakes surveys at the event, which includes questions such as where the visitor comes from, how much they have spent, length of stay and satisfaction*
- *the information is entered into Survey Monkey and Council develops a post visitor survey report*
- *economic data is entered into an economic profile model program called Remplan, for which Council pays an annual subscription*
- *information gained from Remplan and the visitor survey is used to assess community grants and investment in major events*
- *survey results are also used to help events grow by identifying demographics and satisfaction levels [15].*

Increasing event organiser capacity

To facilitate the capacity of event organisers to grow their events, a series of training opportunities and event boot camps for event organisers is recommended.

Training could cover a variety of areas including:

- working with the media
- business planning
- governance
- event management
- risk analysis
- funding and sponsorship application development
- succession planning
- monitoring the impact of your event
- volunteer attraction and retention
- marketing and how to leverage destination marketing
- how to incorporate hero experiences and program develop to enhance visitor satisfaction
- bundling and packaging with the tourism industry
- entertainment
- production
- compliance
- traffic
- waste management.

Networking and mentoring between larger and smaller events could also assist in increasing event organiser capacity.

Event attraction strategy

An event attraction strategy focused on the attraction of new events (and retaining suitable events) could be developed that includes:

1. Attracting events aligned with events vision
2. Attending and participating in event activities with Brisbane Marketing and Tourism and Events Queensland and supplying information and promotional material to leverage and maximise their bidding processes
3. Ensure event attraction considers off-peak and shoulder periods, including working with event organisers to influence timing for new events and venue availability
4. Encourage the geographic dispersal of events across the city, particularly activating open spaces
5. Actively working with potential event organisers to build relationships by identifying their needs, outlining approval processes, conducting familiarisations (famils) and providing incentives (Council sponsorship – cash and in-kind) where appropriate.



Action Plan

This Action Plan contains steps required to realise future opportunities and achieve the recommendations included in this Events Strategy to develop the Redlands as an event destination, as well as supplementary actions that can be undertaken to further its success.

The following three key result areas will be focused on to help facilitate the successful implementation of this Event Strategy:

- **Key Result Area 1** – Infrastructure opportunities
- **Key Result Area 2** – Event promotion and networking opportunities
- **Key Result Area 3** – Event coordination, development and investment opportunities

Actions will be implemented over the following time frames:

- **Short-term** – within the next two years (2017 and 2018)
- **Medium-term** – within the following three years (2019 onward)

Actions are listed in order of timeframe, not priority.

Key Result Area 1 – Infrastructure opportunities

#	Action	Tasks	Responsibility/ Stakeholders	Time-frame	Key performance indicators
1	Establishing a soft infrastructure pool of portable event equipment	<ul style="list-style-type: none"> Investigate the viability of Council establishing a soft infrastructure pool of portable event equipment i.e. barrier fencing, traffic cones, bunting and small marquees that can be booked for use by event organisers including island destinations. A bond or fee may be required. Storage of equipment and staffing would need to be considered to manage the soft infrastructure pool. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Recommendation about establishing a soft infrastructure pool of portable event equipment made by March 2017.
2	Activation of a dedicated event space and activation of spaces across the City for events	<ul style="list-style-type: none"> Identify an events-specific venue such as Norm Price Park Conduct feasibility study of Council-owned open spaces including infrastructure i.e. power, water, toilets, lighting and car parking available to support events. Prioritise infrastructure upgrades for open spaces/ areas identified as event venues. 	<ul style="list-style-type: none"> Council Redlands Tourism Subcommittee Redlands Economic Development Advisory Board 	Short-term	<ul style="list-style-type: none"> Complete feasibility study by June 2017.
3	Redlands is a recreational-vehicle friendly City	<ul style="list-style-type: none"> Investigate options for self-contained motorised vehicles to temporarily park overnight in relation to events across the mainland and islands including Norm Price Park. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Recommendation about options for overnight parking for events by June 2017.
4	Connectivity to events	<ul style="list-style-type: none"> Improve transport to events, particularly on the island, including through the Redlands Transport Strategy. 	<ul style="list-style-type: none"> Council Department of Transport and Main Roads TransLink Ferry operators Bus companies Events organisers 	Medium-term	<ul style="list-style-type: none"> Initiatives to improve connectivity to events are included in the Redlands Transport and Connectivity Priority Plan – ongoing

Key Result Area 2 – Event promotion and networking opportunities

#	Action	Tasks	Responsibility/ Stakeholders	Time- frame	Key performance indicators
5	Event portal	<ul style="list-style-type: none"> Develop an event portal as part of the Redland City destination website that includes: <ul style="list-style-type: none"> ◆ event information and toolkit for events organisers ◆ online application forms for event permit applications ◆ a 'What's On in the Redlands' event calendar ◆ feed from the Australian Tourism Data Warehouse for events ◆ functionality for Rich Site Summary (RSS) feeds to alert subscribers about new events or changes to event details ◆ area for event organisers including online forum ◆ directory for local suppliers, private venues and event organisers to add details about their services, facilities and equipment ◆ links to useful websites i.e. Brisbane Marketing and Tourism and Events Queensland ◆ social media and e-newsletter integration ◆ contact details for Council. 	<ul style="list-style-type: none"> Council Event organisers Local suppliers Local venues 	Short-term	<ul style="list-style-type: none"> Develop event portal by June 2017.
6	Networking opportunities	<ul style="list-style-type: none"> Facilitate event organiser, supplier and venue manager networking events Organise famils for event organisers to visit venues, open spaces and tourism facilities 	<ul style="list-style-type: none"> Council Event organisers Chambers of Commerce Tourism operators 	Short-term	<ul style="list-style-type: none"> Delivery of two event networking forums per year (first forum completed by February 2017). Delivery of one famil for event organisers per year (first famil completed by June 2017).
7	Event bundling and packaging	<ul style="list-style-type: none"> Assist event organisers and local tourism operators to bundle event tickets with transport, tours and accommodation options. Consider pop-up accommodation opportunities for events like the Quandamooka Festival and Straddie Salute in 2017. 	<ul style="list-style-type: none"> Council Redlands Tourism Subcommittee Event organisers Tourism operators 	Short-term	<ul style="list-style-type: none"> Three events bundles/packages available by June 2017. Five packages available by June 2018.

Key Result Area 3 – Event coordination, development and investment opportunities

#	Action	Tasks	Responsibility/ Stakeholders	Time-frame	Key performance indicators
8	Establish an events team – the “red team”	<ul style="list-style-type: none"> Establish a team comprising representatives from relevant areas of Council and other agencies to advise on requirements for events and what type of support could be provided. Meet bi-monthly, and more often as required, so that event organiser can “pitch” their event. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Establish “red team” by February 2017. Commence bi-monthly meetings from February 2017.
9	Events policy	<ul style="list-style-type: none"> Develop a Council events policy/guideline. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Development of events policy/guideline for review and adoption by Council by March 2017.
10	Measuring event value and impact	<ul style="list-style-type: none"> Investigate localised formula to measure the value of events held in Redland City. Develop social and environmental impact assessment templates for use by events organisers. Develop event visitor survey template for use by event organisers. Include event impact question(s) in Council's Community Satisfaction Survey. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Investigate formulas by March 2017. Develop templates by June 2017. Include event impact questions(s) in Council's Community Satisfaction survey from July 2017.
11	Sponsorship	<ul style="list-style-type: none"> Move towards a process of providing in-kind support in lieu of cash for event sponsorship. Increase sponsorship budget to contain all Council expenses for external events for services such as traffic management and permit fees, where appropriate. Review sponsorship policy, associated guidelines, application form and acquittal form to reflect requirements of measurement of event value and impact, marketing/media coverage and in-kind contribution by Council. Record in-kind support for events in a central location. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Review Sponsorship policy and associate documents by June 2017. Apply new policy from July 2017.

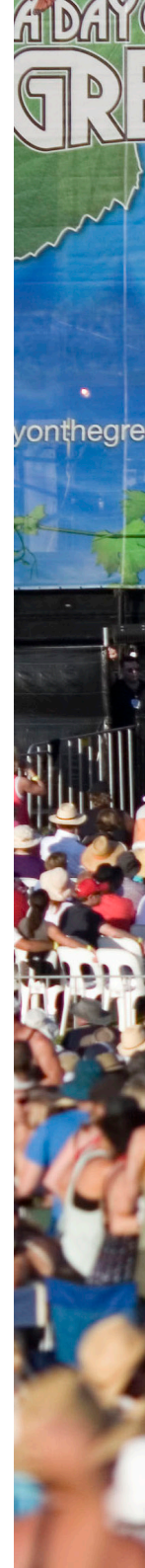
#	Action	Tasks	Responsibility/ Stakeholders	Time- frame	Key performance indicators
12	Events resources	<ul style="list-style-type: none"> Map the events application process for Council and look for any areas to streamline it. Establish a dedicated Events Unit within Council with a minimum of two full-time staff to assist community and commercial event organisers. Review the organisational placement of the Events Unit. 	<ul style="list-style-type: none"> Council 	Short-term	<ul style="list-style-type: none"> Map events process using LEAN and receive any recommendations for improvement by January 2017. Establish Events Unit and determine best organisational fit by March 2017.
13	Leverage off the Gold Coast Commonwealth Games 2018	<ul style="list-style-type: none"> Identify and communicate to the community how Redland City can benefit from opportunities presented by the Commonwealth Games. Investigate opportunities for Redland City to partner with GOLDOC and Department of Tourism, Events and Small Business on Commonwealth Games initiatives i.e. hosting countries for pre-games training, Queen's Baton Relay and famils. 	<ul style="list-style-type: none"> Council Commonwealth Games Committee Department of Tourism, Events and Small Business GOLDOC Events organisers Local suppliers 	Short-term	<ul style="list-style-type: none"> Identify and communicate opportunities by March 2017. Work through Council Commonwealth Games Committee to facilitate opportunities until June 2018.
14	Support formal bid process for South East Queensland to host Olympic Games in 2028	<ul style="list-style-type: none"> Support the South East Queensland feasibility study into hosting the Olympic Games in 2028 that includes: <ul style="list-style-type: none"> People Mass Movement Study Sporting and Performance Space Review. 	<ul style="list-style-type: none"> Redland City Council Other South East Queensland Councils Queensland Government 	Short-term	<ul style="list-style-type: none"> Financially support the feasibility study by June 2018.
15	Volunteer strategy	<ul style="list-style-type: none"> Promote the Welcome to Redlands Program and Welcome to North Stradbroke Island Program to enhance volunteers' knowledge about the Redlands. Investigate options to partner with Volunteering Redlands and Volunteering Queensland for training and event experience opportunities. 	<ul style="list-style-type: none"> Council Event organisers Volunteering Redlands Volunteering Queensland 	Short-term	<ul style="list-style-type: none"> Promote the Welcome to Redlands Program and Welcome to North Stradbroke Island Program to enhance volunteers' knowledge about the Redlands through Volunteering Redlands by January 2017. Investigate options for partnering with Volunteering Redlands and Volunteering Queensland by June 2017.

#	Action	Tasks	Responsibility/ Stakeholders	Time- frame	Key performance indicators
16	Event toolkit	<ul style="list-style-type: none"> • Develop an online event toolkit to assist event organisers that includes: <ul style="list-style-type: none"> ◆ event information kit ◆ event visitor survey ◆ branding fact sheet ◆ working with media fact sheet ◆ event value formula ◆ social and environmental impact assessment templates ◆ funding sources fact sheet ◆ attracting sponsors fact sheet ◆ how to write an award-winning submission fact sheet ◆ talent release form template ◆ support services listing contact list ◆ Australian Tourism Data Warehouse Information booklet ◆ online marketing information booklet ◆ destination imagery ◆ marketing collateral order form ◆ how to organise special events information booklet ◆ event planner template ◆ other useful information. 	<ul style="list-style-type: none"> • Council 	Short-term	<ul style="list-style-type: none"> • Develop online event toolkit by June 2017.

#	Action	Tasks	Responsibility/ Stakeholders	Time- frame	Key performance indicators
17	Build capacity of event organisers	<ul style="list-style-type: none"> Develop a schedule of event organiser training opportunities that is tailored to suit those with minimal to high-level experience i.e. information sessions with Council officers to boot camps and seminars run by industry experts on a variety of topics including safety and risk management, budget development, bundling and packaging and writing grant and sponsorship applications. Include schedule on event portal once portal is live. Work with event organisers to identify training opportunities that would be most beneficial for them. 	<ul style="list-style-type: none"> Council Event organisers Industry experts Brisbane Marketing 	Short-term	<ul style="list-style-type: none"> Schedule of event organiser training developed by June 2017. Commence roll out of training from July 2017.
18	Signature/destination event development	<ul style="list-style-type: none"> Identify key events that show potential to elevate to signature/destination event status based on event monitoring. 	<ul style="list-style-type: none"> Council Redlands Tourism Subcommittee Brisbane Marketing Tourism and Events Queensland 	Short-to-medium term	<ul style="list-style-type: none"> Identification of one or more events to focus on for development by June 2018.
19	Event attraction strategy	<ul style="list-style-type: none"> Develop an event attraction strategy that includes: <ul style="list-style-type: none"> leveraging regional and state event body event bidding initiatives marketing and promotion of Redland event venues, organisers and suppliers including famils list of appropriate events that are suitable to available venues and infrastructure to be staged across the City event incentives package to come to Redland City. 	<ul style="list-style-type: none"> Council 	Medium-term	<ul style="list-style-type: none"> Develop event attraction strategy by March 2019.

References

1. Profile.id. *Welcome to the Redland City Community Profile*. 2016 [23 August 2016]; Available from: <http://profile.id.com.au/redland>.
2. *A Festival & Events Strategy for the Redlands* (2008)
3. Thomas, C., *Local Fairs, Festivals Boost Economic Impact on Communities, WVU Experts Say*, in *Targeted News Service 2015*: Washington D.C.
4. Salt, B., *All about me: the rise of the individual is trending*, in *The Australian Business Review*. 2016.
5. Mintel. *Mintel Consumer Trends, Australian and New Zealand 2015*. 2015 [23 August 2016]; Available from: <http://www.mintel.com/en/australia-new-zealand-consumer-trends-2015/>
6. Eventbrite. *New Trends Impacting Festival and Consumer Events*. 2015 [23 August 2016]; Available from: http://eventbrite-s3.s3.amazonaws.com/marketing/britepapers/Britepaper_6newtrends_webVersion.pdf
7. Tourism Research Australia. *Events: Drivers of Regional Tourism, Summary*. 2014 [23 August 2016]; Available from: https://www.tra.gov.au/documents/DVS_Events_-_Drivers_of_Regional_Tourism_FINAL_04082014.pdf
8. Yeoman, I., *A futurist's thoughts on consumer trends shaping future festivals and events*. *International Journal of Event and Festival Management*, 2013. 4(3).
9. City of Gold Coast, *Gold Coast City Events Strategic Plan 2011–2015*. 2011
10. Hobsons Bay City Council, *Hobsons Bay City Council Events and Festivals Plan 2016–2021*. 2015
11. Redland City Council, *Copy of Commercial and Community Use Parks Spreadsheet (A123906)*. 2015.
12. Redland City Council, *Redland City Tourism Strategy and Action Plan 2015–2020*. 2015.
13. North Byron Parklands. *About Us*. 2016 3 April 2016]; Available from: <http://northbyronparklands.com/>.
14. UK Sport event IMPACTS. *Direct Economic Impact Calculator*. 2015 [23 August 2016]; Available from: <http://www.eventimpacts.com/>.
15. Shire of Campaspe, *Events Strategy 2012–2014*. 2012.





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Contact details

For more information about events in the Redlands please contact Redland City Council on 3829 8999.

Disclaimer

The information contained in this document or its attachments is to the best of our knowledge accurate at the time of authorising the printing of the publication in December 2016. Any representation, statement, opinion or advice, expressed or implied in this publication is made in good faith for general information purposes but and on the basis that the Redland City Council, its agents and employees are to the extent permissible by law, not liable (whether by reason of negligence, lack of care or otherwise) to any person for any damage or loss whatsoever that has occurred or may occur in relation to that person taking or not taking (as the case may be) action in respect of any representations, statement or advice referred to above.



11.3 COMMUNITY & CUSTOMER SERVICES**11.3.1 DECISIONS MADE UNDER DELEGATED AUTHORITY FOR CATEGORY 1, 2 AND 3 DEVELOPMENTS**

Objective Reference: A124442
Reports and Attachments (Archives)

Attachment: [Decisions Made Under Delegated Authority 13.11.2016 to 26.11.2016](#)

Authorising Officer:



Louise Rusan
General Manager Community & Customer Services

Responsible Officer: David Jeanes
Group Manager City Planning & Assessment

Report Author: Debra Weeks
Senior Business Support Officer

PURPOSE

The purpose of this report is for Council to note that the decisions listed below were made under delegated authority for Category 1, 2 and 3 development applications.

This information is provided for public interest.

BACKGROUND

At the General Meeting of 27 July, 2011, Council resolved that development assessments be classified into the following four Categories:

Category 1 – Minor Complying Code Assessments and Compliance Assessments and associated administrative matters, including correspondence associated with the routine management of all development applications;

Category 2 – Complying Code Assessments and Compliance Assessments and Minor Impact Assessments;

Category 3 – Moderately Complex Code & Impact Assessments; and

Category 4 – Major and Significant Assessments

The applications detailed in this report have been assessed under:-

- Category 1 criteria - defined as complying code and compliance assessable applications, including building works assessable against the planning scheme, and other applications of a minor nature, including all accelerated applications.

- Category 2 criteria - defined as complying code assessable and compliance assessable applications, including operational works, and Impact Assessable applications without submissions of objection. Also includes a number of process related delegations, including issuing planning certificates, approval of works on and off maintenance and the release of bonds, and all other delegations not otherwise listed.
- Category 3 criteria that are defined as applications of a moderately complex nature, generally mainstream impact assessable applications and code assessable applications of a higher level of complexity. Impact applications may involve submissions objecting to the proposal readily addressable by reasonable and relevant conditions. Both may have minor level aspects outside a stated policy position that are subject to discretionary provisions of the Planning Scheme. Applications seeking approval of a plan of survey are included in this category. Applications can be referred to General Meeting for a decision.

OFFICER'S RECOMMENDATION

That Council resolves to note this report.

Decisions Made Under Delegated Authority 13.11.2016 to 19.11.2016

CATEGORY 1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
BWP003916	Design & Siting - Setbacks	Abilities Engineering Pty Ltd	52 Seacrest Court Cleveland QLD 4163	Concurrence Agency Referral	15/11/2016	NA	Approved	2
BWP002980	Design and Siting - Carport	Mark James BROWNLIE	9 Grandview Court Thornlands QLD 4164	Concurrence Agency Referral	15/11/2016	NA	Extension of Time	3
BWP003910	Design and Siting - Garage	B Approved	3 Breckenridge Court Thornlands QLD 4164	Concurrence Agency Referral	16/11/2016	NA	Approved	3
BWP003915	Design & Siting - Carport	Ashley Dean JACKSON	3 Lyn Court Victoria Point QLD 4165	Concurrence Agency Referral	16/11/2016	NA	Approved	4
MCU013838	Dual Occupancy	East Coast Surveys Pty Ltd	84 Sycamore Parade Victoria Point QLD 4165	Code Assessment	18/11/2016	NA	Development Permit	4
BWP003930	Referral Agency Response - Secondary Dwelling	Susan Holly COX	6 Bartlett Terrace Redland Bay QLD 4165	Concurrence Agency Referral	18/11/2016	NA	Approved	5
BWP003919	Design and Siting - Pool Fence on top of Retaining Wall	Professional Certification Group	12 Joshua Place Redland Bay QLD 4165	Concurrence Agency Referral	16/11/2016	NA	Approved	6
BWP003931	Design and Siting - Dwelling	Professional Certification Group	39 Capella Drive Redland Bay QLD 4165	Concurrence Agency Referral	14/11/2016	NA	Approved	6
BWP003926	Design and Siting - Deck	Bartley Burns Certifiers & Planners	17 Mooroondu Road Thorneside QLD 4158	Concurrence Agency Referral	15/11/2016	NA	Approved	10

CATEGORY 2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
MCU013810	Vehicle Repair Premises	Autosports Castle Hill Pty Ltd	50-52 Redland Bay Road Capalaba QLD 4157	Impact Assessment	15/11/2016	NA	Development Permit	9

Decisions Made Under Delegated Authority 20.11.2016 to 26.11.2016

CATEGORY 1

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
BWP003830	Domestic Outbuilding	The Certifier Pty Ltd	18 Burwana Place Wellington Point QLD 4160	Code Assessment	23/11/2016	NA	Development Permit	1
MCU013854	Dwelling	East Coast Surveys Pty Ltd	257 Wellington Street Ormiston QLD 4160	Code Assessment	23/11/2016	NA	Development Permit	1
MCU013845	Dwelling and Inground Pool	Building Code Approval Group Pty Ltd	24A Seacrest Court Cleveland QLD 4163	Code Assessment	23/11/2016	NA	Development Permit	2
ROL006109	Standard Format: 1 into 2	Building Code Approval Group Pty Ltd	32 Mergowie Drive Cleveland QLD 4163	Code Assessment	25/11/2016	NA	Development Permit	2
BWP003871	Design and Siting - Carport, Gatehouse, Retaining Wall and Fence	The Certifier Pty Ltd	6 Apple Gum Crescent Thornlands QLD 4164	Concurrence Agency Referral	22/11/2016	NA	Approved	3
BWP003310	Design and Siting - Carport	Building Approvals Qld	101 Colburn Avenue Victoria Point QLD 4165	Concurrence Agency Referral	11/12/2015	24/11/16	Development Permit	4
BWP003922	Design and Siting - Carport and Additions	The Certifier Pty Ltd	4 Hatchman Street Victoria Point QLD 4165	Concurrence Agency Referral	22/11/2016	NA	Approved	4
BWP003924	Design and Siting - Garage	Catherine Anne DONALD David Dellow DONALD	7 Canaipa Court Victoria Point QLD 4165	Concurrence Agency Referral	25/11/2016	NA	Approved	4
OPW002114	Operational Works - ROL 1 into 2	Nicole Joyce DUGGAN Simon Angelo SARTOR	107 Point O'Halloran Road Victoria Point QLD 4165	Code Assessment	24/11/2016	NA	Development Permit	4

BWP003937	Design and Siting - Carport	All Approvals Pty Ltd	10 Boronia Street Redland Bay QLD 4165	Concurrence Agency Referral	23/11/2016	NA	Approved	5
BWP003949	Design and Siting- New Dwelling	Applied Building Approvals	30 Noyes Parade Karragarra Island QLD 4184	Concurrence Agency Referral	23/11/2016	NA	Approved	5
MCU013855	Dwelling House - ADA	Zebra Design And Build	123 Beelong Street Macleay Island QLD 4184	Code Assessment	24/11/2016	NA	Development Permit	5
BWP003923	Design and Siting - Dwelling	Building Code Approval Group Pty Ltd	8 Isaac Place Redland Bay QLD 4165	Concurrence Agency Referral	23/11/2016	NA	Approved	6
BWP003928	Building over or near relevant infrastructure (sewer line) - Shed	The Certifier Pty Ltd	15 Kubler Crescent Redland Bay QLD 4165	ConRef 20 Day Referral	24/11/2016	NA	Approved	6
BWP003941	Design and Siting - Garage	Pronto Building Approvals	22-26 Giles Road Redland Bay QLD 4165	Concurrence Agency Referral	25/11/2016	NA	Approved	6
MCU013857	Secondary Dwelling	Development Solutions Qld	95 Hillview Road Mount Cotton QLD 4165	Code Assessment	21/11/2016	NA	Development Permit	6
BWP003899	Design and Siting - Shed	Strickland Certification Pty Ltd	2 Karara Court Alexandra Hills QLD 4161	Concurrence Agency Referral	24/11/2016	NA	Approved	7
BWP003917	Design and Siting - Outbuilding	North Shore Building Approvals	17A Stanley Street Capalaba QLD 4157	Concurrence Agency Referral	23/11/2016	NA	Approved	9
OPW002107	Illumination of rear Signage	Catherine Louise HEIRDSFIELD	153 Old Cleveland Road Capalaba QLD 4157	Code Assessment	22/11/2016	NA	Development Permit	9
BWP003918	Design and Siting - Dwelling	Bartley Burns Certifiers & Planners	20 Claremont Street Birkdale QLD 4159	Concurrence Agency Referral	21/11/2016	NA	Approved	10

CATEGORY 2

Application Id	Application Full Details	Applicant	Associated Property Address	Primary Category	Decision Date	Negotiated Decision Date	Decision Description	Division
OPW002108	Operational Works - Multi Unit Development x 10 Units	Antech Constructions Pty Ltd	35 Freeth Street East Ormiston QLD 4160	SPA - 15 Day Compliance Assessment	24/11/2016	NA	Compliance Certificate Approved	1
OPW002120	Pontoon System	The Jetty Specialist Yu-Kai CHU	4 Binnacle Close Cleveland QLD 4163	Code Assessment	24/11/2016	NA	Development Permit	2
OPW002015	Operational Works - ROL 1 into 4 Lots	J And J Civil Engineering Pty Ltd	89 Main Street Redland Bay QLD 4165	Code Assessment	24/11/2016	NA	Development Permit	5
BWP003955	Build Over Sewer - Above Ground Pool	Dean Ashley ANNABLE Katrina Louise ANNABLE	28-30 Parnell Street Ormiston QLD 4160	Concurrence Agency Referral	23/11/2016	NA	Approved	8

11.3.2 PLANNING & ENVIRONMENT COURT MATTERS LIST CURRENT AT 29 NOVEMBER 2016

Objective Reference: A2082098
Reports & Attachments (Archives)

Authorising Officer:



Louise Rusan
General Manager Community and Customer Services

Responsible Officer:

David Jeanes
Group Manager City Planning and Assessment

Report Author:

Kim Peeti
Acting Service Manager Planning Assessment

Graham Simpson
Service Manager Development Control

PURPOSE

The purpose of this report is for Council to note the current appeals and other matters/proceedings in the Planning and Environment Court.

BACKGROUND

Information on these matters may be found as follows:

1. Planning and Environment Court

- a) Information on current appeals and declarations with the Planning and Environment Court involving Redland City Council can be found at the District Court web site using the "Search civil files (eCourts) Party Search" service: <http://www.courts.qld.gov.au/esearching/party.asp>
- b) Judgements of the Planning and Environment Court can be viewed via the Supreme Court of Queensland Library web site under the Planning and Environment Court link: <http://www.sclqld.org.au/gjudgment/>

2. Department of Infrastructure, Local Government and Planning (DILGP)

The DILGP provides a Database of Appeals (<http://www.dilg.qld.gov.au/resources/tools/planning-and-environment-court-appeals-database.html>) that may be searched for past appeals and declarations heard by the Planning and Environment Court.

The database contains:

- A consolidated list of all appeals and declarations lodged in the Planning and Environment Courts across Queensland of which the Chief Executive has been notified.
 - Information about the appeal or declaration, including the appeal number, name and year, the site address and local government.
-

APPEALS

1.	File Number:	Appeal 2675 of 2009. (MC010624)
Applicant:		L M Wigan
Application Details:		Material Change of Use for residential development (Res A & Res B) and preliminary approval for operational works. 84-122 Taylor Road, Thornlands.
Appeal Details:		Applicant appeal against refusal.
Current Status:		A minor change to the application was allowed by the Court on 4 November 2015. Mediation held on 21 October 2016. Review set down for 2 December 2016.

2.	File Number:	Appeal 3641 of 2015 (MCU012812)
Applicant:		King of Gifts Pty Ltd and HTC Consulting Pty Ltd
Application Details:		Material Change of Use for Combined Service Station (including car wash) and Drive Through Restaurant 604-612 Redland Bay, Road, Alexandra Hills
Appeal Details:		Applicant appeal against refusal.
Current Status:		Appeal filed in Court on 16 September 2015. Without Prejudice meeting held December 2015. Direction orders obtained on 24 August 2016. Minor change application heard in court on 12 October 2016. Matter set down for four day hearing in January 2017.

3.	File Number:	Appeal 4541 of 2015 (ROL005873)
Applicant:		Loncor Properties Pty Ltd
Application Details:		Reconfiguring a Lot (1 into 43 lots) 35-41 Wrightson Road, Thornlands
Appeal Details:		Applicant appeal against refusal.
Current Status:		Appeal filed in Court on 20 November 2015. Trial held 25 to 28 October 2016. Final submissions 31 October 2016. Awaiting Judgment.

4.	File Number:	Appeals 4940 of 2015, 2 of 2016 and 44 of 2016 (MCU013296)
Applicant:		Lipoma Pty Ltd, Lanrex Pty Ltd and Victoria Point Lakeside Pty Ltd
Application Details:		Preliminary Approval for Material Change of Use for Mixed Use Development and Development Permit for Reconfiguring a Lot (1 into 2 lots) 128-144 Boundary Road, Thornlands
Appeal Details:		Submitter appeals against approval.
Current Status:		Appeals filed in Court on 18 December 2015, 4 January 2016 and 6 January 2016. Directions orders obtained 19 February 2016. Trial held 27-30 September 2016. Final submissions 7 October 2016. Awaiting Judgment.

5.	File Number:	Appeal 2709 of 2016 (ROL005993)
Applicant:		Golden Ponds Estates Pty Ltd
Application Details:		Reconfiguration of Lots by 1 into 2 lots subdivision at 60 Korsman Drive, Thornlands.
Appeal Details:		Applicant appeal against Council refusal
Current Status:		Appeal filed 12 July 2016. Experts being briefed.

6.	File Number:	Appeal 3348 of 2016 (MCU013632)
Applicant:		Gregory Mark Wood
Application Details:		Home Business at 31 Drevesen Avenue, Cleveland (Lot 42 on RP118194)
Appeal Details:		Applicant appeal against conditions
Current Status:		Appeal filed 23 August 2016. Without Prejudice meeting held 11 October 2016. The notice of appeal was mostly struck out on 28 November 2016, however the appellant was granted leave of the Court to file an amended appeal (limited to specified conditions) by 5 December 2016. Matter listed for review on 9 December 2016. The appellant is also required to pay 90% of Council's costs of the application to strike out the notice of appeal.

7.	File Number:	Appeal 4004 of 2016 (BD155692)
Applicant:		Michelle Maree Webb
Application Details:		Dwelling House at 236-246 Queen Street, Cleveland Building works (deemed material change of use in accordance with s265 of the <i>Sustainable Planning Act 2009</i>)
Appeal Details:		Applicant appeal against Council refusal
Current Status:		Appeal filed 5 October 2016.

OTHER PLANNING & ENVIRONMENT COURT MATTERS/PROCEEDINGS

8.	File Number:	2771, 2772 and 2774 of 2016
Applicant:		KFA Investments Pty Ltd
Development:		Unlawful filling at 91-101, 91-141 and 115 Rocky Passage Road, Redland Bay (Lot 1, Lot 2 and Lot 4 on SP117632)
Appeal Details:		Appeals against Enforcement Notices
Current Status:		Appeals filed 15 July 2016. Without Prejudice meeting on 3 August 2016. Review set down for 8 December 2016.

9.	File Number:	3075 of 2016
Applicant:		Michelle Maree Webb
Development:		Dwelling House at 236-246 Queen Street, Cleveland (Lot 20 on SP175602)
Proceeding Details:		Council application for declarations that the Building Works approval (BD155692) be set aside, a Material Change of Use be applied for, the premises be revegetated and associated orders
Current Status:		Proceedings filed in Court on 5 August 2016. Mediation scheduled for 15 December 2016.

10.	File Number:	3870 of 2016
Applicant:		Redland City Council
Respondent:		John Alexander Anderson
Development:		Outdoor storage of goods, machinery, and vehicles) at 79 and 81 Harvey Street, Russell Island
Appeal Details:		Unlawful use
Current Status:		Council to list documents and lodge affidavits 10 November 2016. Mr Anderson to lodge affidavit material by 16 December 2016. Hearing to be scheduled for March 2017.

11.	File Number:	3871 of 2016
Applicant:		Redland City Council
Respondent:		John Alexander Anderson
Development:		Outdoor storage of goods, machinery, containers and vehicles at 24 Pia Street, Russell Island
Appeal Details:		Unlawful use
Current Status:		Council to list documents and lodge affidavits 10 November 2016. Mr Anderson to lodge affidavit material by 16 December 2016. Hearing to be scheduled for March 2017.

12.	File Number:	3873 of 2016
Applicant:		Redland City Council
Respondent:		Clint John McDonald and Lucas John McDonald
Development:		Dwelling House or Warehouse at 3 Basil Court, Lamb Island
Appeal Details:		Unlawful use
Current Status:		Proceedings filed 23 September 2016. Hearing to be scheduled for March 2017.

OFFICER'S RECOMMENDATION

That Council resolves to note this report.

11.3.3 CHRISTMAS DELEGATIONS 2016

Objective Reference: A124442
Reports & Attachments (Archives)

Authorising Officer:



Louise Rusan
General Manager Community and Customer Services

Responsible Officer:

David Jeanes
Group Manager City Planning and Assessment

Report Author:

Debra Weeks
Senior Business Support Officer

PURPOSE

The purpose of this report is to recommend that Council conditionally delegates its powers under the *Sustainable Planning Act 2009* from 15 December 2016 to 24 January 2017 (inclusive), to comply with the Integrated Development Assessment System (IDAS) timeframes and ensure continuity within this decision-making process.

BACKGROUND

Under the *Sustainable Planning Act 2009* (the Act) Council has the power to:

1. decide development applications; and
2. provide instructions to legal counsel for appeal matters actioned under Chapter 6 of the Act.

With the last meeting of Council for 2016 to be held on 14 December 2016 and the first meeting of 2017 to be held on 25 January, there is a gap of six weeks for any potential development application decisions under the Act, which may need to be made to meet IDAS timeframes.

ISSUES

To comply with the IDAS timeframes and ensure continuity within this decision-making process it is proposed that Council delegates, under section 257 of the *Local Government Act 2009*, its powers under the *Sustainable Planning Act 2009*:

1. to the Mayor, for the period 15 December 2016 to 24 January 2017 (inclusive);
 2. subject to the condition that this delegation can only be exercised where the relevant Divisional Councillor and the Chief Executive Officer have been:
 - a) personally provided with a copy of each development report that would normally be determined by Council; and
 - b) grant a period of three (3) business days from the receipt of the report in which to comment, prior to that application being determined.
-

A report will be presented to Council in February 2017 detailing all matters determined under delegated authority during the subject period.

In accordance with section 165 of the *Local Government Act 2009*, during any absence (leave or otherwise) of the Mayor, the Deputy Mayor acts for the Mayor. As such, should the Mayor take leave during this period, the delegation is automatically transferred to the Acting Mayor (i.e. Deputy Mayor).

STRATEGIC IMPLICATIONS

Legislative Requirements

This report provides for any potential development application decisions under the *Sustainable Planning Act 2009*, which may need to be made to meet IDAS timeframes.

Risk Management

This report reduces possible risks associated with any potential development application decisions under the *Sustainable Planning Act 2009*, which may need to be made to meet IDAS timeframes.

Financial

There are no financial implications associated with this report.

People

This report provides a system to support officers involved in development applications.

Environmental

There are no environmental implications associated with this report.

Social

This report provides a process to ensure development application decisions are made within specified IDAS timeframes to support good decision making practices for both applicants and the Redland's community.

Alignment with Council's Policy and Plans

This report aligns with Council's policies and plans and supports good decision making processes.

CONSULTATION

The City Planning and Assessment Group were consulted in the preparation of this report.

OPTIONS

Option One

That Council resolves to delegate, under section 257 of the *Local Government Act 2009*, its powers under the *Sustainable Planning Act 2009*:

1. to the Mayor, for the period 15 December 2016 to 24 January 2017 (inclusive),

2. subject to the condition that this delegation can only be exercised where the relevant Divisional Councillor and the Chief Executive Officer have been:
 - a) personally provided with a copy of each development report that would normally be determined by Council; and
 - b) grant a period of three (3) business days from the receipt of the report in which to comment, prior to that application being determined.

Option Two

That Council resolves to amend, or not adopt the Officer's Recommendation and provide an alternative resolution on this matter.

OFFICER'S RECOMMENDATION

That Council resolves to delegate, under section 257 of the *Local Government Act 2009*, its powers under the *Sustainable Planning Act 2009*:

1. **To the Mayor, for the period 15 December 2016 to 24 January 2017 (inclusive);**
2. **Subject to the condition that this delegation can only be exercised where the relevant Divisional Councillor and the Chief Executive Officer have been:**
 - a) **personally provided with a copy of each development report that would normally be determined by Council; and**
 - b) **grant a period of three (3) business days from the receipt of the report in which to comment, prior to that application being determined.**

11.3.4 ECONOMIC DEVELOPMENT ADVISORY BOARD UPDATE

Objective Reference: **A124442**
Reports and Attachments (Archives)

Authorising Officer:



Louise Rusan
General Manager Community and Customer Services

Responsible Officer:

Kim Kerwin
Manager Economic Sustainability and Major Projects Group

Report Author:

Noreen Orticio
Research Economist

PURPOSE

The purpose of this document is to present a report to Council on the fourth formal meeting of the Redland City Economic Development Advisory Board (the Advisory Board) held on the 16th of November 2016 as specified in the Terms of Reference.

BACKGROUND

Redland City Council has formed an Economic Development Advisory Board as part of its commitment to increasing the city's economic capacity through business retention and growth and employment generation.

The Advisory Board will provide strategic advice on the implementation of the Economic Development Framework through the development of industry sector strategy and action plans.

ISSUES**1. Advisory Board meeting 16 November 2016**

The last formal Advisory Board meeting for 2016 took place on 16 November 2016. The meeting agenda consisted mainly of presentations with a specific emphasis on Innovation and was aimed at identifying funding opportunities as well as exploring Council's direction in the innovation sphere. The presentations were also in line with a Council resolution at the General meeting on 9 November 2016 that endorsed working with stakeholders to support a series of innovation summits with the initial summit to target young people. The discussion also focused on action items from previous meetings and various updates on key initiatives.

The following items formed the agenda for the meeting:

- i. Health Care and Social Assistance and Education and Training Strategies and Action Plans Update
 - ii. Opportunities in the Redlands – Redlands Investment Corporation
 - iii. Innovation:
 - a. City Internet Connectivity
-

- b. Advance Queensland Regional Innovation Hubs Program
- c. The Capital Innovation hub
- d. Business Internet Survey
- e. Innovation Workshop with Young People
- iv. Redland City Chamber of Commerce
- v. City Branding Update
- vi. Tourism Update

A summary of the presentations is provided below:

i. Health Care and Social Assistance and Education and Training Strategies and Action Plans Update

A Council resolution at the General Meeting on 27 July 2016 has confirmed the Advisory Board recommendation of prioritising the development of action plans for the Health Care and Social Assistance and Education and Training Industry Sectors. A successful consultant has been selected by the panel to develop the Health Care and Social Assistance Industry Sector Strategy and Action Plan. An inception meeting with the consultant will be scheduled once the procurement requirements have been finalised.

The project brief for the development of the Education and Training industry sector strategy and action plan has been redistributed and Council is awaiting proposals.

ii. Opportunities in the Redlands

The Redlands Investment Corporation Chief Executive Officer provided an overview of the Corporation's role in delivering economic and social outcomes and benefits for Redland City Council and the Redlands community. He also presented on Council owned land and facilities and gave an update on various initiatives across the city including the Toondah Harbour and Weinam Creek Priority Development Areas (PDAs).

iii. Innovation

a. City Internet Connectivity:

The Chief Information Officer (CIO) discussed ongoing negotiations with vendors to address poor connectivity and to consider connecting areas of activity around the city. Options are currently being explored to improve intra-city connectivity.

b. Advance Queensland Regional Innovation Hubs Program:

Michael Eales from Business Model Inc provided an overview of the State Government initiative, Advance Queensland Regional Innovation Hubs Program which is designed to support innovation and entrepreneurship in Regional Queensland. The program will provide funding towards strengthening the regional innovation ecosystem that has the following building blocks

- o Leadership
- o Collaboration
- o Connectivity
- o Communities of practice

- o Places and spaces

Expressions of interest for the funding program were due by close of business 18 November 2016. Regional Development Australia (RDA) Logan and Redlands has coordinated the expression of interest submission on behalf of Logan City Council, Redland City Council, Griffith University, TAFE, a social enterprise incubator and community organisations.

- c. The Capital Innovation Hub:

Jock Fairweather, the Chief Executive Officer (CEO) of Little Tokyo Two shared his experience in relation to innovation hubs including his work with The Capital. He suggests that activating existing spaces like libraries can be a good start. There is a need to engage with communities to get a sense of what they want in terms of innovation. He also emphasised that it is vital for Redlands to have a theme or a brand to attract innovators in the city.

- d. Business Internet Survey:

Research was undertaken on the internet needs of businesses across the city. The survey which was opened from 20 September to 13 November 2016 generated 72 responses. Survey results showed

- o 20 businesses who responded had a turnover greater than \$2 million.
- o 87% of respondents said their current internet service was not sufficient for the current business needs.
- o A number of these respondents were considering moving out of the city to access better internet.
- o Average download speeds (mb/s) per suburb.

Suburb	Download	Upload
Alexandra Hills	8.1	0.9
Birkdale	7.7	0.8
Capalaba	7.4	1.1
Cleveland	8.2	2.5
Dunwich	7.0	1.1
Mt Cotton	3.8	0.3
Ormiston	3.1	0.3
Point Lookout	11.8	0.8
SMBI	2.7	1.3
Thornlands	2.5	0.6
Victoria Point	4.0	2.3
Wellington Point	8.3	1.4

*note: 2 outlying results removed to avoid data distortion

The results of the study will assist with understanding the internet gaps in the City and identifying possible solutions to address those gaps.

- e. Innovation Workshop with Young People:

Planning is underway to support a series of innovation workshops for the city with the first to target young people. A concept paper has been drafted and presented to the Advisory Board to identify pathways to attract innovators. The first innovation workshop is planned to take place in March 2017.

iv. Redland City Chamber of Commerce (RCCC)

Garry Hargrave, President of the Redland City Chamber of Commerce, provided an overview of the organisation which represents small businesses and currently has 225 members. He discussed key statistics of the City with emphasis on the missing age cohort between 15 and 35 years, the City's ageing population and areas of disadvantage. He also highlighted the need to attract more activities and investment to the City, job creation, inter-city transport particularly ferries and the Cleveland medical hub as some of the main challenges and opportunities for the City.

v. City Branding Update

A Council resolution has endorsed the development of a City Branding and identity strategy for Redlands at the General Meeting on 9 November 2016. The Communication, Engagement and Tourism Group is targeting to commence the City branding and identity strategy process in January 2017 and has invited fee proposals for this work.

vi. Tourism Update

The Advisory Board was briefed on Council's Draft Events Strategy and Action Plan 2017-2022. The action plan provides an event vision for the next five years and highlights three key result areas that will facilitate the implementation of the strategy, namely:

- Infrastructure opportunities.
- Event promotion and networking opportunities.
- Event coordination, development and investment opportunities.

19 actions have been identified that will be implemented over the short term (within the next two years) and medium term (within the following three years). The draft Events Strategy and Action Plan will be presented to Council at the General Meeting on 14 December.

2. Advisory Board Advice and Recommendations

The planning for the initial innovation workshop with young people will be progressed further with some members of the Advisory Board assisting in the development of the framework. The Advisory Board recommends that a Think Space workshop with Councillors be held prior to the innovation workshop with young people.

The Advisory Board recognised that having good internet connectivity is vital in facilitating growth and job creation and have expressed their support for the resourcing of the digitisation strategy and potential implementation of a high speed network in the CBD areas.

STRATEGIC IMPLICATIONS

Legislative Requirements

There are no legislative requirements that affect the outcome of this report.

Risk Management

Identified risks to successful economic development in the City include:

- Failure to work in partnership with the business community, and other levels of government which will inhibit the delivery of the framework; and
- Failure to implement the action plans due to inadequate resourcing.

Financial

Budgets have been allocated in financial year 2016-17 for the development of the Health Care and Social Assistance and Education and Training industry sector.

Budget has been allocated for an innovation summit for young people.

People

The planning of the innovation summit will require continued involvement of officers from the Economic Sustainability and Major Projects Group and officers from across a number of groups, namely; Communications, Engagement and Tourism Group, Information Management Group and Strengthening Communities Team.

Environmental

There are no identified environmental impacts.

Social

A strong and vibrant economy allows a community to reinvest its wealth back into the society that helped contribute to that growth. The well-being of people, the environment and the economy are intricately linked. A strong and sustainable economy will be integrated and deliver benefits from across a range of sectors, through all parts of the City and across all demographic boundaries.

Alignment with Council's Policy and Plans

Relationship to Corporate Plan

The Economic Development Advisory Board through its role of monitoring the implementation of the Redland City Economic Development Framework 2014-2041 supports Council's strategic priority of delivering a supportive and vibrant economy. In addition, the Redland City Economic Development Framework 2014 – 2041 will also:

- Provide opportunity for business investment and local employment;
- Develop a supportive vibrant economy that delivers business opportunities;
- Promote local jobs; and
- Strengthen the tourism industry.

CONSULTATION

The fourth formal meeting of the Economic Development Advisory Board was overseen by the Economic Sustainability and Major Projects Group with input from the following:

Internal

- Information Management;
- Communications, Engagement and Tourism Group; and
- Redlands Investment Corporation

External

- Business Models Inc.
- Little Tokyo Two and The Capital
- Redlands City Chamber of Commerce

OPTIONS

1. Note the report to Council from the Economic Development Advisory Board meeting of 16 November 2016; and
2. Undertake a Thinkspace workshop with Councillors in preparation for a series of innovation summits with the initial summit targeting young people.

OR

3. That Council requests additional information on the Economic Development Advisory Board meeting of 16 November 2016

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Note the report to Council from the Economic Development Advisory Board meeting of 16 November 2016; and**
2. **Undertake a Thinkspace workshop with Councillors in preparation for a series of innovation summits with the initial summit targeting young people.**

**11.3.5 MC008414 – REQUEST TO EXTEND THE RELEVANT PERIOD – BIOMASS
POWER PLANT 70-96 HILLVIEW ROAD, MOUNT COTTON**

Objective Reference: **A124442**
Reports and Attachments (Archives)

Attachments: [Site Aerial Photo](#)
[Zoning Plan](#)
[Proposal Plan](#)
[2013 Judgment](#)

Authorising Officer:



Louise Rusan
**General Manager Community and Customer
Services**

Responsible Officer:

David Jeanes
Group Manager City Planning and Assessment

Report Author:

Scott Pearson
Planning Officer

PURPOSE

This Category 4 application is referred to Council for determination.

An approval by consent was granted by the Planning and Environment Court on 7 November 2007 for the operation of a power plant fuelled by chicken litter on the subject site at 70-96 Hillview Road, Mount Cotton.

A previous request to extend the relevant period was refused by Council in 2011. The applicant appealed against Council's decision and the appeal was upheld by the Court.

The applicant later applied for a further 18 month extension to the relevant period. In considering the relevant test and the reasons given in the previous Court Order, the request was approved on 6 May 2015.

A third request to extend the relevant period has now been lodged as the developer has experienced a delay in obtaining funding for the project. The applicant has requested that the relevant period be extended until 20 July 2018.

The current request has been assessed against the test under s388 of SPA. The application is considered to be consistent with current laws and policies. No new issues are likely to be raised in a submission if the application were to be lodged anew. Concurrence agency advice has also been provided by SARA with no objections to the extension. Overall, it is recommended that the request be approved.

BACKGROUND

The original application was lodged on 18 June 2004 and involved a Material Change of Use for a “Bio-mass Power Plant” (Undefined Use) and an Environmentally Relevant Activity (ERA) #17 – Fuel Burning. ERA #17 for fuel burning was a non-devolved activity, meaning that this aspect of the proposal was required to be assessed entirely by the Environmental Protection Agency (EPA) (now Department of Environment and Heritage Protection DEHP).

On 20 March 2007 a development permit, subject to conditions, was granted by Council at a Development Assessment Committee meeting.

An appeal against Council's decision was filed on 2 May 2007 by a submitter to the application. Without prejudice negotiations and discussions took place throughout 2007 between the parties involved in the appeal. A settlement was reached and the appeal was therefore dismissed by agreement of the parties. A Consent Order was issued by the Court on 7 November 2007, which upheld the approval of the application, subject to conditions.

Before the relevant period ended, the applicant lodged a request to extend the relevant period by 4 years. This was refused by Council in 2011. The reasons for refusal can be summarised as follows:

- Inconsistency with current laws and policies;
- Proposal does not achieve revegetation requirements;
- Insufficient evidence that the approved design will meet noise level criteria;
- Insufficient evidence that the approved design will meet air quality criteria;
- Community's awareness of proposal has subsided over time and new grounds of submission would exist.

The applicant appealed to the Planning and Environment (P&E) Court against Council's refusal. During the appeal, a number of matters were addressed via a permissible change lodged with the Court. The changes ensured consistency in the approved plans, additional monitoring requirements to ensure compliance with air quality criteria and more certain restrictions on fuel throughput.

The permissible change was approved on 28 February 2013 and the extension to the relevant period was then approved by the court on 20 March 2013.

In summary, the reasons for upholding the appeal were:

1. Whilst Council had decided not to oppose the appeal, the judge did not find this to be determinative. Rather, the judge concluded that if he could have taken the non-opposition of Council into account, this would have reinforced the other bases for his decision in allowing the appeal.
2. The judge concluded that the development approval was consistent with the current laws and policies and therefore complied with the test in s388(1)(a) of SPA.
3. The provision in s388(1) of SPA does not contemplate that any one of the four considerations is intended to prevail and it does not contemplate that a failure to comply with one of the criteria mandates refusal.
4. Whilst it is likely that submissions would be made for a new development application, this request to extend the approval should not be refused because:

- Such submissions would not result in any new issues not already raised by the more than 300 submissions on the original application;
- The consistency of the approval with the planning documents would mean there must be a reasonable expectation from the community that a development of the kind approved may occur in the area; and
- There is little utility in forcing the developer to go through an impact assessment process to obtain a development approval that would be consistent with the existing development approval and which would be unlikely to provoke a submission raising new matters for consideration.

A second extension to the relevant period was requested by the applicant. Given the previous court case and Council's acceptance of that request, it was subsequently approved by Council on 6 May 2015.

The current and third request for an extension was lodged on 19 September 2016. The statutory timeframes prescribed under the Sustainable Planning Act 2009 stipulate that a decision is due by 14 December 2016.

ISSUES

Development Proposal & Site Description

Site

The subject site is identified as Lot 2 on RP30611 and 70-96 Hillview Road, Mount Cotton. The land is zoned Conservation and Rural Non-Urban and contains a number of overlays including Bushfire Hazard, Habitat Protection, Extractive Resources, Flood Storm and Drainage Constrained Land, Landslide Hazard, Protection of Poultry Industry Overlay and the Waterways Wetlands and Moreton Bay Overlay.

The subject site has been used for poultry farming for several decades and currently accommodates four poultry sheds, a residential dwelling and a mobile phone tower. The buildings and associated use areas are contained within the northern half of the site. A dam exists on the eastern side of the site and it is understood that the south-eastern portion of the site has been used for intermittent grazing activities. The south-western portion of the site is heavily vegetated, steeply sloped and contains the highest elevations on the site.

The site itself is accessed from Hillview Road, which is a sealed bitumen road that accesses a number of rural properties and intersects with Mount Cotton Road to the east.

Surrounding Area

The surrounding area is predominantly rural in nature. The Golden Cockerel chicken processing plant is located to the direct east of the site, with another poultry farm on the northern side of Hillview Road. To the south of the site are a contractor's depot and the Barro Quarry. A number of small to medium size rural lots exist in the locality, which are used for a mix of uses, varying from purely residential dwellings on large lots to hobby farms and conservation-style lots. To the far west of the site are large stretches of bushland, which dominate both sides of West Mount Cotton Road.

Mount Cotton State School is located approximately 800 metres to the north-east of the site. A park residential estate exists on the eastern side of Mount Cotton Road. The Mount Cotton village residential estate also exists to the south-east of the site, on the eastern side of Mount Cotton Road.

Proposal

The approved development involves the operation of a power plant fuelled by chicken litter at 70-96 Hillview Road, Mount Cotton. The power plant comprises a power generator, chimney, dry fluid coolers, a large fuel storage hall and an associated car parking area. The burning of chicken waste supplied from poultry farms generates power which provides electricity to the adjoining Golden Cockerel processing plant and the electricity grid.

The plant infrastructure will replace the existing large rectangular poultry growing shed on the north-eastern side of the site. The following summarises the development:

- the fuel to be burnt is primarily chicken litter (with other start up fuels being smaller quantities of sawdust and gas);
- the plant will have a throughput of 66,000 tonnes of chicken litter per annum;
- the sources of the fuel are local Darwalla operated poultry farms, however, dependent upon supply of litter sources may include competitor's farms and Darwalla operated farms outside the local area;
- the activity is proposed to operate continuously and will involve the continuous monitoring of temperature and velocity at the stack exit;
- there will be 15 truck movements per day (105 per week);
- the fuel storage hall will be approximately 11 metres in height above the existing ground level and 3000m² in area (60m x 50m);
- maximum litter storage will be 700 tonnes (4 days fuel) at any one time;
- the power generation / distribution and pollution control equipment / infrastructure occupies an area of approximately 2040m² (60m x 34m) on the south-western side of the fuel storage hall. This plant area has a predominate height similar to the height of the fuel storage hall, with a chimney that extends to 30 metres;
- the approved plans indicate a rotating kiln, which burns at a temperature between 900°C and 1200°C. The heat from the burner heats water to generate steam which drives a turbine and the turbine drives an alternator which produces the electricity that is released to the grid and the Golden Cockerel processing plant to the east of the site;
- the EPA conditions restrict the power generation to approximately 5MW of electricity;
- emissions will be released to the air via a bag house filter, lime dosing system and a 30m high stack;
- waste ash will be cooled and collected for reuse by licensed waste transporters; and
- the disposal of waste heat is proposed to be via a dry fluid cooling system (fans).

Application Assessment

Sustainable Planning Act 2009

This application has been made in accordance with Section 383 (Integrated Development Assessment System, IDAS) of the *Sustainable Planning Act 2009* (SPA) and constitutes a Request to Extend the Relevant Period.

Section 388 of SPA states that, in deciding the request, the Assessment Manager must only have regard to the following:

- (a) the consistency of the approval, including its conditions, with the current laws and policies applying to the development, including, for example, the amount and type of infrastructure contributions, or infrastructure charges payable under an infrastructure charges schedule; and*
- (b) the community's current awareness of the development approval; and*
- (c) whether, if the request were refused—*
 - (i) further rights to make a submission may be available for a further development application; and*
 - (ii) the likely extent to which those rights may be exercised; and*
- (d) the views of any concurrence agency for the approval given under section 385.*

The above points are discussed below.

In considering this request, Council as assessment manager is bound to consider case law relevant to the matter. In this regard, the previous court judgement on the request to extend the relevant period is critical.

Consistency of Approval with Current Laws and Policies

- **SEQ Regional Plan 2009-2031**

The site is located within the Regional Landscape and Rural Production Area in the SEQ Regional Plan 2009-2031. Within this designation, “urban activities” are heavily discouraged and are required to demonstrate locational requirements and overriding need for the development in the public interest.

The definition of an “Urban Activity” under the Regional Plan Regulatory Provisions is:

Urban activity means a residential, industrial, retail, or commercial activity. It does not include the following –

- (h) water cycle, waste management, telecommunications and **electricity infrastructure** [emphasis added];*

It is considered that the proposal falls under the umbrella of electricity infrastructure, and therefore does not constitute an “urban activity”. Therefore the use, originally lodged as an Undefined Use in 2004, is consistent with the SEQ Regional Plan.

- **State Planning Policies**

Stormwater was addressed at the time of the original application. The original approval acknowledged that detailed stormwater quality design would not be available until the works stage (compliance assessment stage).

Given the small ratio (approximately 20 percent) of roofed / paved structures to total undeveloped land area of the site, it is unlikely that the SPP trigger level will be exceeded. That however, will not be known for certain until the detailed design is done at the works stage, as the original approval indicated.

In any case, design according to the concentration parameters named at the time would still be acceptable, and would comply with the SPP.

- **State Planning Regulatory Provisions**

The South East Queensland Koala Conservation State Planning Regulatory Provisions came into effect in May 2010. Table 6 of the SPRP is relevant to the current assessment. The site is designated under the current SPRP as Medium Value Rehabilitation, Medium Value Bushland, High Value Rehabilitation and High Value Bushland. Table 6 Column 2 Item 2 therefore applies. The actual location of the development is within the Medium Value Rehabilitation designation. This requires removal of any non-juvenile koala habitat trees to be offset either by replanting or a monetary contribution under the Environmental Offsets Act 2014. Comparison of the proposal plan with current aerial photography demonstrates that no habitat trees will be impacted by the power plant, storage shed, access road or any other component. Overall, the proposal complies with the current SPRP.

- **Redlands Planning Scheme**

This section assesses the consistency of the approval against the current Redlands Planning Scheme (Version 7.1). Under this Scheme, the subject site is within the Rural Non-Urban Zone and the use is defined as High Impact Industry, which would be an Impact Assessable development, as was the case when the application was lodged in 2004 under the now superseded Planning Scheme. It is worth noting also that the previous request to extend the relevant period, approved 19 May 2015, was assessed under v7 of the RPS. No significant changes to the Planning Scheme that affect the assessment of this request were made in the new version. Consequently, the development is considered to be consistent with the current scheme. The current Scheme has been considered nonetheless below.

Zoning and overlay Intent

The general zoning and intention for this land is relatively unchanged from the 1988 Town Plan and the 1998 Strategic Plan through to the current Redlands Planning Scheme. In all planning documents, the zoning or designation is Rural Non-Urban, with the intention being to provide for agriculture and other rural uses, aligned uses that support the on-going operation of these rural uses and to protect the poultry industry and ensure its survival within Redland City. It is considered that, as per the previous assessment, the location of the use compliments primary industrial activities, specifically the nearby chicken farm.

No part of the development is within the Conservation Zone. The following Overlays have also been assessed:

- Bushfire Hazard Overlay - outside mapped hazard area;
- Habitat Protection Overlay - there is no proposed development within the Bushland Habitat designated area. Therefore the proposal complies with Specific Outcome S2.1(3) of the Habitat Protection Overlay Code. The balance of the site, including the power plant location, is within the designated

Enhancement Area. Specific Outcome S2.1(7) of the Habitat Protection Overlay Code requires enhancement planting of habitat trees at a minimum rate of one tree per 200m² of the Enhancement Area. It is estimated that the site contains some 950 habitat trees, over the entire area designated Bushland Habitat and partially over the Enhancement Area. It is considered that the overlay code Specific Outcome is already met. It should also be noted that the original approval incorporates conditions for a Vegetation Management Plan and an Environmental Management Plan (incorporating a Fauna Management Plan);

- Extractive Resources Overlay - the use will be within a key regional resource buffer. However the proposal complies with the Specific Outcomes of the Code given it does not introduce any noise sensitive uses;
- Flood Storm and Drainage Constrained Land Overlay - the use is outside the mapped hazard area;
- Landslide Hazard Overlay - the proposal meets the requirements for development in the low landslide hazard area;
- Protection of Poultry Industry Overlay - the use is being constructed to complement the existing poultry farm;
- Waterways Wetlands and Moreton Bay Overlay - the use is also outside of the mapped waterway area.

Infrastructure Contributions

For extensions to the relevant period of existing development approvals, sub-sections 976B(4)to(6) of the SPA Transitional Provisions allow a local government to issue an infrastructure charges notice (pursuant to their respective resolution) that supersedes planning scheme policy infrastructure conditions applied under IPA. The purpose of these sub-sections is to ensure the provision to include extensions to relevant periods under sections 383 to 390 is captured. In particular, the test of consistency of the approval with the current laws and policies applying to the development, such as infrastructure contributions. This does not adversely affect rights or impose obligations retrospectively as the extension is effectively reissuing the approval under the current charging framework.

The proposed development is subject to infrastructure charges in accordance with the State Planning Regulatory Provisions (adopted charges). It is noted that the site is not connected to town water or the sewer system, so there is no Redland Water charge. The total charge applicable to this development is:

Total charge: \$45,048.00

This charge has been calculated as follows in accordance with Council's Adopted Infrastructure Charges Resolution (No. 2.3) August 2016.

Notice #001490

Non-Residential Component	
2100m2 High Impact Industry X \$58.10 (no sewer)	\$122,010.00
Stormwater Infrastructure	
2100m2 Stormwater Impervious Area X \$10.10/m2	\$21,210.00
Demand Credit	
4860m2 High Impact Rural X \$20.20	\$98,172.00
Total Council Charge:	\$45,048.00

OFFSETS

There are no offsets that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

REFUNDS

There are no refunds that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

Overall, a new Infrastructure Charges Notice for the above amount will be issued, should the extension to relevant period application be approved.

Community Awareness and Potential Submissions

Part of the extension to relevant period test is considering the *community's current awareness of the development approval*. It is likely that there would be a moderate knowledge of the development application. The application was subject to two sets of public notification in 2004 and 2005, and attracted 333 submissions. There have been numerous newspaper articles and letters to the editor in the local newspapers, which are free of cost and circulated to the entire Redland City population, and public meetings regarding the development.

It is worth considering though that it has been a significant amount of time since the original approval in 2007. Over 200 new lots in the surrounding area (Mount Cotton estate) have been created since the original application was publically notified, which means there is potential for new owners to have no knowledge of the development. Changes in property ownership within the catchment during this time are also inevitable.

The second part of the test is *whether, if the request were refused further rights to make a submission may be available for a further development application; and the likely extent to which those rights may be exercised.*

If the request was refused and a new Material Change of Use application were to be lodged, it is likely that a large number of submissions would be received, as was the case with the original application. Three hundred and thirty-three (333) submissions were received on the original development application and three hundred and thirty-two (332) of those submissions were objections to the proposal.

However, this test was considered in the previous court order and it was concluded that:

- The Order states that failure of any part of section 388 (in this instance the right to object) does not mandate a refusal of the extension request;
- The Order states that it was unlikely any new grounds of submission would be raised;
- The application was originally approved in accordance with the planning scheme, and there should be an expectation from new residents in the area along those lines; and
- There is little benefit in forcing the applicant to re-lodge essentially the same application, which for all intents and purposes is consistent with the existing development.

Given the interpretation by the Judge on Council's previous refusal, the current request for an extension to the relevant period is considered to comply with the relevant tests under SPA.

Concurrence Agencies

SARA (State Assessment Referral Agency) (via the Department of Main Roads and Transport and the Department of Environment and Heritage Protection) in their correspondence, dated 5 October 2016, advised that no objection was raised to the request to extend the relevant period.

Assessment Summary

In assessing this request, Council must consider Section 388 of the *Sustainable Planning Act* as a whole. This approach is consistent with that taken by the P & E Court in deciding the previous extension request.

As discussed above, while it is almost certain that objecting submissions would be received if the application were re-lodged, it is considered that the submissions are unlikely to raise new issues not already considered as part of the original application and subsequent Court appeal. This is strengthened by the premise that there have been no significant changes to laws and policies that have a specific impact on this development. In this regard, and considering the Judgment in the previous extension request, it is concluded that a reason would be difficult to defend.

Conclusion

The request to extend the relevant period has been assessed against the relevant provisions of the *Sustainable Planning Act*, the current Redlands Planning Scheme and other applicable planning instruments. In this regard, it is recommended that the request to extend the relevant period be approved.

STRATEGIC IMPLICATIONS

Legislative Requirements

In accordance with the *Sustainable Planning Act 2009* this development application has been assessed against the Redlands Planning Scheme V7.1 and other relevant planning instruments. The decision is due on 14 December 2016.

Risk Management

In accordance with the *Sustainable Planning Act 2009* the applicant may appeal to the Planning and Environment Court against a decision to refuse.

Financial

If approved, Council will collect infrastructure contributions in accordance with the State Planning Regulatory Provisions (adopted charges) and Council's Adopted Infrastructure Charges Resolution.

If the development is refused, there is potential that an appeal will be lodged and subsequent legal costs may apply.

People

Not applicable. There are no implications for staff.

Environmental

Environmental implications are detailed within the assessment in the "issues" section of this report.

Social

Social implications are detailed within the assessment in the "issues" section of this report.

Alignment with Council's Policy and Plans

The assessment and officer's recommendation align with Council's policies and plans as described within the "issues" section of this report.

CONSULTATION

The assessment manager has consulted with other internal assessment teams where appropriate. Advice has been received from relevant officers and forms part of the assessment of the application. Legal advice has been sought from General Counsel.

OPTIONS

Option One

That Council resolves as follows:

1. That an approval be issued for a 22 month extension to the relevant period for the approved Bio-mass Power Plant (Undefined Use) and ERA #17 on the land known as 70-96 Hillview Road Mount Cotton; and
2. That the relevant period therefore remains current up to and including 20 July 2018.

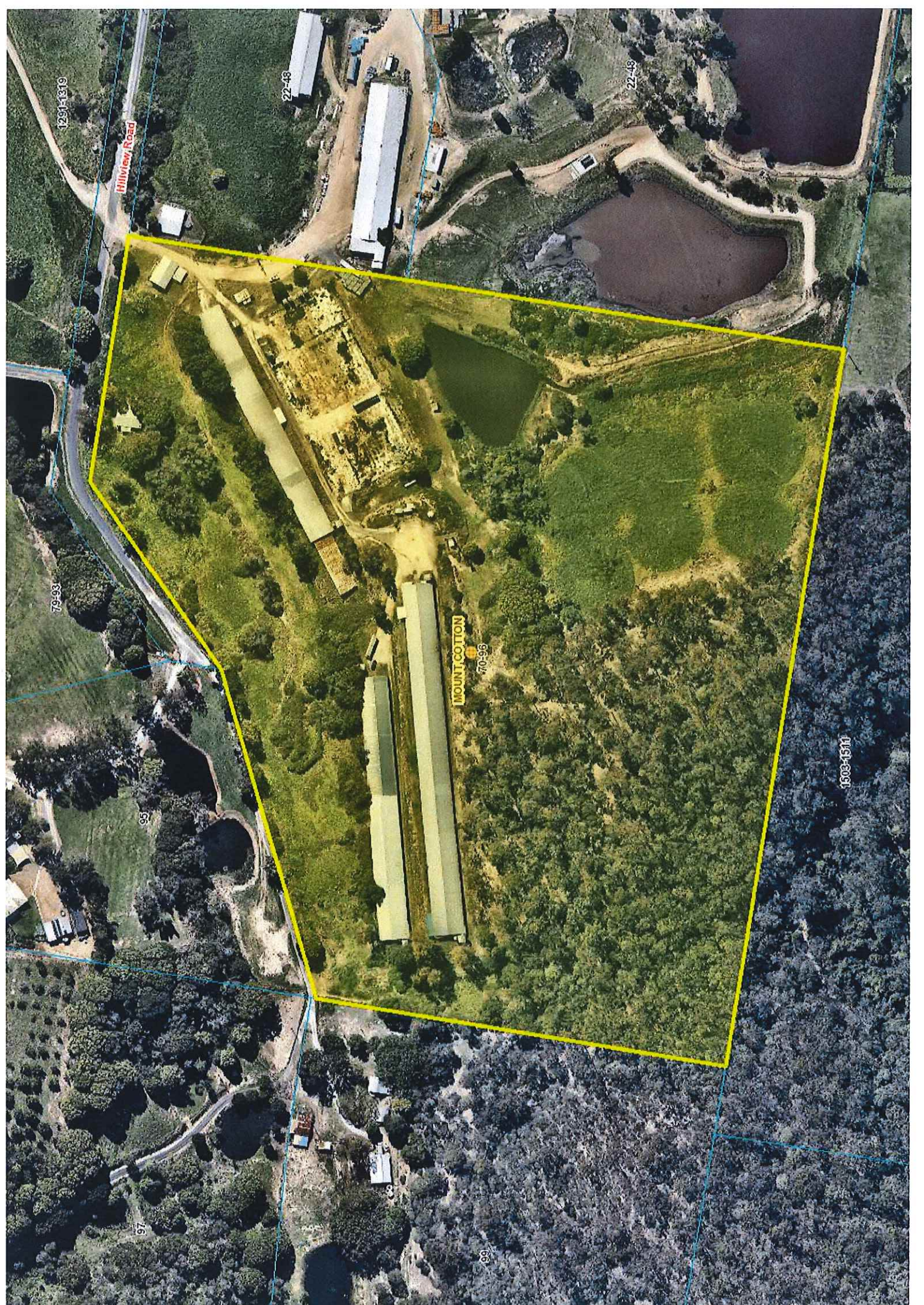
Option Two

That Council resolves to refuse the application.

OFFICER'S RECOMMENDATION

That Council resolves as follows:

- 1. That an approval be issued for a 22 month extension to the relevant period for the approved Bio-mass Power Plant (Undefined Use) and ERA #17 on the land known as 70-96 Hillview Road Mount Cotton; and**
- 2. That the relevant period therefore remains current up to and including 20 July 2018.**



1291-1819

Hillview Road

22-48

22-48

79-93

95

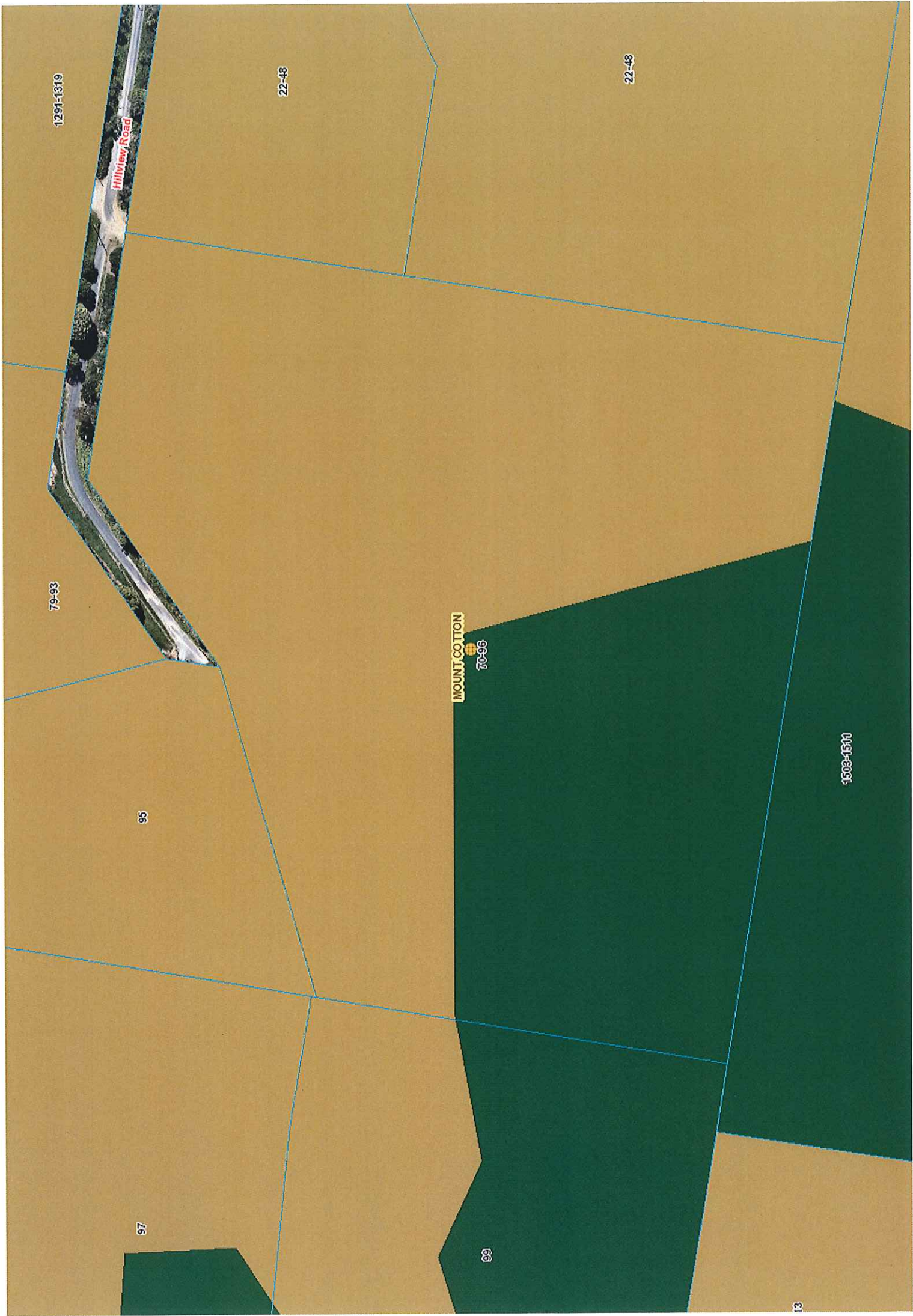
97

MOUNT COTTON

70-96

69

1603-1511



1291-1319

22-48

22-48

Hillview Road

79-93

95

MOUNT COTTON

70-96

1503-1510

97

99

13

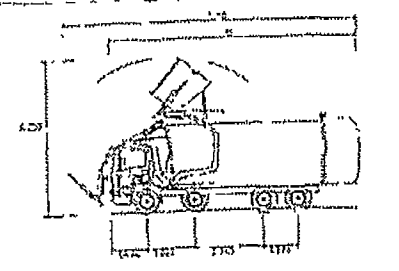
APPROVED FOR CONSTRUCTION
 26/3/07

PRELIMINARY DRAWINGS

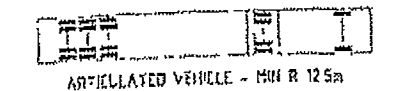
23/07/01 Title
 23/07/01 Site Plan for 800kw power station
 23/07/01 Site Plan
 23/07/01 Grading and drainage
 23/07/01 General Arrangement

LEGEND

- Existing Property Boundary
- Existing Casement Boundary
- Proposed Surface Flow Stormwater
- Proposed Footwater
- Existing Edge of Bitumen
- Proposed acoustic concrete surface
- Proposed Concrete Surface

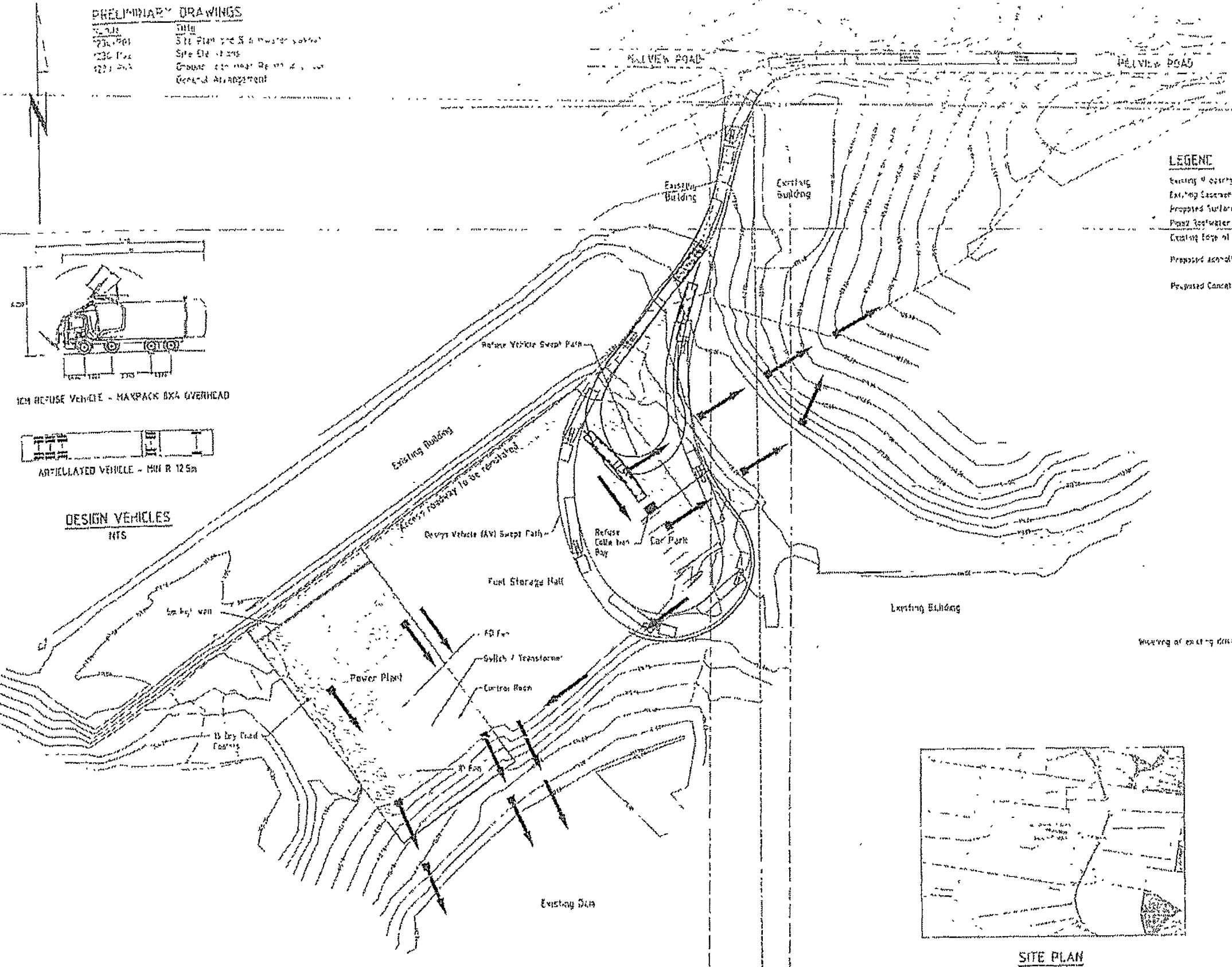


NON REFUSE VEHICLE - MAXPACK BOX OVERHEAD



ARTICULATED VEHICLE - MIN R 12.5m

DESIGN VEHICLES
 HTS

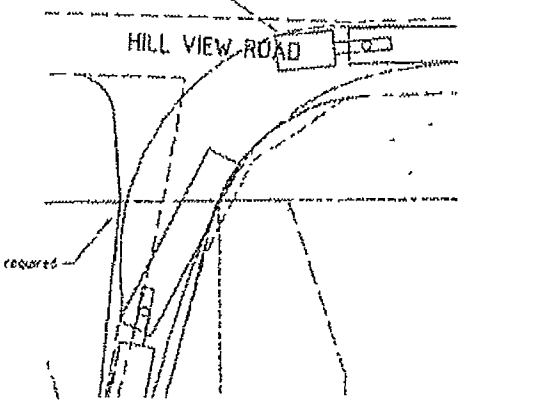


WOLLAND SHIRE COUNCIL

MC 008414

APPROVED PLANS

26/3/07 Page 1 of 6

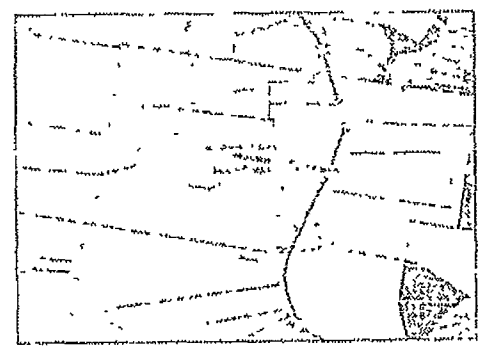


ENTRANCE DETAIL

RECEIVED

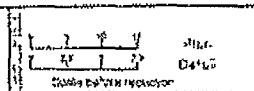
26/3/07

Development Assessment



SITE PLAN

DATUM: A.H.D. (derived)
 PSM: 000000 RL 00000



Designed	M. Walters	A1	Loyal	Amendment	By	Date
Checked	J. Stanley					
Drawn	N. Cavallaro					
Approved						

STANLEY AND PARTNERS Pty Ltd
 Consulting Engineers

23 Lonsdale Street, Caspary, PO Box 523, Caspary Q-4167
 T: 3745-1148 F: 3750-1654 E: enq@spandp.com

APPROVED

PROPOSED POWER STATION
 AT HILLVIEW ROAD
 MOUNT COTTON

DARWALLA MILLING COMPANY PTY LTD

SITE CONCEPT PLAN		
Drawing No	Sheet	And
1230-P01	1 of 3	E

PLANNING & ENVIRONMENT COURT OF QUEENSLAND

CITATION: *Cleveland Power P/L v Redland Shire Council* [2013] QPEC

PARTIES: **CLEVELAND POWER P/L ACN 101932272**
(Appellant)

V

REDLAND SHIRE COUNCIL
(Respondent)

FILE NO/S: 5192 of 2011

DIVISION: Planning and Environment

PROCEEDING: Appeal

ORIGINATING
COURT: Brisbane

DELIVERED ON: 20 March 2013

DELIVERED AT: Brisbane

HEARING DATE: 8 March 2013

Written submissions 20 March 2013

JUDGE: Andrews SC DCJ

ORDER: **Judgment allowing the appeal and extending the relevant period of the development approval as per initialled draft.**

CATCHWORDS: PLANNING AND ENVIRONMENT – where Council refused a request to extend the period of a development approval – where developer appealed Council’s refusal – where Council no longer opposes an order extending the period of approval – whether the court should have regard to the matters in s 388(1) of the *Sustainable Planning Act 2009*

PLANNING AND ENVIRONMENT – where Council refused developer’s request to extend period of a development approval – where the approval is consistent with current laws and policies – where high level of community awareness of the development approval – where if the request were refused further rights to make a submission would be available for a further development application and would be exercised by members of the public – whether to extend the relevant period of the development approval

COUNSEL: M Williamson for the appellant

M Johnston for the respondent

SOLICITORS: Connor O’Meara for the appellant
Norton Rose for the respondent

Issues

- [1] Where Council has refused a developer’s request to extend the period of a development approval and the developer appeals against Council’s refusal this court determines the appeal. Council having withdrawn its opposition to the appeal the first issue is whether the court deciding the appeal should have regard to s 388(1) of the *Sustainable Planning Act 2009* (“SPA”). The second issue is whether the court should have regard to the fact that Council does not oppose the appeal. The third issue is whether it is appropriate to allow the appeal and extend the period of the development approval notwithstanding that further rights to make a submission would be available for a further development application and would be exercised by members of the public.

Background

- [2] This is an appeal against Council’s decision to refuse a developer’s request to extend the relevant period of a development approval. The developer seeks final orders from the court allowing the appeal and extending the period of the development approval for two years from the date of judgment. The order is not opposed by Council.
- [3] The developer proposes to develop land at Mount Cotton with a bio-mass power plant. The land has the benefit of a development approval for a material change of use and a related environmental approval for Environmentally Relevant Activity No. 17.
- [4] The development application was impact assessable. More than 300 submissions were made by members of the community opposing the development. The development application was approved by the Council.
- [5] A submitter appeal was commenced in relation to the Council’s decision to grant the development approval. The appeal was resolved between the parties and the court made final orders in the submitter appeal on 7 November 2007. That order of 7 November 2007 is the development approval which is the subject of the developer’s request to extend the relevant period. The period was four years from 7 November 2007.
- [6] On 7 November 2011 the developer lodged a request with the Council under s 383 of SPA to extend the relevant period of the development approval. The Council refused. This is an appeal against that refusal.

- [7] In preparation for the appeal, experts in the fields of town planning, air quality and noise impacts prepared joint reports.
- [8] The development approval is consistent with Council’s current planning scheme and with the South East Queensland Regional Plan as at the time the approval was granted.
- [9] The noise and air quality experts recommended changes to the development approval to update the conditions imposed by the then Environmental Protection Agency to achieve greater certainty that the approval would be consistent with current laws and policies with respect to air quality emissions.
- [10] The Department of Environment and Heritage Protection includes the former Environmental Protection Agency. That Department agreed that the extension to the development period was appropriate.
- [11] The developer accepts that members of the public have maintained a “rage” against the proposal and that if the request were refused, further rights to make a submission would be available for a further development application and that members of the public would exercise those rights.

Statutory framework

- [12] Section 383 of *SPA* provides that a person may apply to the assessment manager to extend a relevant period. In deciding the request, the assessment manager must have regard to s 388 of *SPA*.
- [13] Section 388(1) of *SPA* provides:
“388 Deciding request
- (1) In deciding a request under section 383, the assessment manager must only have regard to—
- (a) the consistency of the approval, including its conditions, with the current laws and policies applying to the development, including, for example, the amount and type of infrastructure contributions, or infrastructure charges payable under an infrastructure charges schedule; and
- (b) the community’s current awareness of the development approval; and
- (c) whether, if the request were refused—
- (i) further rights to make a submission may be available for a further development application; and
- (ii) the likely extent to which those rights may be exercised; and

(d) the views of any concurrence agency for the approval given under section 385.”

Issue 1: whether the court needs to consider s 388(1) of SPA

- [14] Solicitors for developer appeared on a review day with a draft order with a provision for allowing the appeal and extending the period of the development approval. Counsel for the Council announced that the Council did not oppose the order but brought to the court’s attention some facts relevant to the matters set out in s 388(1) of SPA.
- [15] It was submitted by the solicitor for the developer that the matters in s 388(1) need not be established for the purpose of determining that the court has jurisdiction to make the order, that jurisdiction was not in issue, that because Council did not oppose the orders the court need not be concerned with s 388(1) of SPA and that the facts drawn to the attention of the court by counsel for the Council unnecessarily complicated a simple matter.
- [16] I accept that the factual matters set out in s 388(1) of SPA do not need to be satisfied in order for the court to have jurisdiction to hear the appeal. That feature is of no assistance in determining whether the court should consider s 388(1). I otherwise reject the two other submissions of the solicitor for the developer.
- [17] As I expressed concern in the face of the developer’s submissions the matter down to allow the developer to add to its submissions. Some hours later, Mr Williamson of counsel appeared on very short notice to supplement the submissions for the developer. He orally distinguished the concern courts must have with jurisdictional matters from the concern which the court should have with the matters in s 388(1). He echoed the submission of the solicitor for the developer that it was relevant that the Council did not oppose the application and added that the Council’s decision not to oppose the appeal should be given more weight as the Council acts to protect public rights. Perceiving that more assistance would be appreciated, Mr Williamson offered to supplement the oral submissions with written ones. They arrived today.

Issue 2: The relevance of council not opposing

- [18] While it seems sensible that a court should have regard to the fact that Council has changed its mind, I am unsure whether that is a matter which the court may consider. I note that according to the wording of s 388(1), an assessment manager deciding a request under s 383 of SPA “must only have regard to” the four matters set out in s 388(1). The court can have regard to the “views of any concurrence agency for the approval given under s 385”. There was no submission made that the Council was such a concurrence agency. Even if a failure to oppose an application could be regarded as the “views” of Council, I am not persuaded that it is a matter to which I may have regard. Fortunately, it does not affect the outcome as I propose for the reasons following, to allow the appeal. If I could take into account the non-opposition of council on the hypothesis that it is “a concurrence agency for the

approval given under section 385” it would have reinforced the other bases for my decision.

Issue 3: Should the appeal be allowed where it is likely that numerous persons would make submissions to a fresh development application?

- [19] The position taken by the Council in drawing to the court’s attention matters referred to in s 388(1)(c) of SPA was appropriate. The complication it introduced was appropriately introduced. The choice of its counsel to raise the complicating facts was performance of his duty performance to the court. Section 388(1)(c) makes relevant to the court’s function as assessment manager the likely extent to which rights to make a submission may be exercised. That part of the sub-section makes relevant the interests of potential submitters. They are not represented at the appeal. In an appeal where the facts show a likelihood that there would be numerous submitters in the event of a further development application the court should expect that this complication would be raised, at least by an officer of the court acting for Council.
- [20] The developer’s supplementary written submissions have been helpful.
- [21] I accept that the provision in s 388(1) of SPA does not contemplate that any one of the four considerations is intended to prevail and it does not contemplate that a failure to comply with one of the criteria mandates refusal.
- [22] I regard it is as particularly significant that the development approval is consistent with current laws and policies. Because the public notification process for the development application attracted more than 300 submissions I accept the submission that any submission made in response to the development application, if remade, is unlikely to raise any new issue not already raised by submissions in the original application process.
- [23] I accept the submission that any new resident in the area having arrived after the public notice should have an expectation that development could proceed in the area in accordance with the planning scheme. The consistency of the development approval with the planning documents is important because there must therefore be a reasonable expectation on the part of the public that development of the kind approved may occur in the area.
- [24] I accept that the opposition to the proposal maintained by some members of the public is likely to be related to the acceptability of the “use” in the area and not based upon its consistency or otherwise with current laws and policies. I balance that against the fact that the approval, including its conditions, is consistent with current laws and policies.
- [25] I accept there would be little utility in forcing the developer to undergo an extensive impact assessment process for the purpose of obtaining a development approval that would be, for all intents and purposes, consistent with the existing development

approval and which would be unlikely to provoke a public submission that would raise any new issue for consideration.

- [26] It is appropriate that the appeal be allowed and that the relevant period of the development approval be extended for two years from the date of judgment.

11.3.6 MCU013526 - MULTIPLE DWELLINGS (X59) – 399-413 BOUNDARY ROAD, THORNLANDS

Objective Reference: **A124442**
Reports and Attachments (Archives)

Attachments: [Proposal Plans](#)
[Unit Type Plans](#)

Authorising Officer:



Louise Rusan
General Manager, Community and Customer Service

Responsible Officer:

David Jeanes
Group Manager, City Planning and Assessment

Report Author:

Emma Martin
Acting Senior Planner, Planning Assessment

PURPOSE

Council has received an application seeking a Development Permit for Material Change of Use on land at 399-413 Boundary Road, Thornlands for Multiple Dwellings x 64 over balance lots 58 and 59 (proposed by development application ROL005951). During the course of the assessment alterations to the layout reduced the number of proposed dwelling units to 59.

The application has been assessed against the relevant provisions of the Redlands Planning Scheme and the proposed development is considered to conflict with parts of the scheme. The key area of conflict identified in the assessment is:

- Density of development – The Redlands Planning Scheme intends for part of the subject site (identified as balance lot 59) to deliver a higher density form of development being a 4 storey apartment building (16m in height) where the application proposes a 2-storey townhouse development.

Although the proposed use does not comply with the intent of the Medium Density Residential Zone code and South East Thornlands Structure Plan Overlay code, it is considered there are sufficient grounds to justify the decision despite the conflict.

It is therefore recommended that the application be granted a Development Permit subject to conditions.

BACKGROUND

The development application was properly made on 30 June 2015. The original application was for 64 dwelling units. In response to matters raised by Council officers the proposed multiple dwelling development has been amended to reduce the dwelling unit density to 59 units.

The applicant responded to Council's Information Request on 6 January 2016 and amended the proposal as part of the response. The change was considered to meet the minor change test under s.350 of the *Sustainable Planning Act 2009* and was accepted as a change to the application under s.351 and s.353 of the Act.

Planning History

The site has been the subject of previous development applications that are relevant to the consideration of this application:

- An application for Operational Works approval to drain and fill the existing dam was approved in September 2002. This approval has since lapsed.
- A combined application, being a Material Change of Use to rezone the lot to Park Residential and Reconfiguring a Lot for 14 lots. The application was initially granted Preliminary Approval at the 9 March 2004 meeting of the Development Assessment Committee, with a Development Permit for the proposal being granted at the 26 October 2004 meeting of the Committee following the lodgement of a Negotiated Decision request. This approval has since lapsed.

ISSUES

Development Proposal & Site Description

Proposal

The application is for a Material Change of Use for Multiple Dwellings x 59 in two stages over balance lots 58 and 59 (proposed by ROL005951). Stage one comprises 30 dwellings and relates to balance lot 58 and stage two comprises 29 dwellings and relates to balance lot 59. Each dwelling is a two (2) storey unit consisting of a single garage, three (3) bedrooms (one with an en suite), family bathroom, living area, dining area, kitchen, powder room, laundry and terrace. The units are grouped into duplexes and terraces with four different unit types. Four of the units also have balconies. The maximum height of the dwelling units varies between house type, however the tallest is approximately 7.5m above natural ground level.

Two vehicular access points are provided to each stage, one each from the boulevard spine road, with stage 1 taking a second access to the proposed road connection to Affinity Way adjoining the northern boundary of balance lot 58 and stage two taking a second access to the proposed road connection adjoining the southern boundary of balance lot 59. Nineteen (19) units take access directly from public road frontages via five (5) single driveways and seven (7) shared driveways. A total of 148 car parking spaces are provided on site, including 59 spaces within unit garages, 30 tandem spaces, 29 allocated resident spaces and 30 visitor spaces. Each unit is provided with private open space in the form of a ground floor terrace and a communal open space area of 828m² is available in between the two stages.

The proposed layout is included in **Attachment 1**.

Site & Locality

The subject site is located within the southernmost portion of the South East Thornlands Structure Plan (SETSP) area and is bounded to the north by the State controlled road Boundary Road and to the south by Eprapah Creek. To the east is the Villaworld development (previously known as Affinity by Aria) and to the west is an established Park Residential zoned community.

The site extends to some 9.79ha, however the developable land comprises less than 5ha, with over 3ha to be dedicated as park (as part of stage 8 / ROL005950) and the rest dedicated for road reserve and drainage.

The area of the subject site that will accommodate the proposed multiple dwelling development is best identified as balance lots 58 and 59, proposed by a simultaneous Reconfiguring a Lot application (ROL005951). There is a crest in the middle of the subject site, which splits the drainage catchments for this proposal. The majority of balance lot 58 drains to the north, with only the southernmost part of balance lot 58 and all of balance lot 59 draining southeast.

The part of the site zoned for development is predominately clear of vegetation except for a cluster of mature trees at the centre of the site, which will need to be removed to facilitate the development. The current use of the site is for a single dwelling unit with associated outbuildings and a large dam to the rear of the property, however it was until fairly recently utilised as a cattle farm. All existing structures will be removed from the development site prior to construction.

Application Assessment

Sustainable Planning Act 2009

The application has been made in accordance with the *Sustainable Planning Act 2009* Chapter 6 – Integrated Development Assessment System (IDAS) and constitutes an application for Material Change of Use under the Redlands Planning Scheme.

SEQ Regional Plan 2009-2031

The site is located within the Urban Footprint in the SEQ Regional Plan 2009-2031.

State Planning Policies & Regulatory Provisions

State Planning Policy / Regulatory Provision	Applicability to Application
SEQ Koala Conservation SPRP	<p>The site is located within an assessable area under the SEQ Koala Conservation SPRP and is within a Koala Broad-Hectare Area. Division 3 of the SPRP applies. The developable part of the site is designated as Medium Value Rehabilitation, with the open space toward the rear of the site split between Low Value Rehabilitation, Medium Value Bushland and Low Value Bushland.</p> <p>Division 3 requires the development design to incorporate movement corridors and food species for koalas. There are no direct requirements for replanting. Schedule 2 acknowledges constraints from development and its associated infrastructure and edge effects. The proposed layout of the site does not obstruct fauna movement itself, and it is recognised that any urban development will have some level of impact on koala movement. The SPRP requirements are considered to be met through the provision of movement corridors via street tree planting (in particular along the boulevard road, which benefits from extra wide verges – delivered as part of ROL005951) and the buffer planting to the site frontage. It is not considered appropriate for koala food trees to be planted in these areas as it would attract koalas to the area which could put them at risk of attack from domestic animals and being struck by vehicles. The final species for planting will be determined as part of the Operational Works stage of the development.</p>

State Planning Policy / Regulatory Provision	Applicability to Application
	<p>A more appropriate location to encourage comprehensive planting of koala habitat and food trees is the Open Space zoned land at the rear of the site (to be dedicated as park as part of ROL005950). This part of the site will provide the most effective and valuable corridor for fauna movement along Erapah Creek. This is also the intended location of a wildlife corridor for fauna movement under the SETSP overlay code.</p> <p>Although it is noted above that the applicable division of the SPRP does not require replanting, the <i>Environmental Offsets Act 2014</i> (EO Act) provides Council with the jurisdiction to require environmental offsets to counterbalance a significant residual impact to a prescribed environmental matter. Relevantly, non-juvenile koala habitat trees located within an area identified as bushland habitat, high value rehabilitation or medium value rehabilitation in the SPRP is a prescribed environmental matter for this purpose. A significant residual impact is the impact of development after any on-site rehabilitation.</p> <p>On this basis it is considered appropriate to impose conditions that ensure any non-juvenile koala habitat trees removed from the site are either replaced on site (completely or partially) at the rate required by the EO Act (referenced above), with any unmet replanting requirements addressed with an environmental offset (an environmental offset relates to offsite revegetation or a financial contribution in lieu of planting). The replanting rate required by the EO Act is three (3) trees for every non-juvenile koala habitat tree removed.</p>
SPRP (Adopted Charges)	<p>The development is subject to infrastructure charges in accordance with the SPRP (adopted charges) and Council's adopted resolution. Details of the charges applicable have been provided under the Infrastructure Charges heading of this report.</p>
State Planning Policy April 2016	<p>The site is mapped as having the following State designations:</p> <ul style="list-style-type: none"> a) KOALA BUSHLAND b) REGULATED VEGETATION – Wetland c) HIGH ECOLOGICAL SIGNIFICANCE - Wetland d) NATURAL HAZARDS, RISK & RESILIENCE – Potential bushfire impact buffer and medium bushfire hazard area e) WATER QUALITY - Climatic regions – stormwater management design <p>No development is proposed in the parts of the subject site affected by designations a) – d).</p> <p>In relation to e) the submitted Stormwater Management Plan adequately demonstrates that the SPP requirements in relation to water quality have been met. Conditions have been included to approve the development generally in accordance with these plans and subject to detailed designs that require Operational Works approval.</p>

Redlands Planning Scheme

The application has been assessed under the Redlands Planning Scheme version 7.

The application is subject to code assessment and the following codes are applicable to the assessment:

- Urban Residential Zone code (UR)
- Medium Density Residential Zone code (MDR)
- Open Space Zone code
- Community Purpose Zone code
- Acid Sulfate Soils Overlay code
- Flood Prone, Storm Tide and Drainage Constrained Land Overlay code
- Habitat Protection Overlay code
- Landslide Hazard Overlay code
- Road and Rail Noise Impacts Overlay code
- South-East Thornlands Structure Plan Overlay code (SETSP)
- Waterways, Wetlands and Moreton Bay Overlay code
- Multiple Dwelling code
- Development Near Underground Infrastructure code
- Excavation and Fill code
- Infrastructure Works code
- Stormwater Management code

Density

The proposal is for low-rise attached dwelling units across both stages of development with an average density of 1 dwelling unit per 245m² (including the open space zoned part of the site, which comprises the communal open space). The type of development proposed is consistent with the intent for the land within the SETSP Overlay code, UR Zone code and MDR Zone code, however the density anticipated in these areas has not been met.

In relation to stage one, which is zoned UR1 (in the UR Zone code) and sub-precinct 2a (in the SETSP Overlay code), the SETSP Overlay code does not stipulate density requirements, however P2.4(2) of the UR Zone code clarifies that the probable solution for residential development density in the zone is 1 unit per 400m². The density of stage one (including part of the Open Space zoned area) is 1 unit per 238m², which does not comply with the probable solution. Specific Outcome S2.4(2) states that dwelling unit density must be compatible with the detached low-rise character of the zone. It is important to consider that this specific outcome refers to the entire UR zone, where detached low-rise dwellings are the predominant land use. The UR1 sub-area is however intended to be characterised by attached dwellings such as those proposed, adjoining areas that may predominantly comprise low-rise detached dwellings. The overall outcomes of the UR zone clarify this, stating that development provides for a range of uses that “are predominantly low-rise detached houses on individual lots of various sizes;... where in sub-area UR1 and UR2 – provide an increased range of residential uses including multiple dwellings, and aged persons and special needs housing.” The overall outcome therefore identifies that the UR1 sub-area provides an increased range of residential uses including multiple dwellings. It does not say that it must entirely consist of this type of dwelling, merely that it is identified as a suitable location for an increased mix of higher density housing options.

It is noted that in most cases in Redland City the UR1 sub-area is identified in locations adjoining or close to land zoned for a higher density of development, areas that are generally better located in terms of access to public transport, shops and entertainment and parks and open space. It is rightly concluded therefore that the UR1 sub-area is a transitional area, between traditional low-rise detached neighbourhoods and higher density development.

In the context of this proposal the land to the north of stage one is zoned UR1, however application ROL005951 proposes to subdivide this land for a mix of lot sizes. Likewise, approval was granted to subdivide the UR1 zoned land to the east of the site. In both cases the lots adjacent to the subject proposal will comprise low-rise detached dwellings, however it is also relevant to note that in both cases the lots closest to this proposal are small lots generally between 300m² and 400m². Additionally, Balance lot 59 to the south, also the subject of this application, is zoned Medium Density Residential sub-area 4 (MDR4) and is expected to deliver attached dwelling units of a density at or over 1 unit per 200m². Finally, land to the west is anticipated to deliver large lots adjoining the Park Residential zoned land beyond. The character/intended character of the area is mixed and is not dominated by a single character type or density. It is therefore considered that the proposed development of Balance lot 58 at an average density of 1 unit per 238m² is consistent with a transitional area, a character intended by the zoning. It provides for an increased mix of housing densities and building types within the area that complements the emerging neighbourhood character and facilitates the efficient use of the land as required by the overall outcomes of both codes. Stage one of the proposal is therefore considered to comply with the Redlands Planning Scheme provisions.

In respect of stage two, which is zoned MDR4 (in the MDR Zone code) and sub-precinct 3a (in the SETSP Overlay code), the SETSP Overlay code does not specify particular density requirements for this sub-area, however it does state that the intended predominant land use is for mid-rise housing to maximise limited land resources and that lower density residential dwelling units should be restricted. Schedule 3, division 2 (Dictionary) of the Redlands Planning Scheme defines mid-rise buildings as “*A building that is 3 to 5 storeys in height*”. The MDR Zone code stipulates that the density expectations for the MDR zone generally is 1 dwelling unit per 200m² (probable solution P2.4(3)), with probable solution P2.4(5) clarifying that in the MDR4 sub-area density is determined through site coverage, setbacks, and maximum building heights (16m/4 storeys). Stage two of the proposal is for approximately 1 dwelling unit per 255m² (including part of the Open Space zoned land) for low-rise two storey dwelling units. Whilst the type of development is generally consistent with both codes, it is considered that the density of development and height of the proposed units is not, and is a conflict with the overall outcomes of both the SETSP Overlay code and the MDR Zone code.

Notwithstanding this conflict, there are considered to be sufficient planning grounds to justify approval of the proposal despite the conflict:

- The developer has argued that the feasibility of higher density development in this part of the site is extremely reduced. This has been further supported by the approval last year on the adjoining land (ROL005869 – also zoned MDR4), where an established unit developer also proved that they were not able to secure bank finance for mid-rise development of the kind anticipated by the Redlands Planning Scheme. The additional construction costs associated with a 4 storey building cannot be recouped in this location and therefore undermines the viability of the

whole scheme. This is because as a dwelling unit grows in height the cost to produce the product increases due to:

- The design of the foundations changing to take greater loads;
 - Additional formwork, concrete and reinforcement needed;
 - Lifts, party wall construction for fire protection and additional screening to protect residential amenity;
 - Commercial fire systems and pumps to boost fire fighting capacity at higher elevations; and
 - Construction of common areas (corridors/lobbies) which would otherwise not be required.
- If the proposal was amended to comprise three storey units instead of two storey it would comply with the definition of mid-rise housing and whilst this is less than the 4 storey maximum for the zone, it could no longer be considered a conflict with the Redlands Planning Scheme. However this would only result in increased unit sizes and would not actually increase the density of development. It would however increase construction costs, which would subsequently increase the cost of the unit. Multiple dwellings are intended to be a low cost housing option. It therefore seems counterintuitive to require an alteration to the proposal to address a conflict with the scheme that would actually result in a poorer outcome for the community.
 - The density of the proposal (both stages) has been reduced since the application was lodged in order to address other assessment matters caused by the topography of the land, specifically in relation to service access and the impact of retaining structures on the amenity of future residents.
 - The density of the whole site, considering also the simultaneous applications ROL005951 and ROL005950, still provides for what is intended by the scheme:
 - A range of dwelling types that offer choice, affordability and adaptability;
 - Creates a vibrant urban community that promotes a sustainable, healthy lifestyle and a strong sense of community;
 - Ensures a mix of housing densities and building types; and
 - Delivers a density of development that makes efficient use of scarce developable land.
 - The proposed development is considered more in keeping with the character of the area as it will be surrounded by detached dwellings.

In summary, it is considered that there are sufficient planning grounds to justify the conflict with the overall outcomes of the scheme. The proposed multiple dwellings are considered to facilitate population growth within Redlands and meet the diverse and changing needs of the community, whilst ensuring the development is appropriate for the character and topography of the area. The developer has put forward a case that the intent of the scheme for a four (4) storey product in this area (which would be needed in order to achieve the intended density), is financially unviable and that there would be limited demand for this product type in this area. Although officers have not undertaken an independent assessment, it is noted that the developer has taken a risk in applying for a non-complying development.

It is unlikely that an experienced developer would apply for a non-complying development if there was another complying development that would generate strong market demand in the area. It is also noted that the concern of unmarketable products was raised during the structure planning process for the area in 2006 and in relation to the approved development to the east.

Streetscape / Urban design

Unit Design

Probable Solution P8 of the Multiple Dwelling code requires that garages are located behind the front building façade and in the case of two storey buildings are recessed beneath the upper storey by at least 1.2m. Specific Outcome S8 of the code clarifies that this is to ensure that garages do not dominate the streetscape or building form when viewed from the street. The proposed house types are considered to provide visual interest and an architectural design that prevents this from being the case. Each incorporates a mix of materials, well proportioned windows to the front elevation and variations in the roof design. The units that present directly to the public road will have the additional benefit of substantial vegetated verges (9m wide) required by the SETSP Overlay in respect of the subdivision application ROL005951. This, along with the supporting landscape design for the development will further soften any perceived dominance of the garage. It is considered that the design meets the requirements of the specific outcome.

Lot type designs are included at **Attachment 2**.

Crime Prevention Through Environmental Design (CPTED)

The proposed layout was amended in response to the Information Request issued by officers to ensure the development addressed the public streets. This along with the proposed unit designs, which incorporate well-proportioned windows to habitable rooms, ensure causal surveillance along the public street. This is particularly important considering that a pedestrian footpath will be constructed in the verge adjoining the proposed development. In relation to the communal open space area, this is overlooked by the units on the high side of the open space (along the northern boundary); this is the side elevation of one unit and the rear elevation of four units (with upstairs windows of habitable rooms directed at the area). Two of the units with rear elevations facing the open space also have a first floor balcony (above the ground floor terrace) that overlooks the space. Units to the southern boundary of the open space are generally too low to overlook the space but the private open space and living areas of these units are directed at the open space, which means that although these units will not have a great deal of visual surveillance they are still well located that residents will likely be aware of activities going on in the area. Finally, the internal roads through both stages of the development will also have the benefit of casual surveillance from all units (x40) that take access from them. It is considered that the proposed development complies with specific outcome S10 of the Multiple Dwelling code, which requires that site layout and building design maximises the safety and security of residents.

Access and Parking

Probable solution P8 of the Multiple Dwelling code refers to *Part 9 – Schedule 1 – Access and Parking – Table 1 – Minimum On-site Vehicle Parking Requirements* in relation to car parking provision. Schedule 1 sets a rate of 1 parking space per unit and 0.25 visitor space per unit, if any part of the site is within 400m of a bus stop providing at least 10 return bus services per day (including Saturday). Otherwise the rate is doubled for each (2 per unit and 0.5 visitor spaces per unit).

At its nearest point (north east of balance lot 58) the proposed unit development is approximately 400m (via Affinity Way to the east) from the bus stop at Boundary Road (Abeya Street), which provides more than 10 return bus services each day (including Saturdays). Moreover this bus stop provides access to six return services to Brisbane City at peak hour Monday – Friday and a night bus service. Notwithstanding this, the developer has proposed to comply with the higher car parking requirement and proposed the following mix of parking spaces:

- 59 spaces provided within the single garages within each unit
- 30 spaces provided in tandem on driveways
- 29 resident parking spaces spread throughout both sites
- 30 visitor parking spaces.

It is considered that the proposal complies with the parking requirements of the Redlands Planning Scheme.

In relation to the access arrangements, specifically that each stage proposes two main access points and 19 units are proposed to have driveway access from the public road, where probable solution P3(1)(e-f) of the Multiple Dwelling code seeks a single vehicle access from the public street frontage and access to individual dwelling units from an internal street. The relevant specific outcome (S3)(1)(l) stipulates that this is to ensure the streetscape is not affected by multiple access points or the dominance of garages. In this case the proposal is not considered to result in a detrimental impact to the streetscape or a dominance of garages for the following reasons:

- Two access points are proposed for each stage as both stages have the benefit of two road frontages and utilising both provides for more efficient vehicle movements, especially for service vehicles attending the site;
- Direct access from the public road creates a more active streetscape, providing more opportunities for active surveillance of the street than side or rear elevations with a nominal 2m landscape buffer;
- The proposed subdivision of the land (ROL005951) incorporates substantial vegetated verges in this location of approximately 9m, in accordance with the SETSP Overlay code; and
- The number of driveways proposed is consistent with that expected within a residential zone.

The proposed access arrangements are therefore considered to comply with the requirements of the Redlands Planning Scheme.

Open Space and Landscaping

The Open Space zoned land between stage one and stage two of the proposed development is proposed to be dedicated as park within the associated subdivision application ROL005951. Both the subdivision plans for that application and layout plans for this proposal also identify the land as communal open space for this development. It is understood that the developer has proposed the dedication of the open space to avoid creating a conflict with the Redlands Planning Scheme which encourages the dedication of open space land. However during the course of the assessment for ROL005951 both City Spaces officers and City Planning & Assessment officers concluded that the cost of maintenance associated with the land far outweighs the community benefit provided by public access to it, considering the very close proximity of 3.29ha of open space (including a Local Park with a play area, kick about area and bbq/picnic facilities) to be dedicated as part of ROL005950. On this basis it is recommended that the 830m² of land identified as communal open space not be dedicated to the State for park, but be maintained by the developer and included as communal open space for this development. This area has therefore been considered as part of the proposed development and the area included in the calculations for communal open space.

Probable solutions P6 and P7 of the Multiple Dwelling code require the following:

- 15% of the site is planted/grassed landscaping
- 2m planted area along the length of any public road
- 20% of the site is provided for open space, consisting a minimum 25m² of private open space for each unit and, where 10 or more units are proposed, a single communal open space area of at least 5% of the total area of the site.

The proposed development is a total of 14,504m² and provides for:

- Landscaped areas (excl. private open space and communal open space) – 2851m² (19.7%)
- Open Space – 3,719m² (25.6%)
 - Private open space – 2889m² (19.9%)
 - Communal open space – 830m² (5.7%)

The *Landscape Master Plan & Design Intent – Stage 3* prepared by Place Design Group clarifies that screen planting will be provided in front of boundary fencing.

The proposal is considered to comply with the open space and landscaping requirements of the Redlands Planning Scheme.

Earthworks / Retaining walls

The applicant lodged an Infrastructure Report in July 2016 in response to Council's request for further information. The report was prepared by Sheehy & Partners Pty Ltd and confirms that all retaining walls will be limited to 1.5m in height wherever possible. In locations where it is not possible they propose to tier the retaining walls.

Probable solution P1 of the Excavation and Fill Code require that retaining walls or structures:

- a) Are setback at least half the height of the wall from any boundary of the site;
- b) Do not exceed 2.5 metres in height; and

- c) Are stepped or terraced 0.75 metres for every 1.5 metres in height to incorporate landscaping.

Concept earthworks plans have been lodged with the development application, which show the anticipated finished pad levels for each unit block. The majority of retaining walls are less than 1.5m and are not set back half the height of the wall in order to maximise the developable area. In four locations, however, there is a pad level change of more than 1.5m (being approximately 1.6m, 1.7m, 2m and 2.8m respectively). In two of these cases the affected boundary of the unit on the low side of the retaining structure is the rear boundary, with two being a side boundary.

In relation to the retaining walls along the side boundary (between units 15 and 16 and between units 21/22 and 25-27, both in stage one), the walls are expected to be 1.6m and 1.7m high respectively. As this is only an additional 100-200mm to what is permitted under the probable solution (P1) without the need to incorporate a stepped design, and given that stepping the top 100-200mm of these walls will have minimal effect on the bulk and impact of the structure and considering that this will reduce the usable area of both parts of the site, it is not considered appropriate to condition that this wall be stepped.

In relation to the retaining structures expected along the rear boundaries, it is considered that each has sufficient space to incorporate stepping and landscaping to reduce the bulk and visual impact of the wall, whilst maintaining sufficient private open space. As these walls are located at the rear of the units they also cause minimal impact on the streetscape as they are screened by the proposed dwelling units. They are located at the rear of units 18 – 20 in stage one and units 17-19 in stage two, they have a pad level change of 2.8m and 2m respectively. In both cases the setback between the retaining wall and the roofed terrace is approximately 4m and 5m to the wall of the dwelling unit itself. Both are large retaining walls, particularly the one expected to be approximately 2.8m high. It is considered that with a condition requiring that both walls are constructed with a stepped design using high quality materials and incorporates a vegetated strip of 0.75m width at a height that can be maintained from the low side property, the development can be made to comply with specific outcome S1 of the Excavation and Fill Code.

It is necessary to also clarify that although one wall will be greater than 2.5m high in total (not preferred in the above probable solution) the structure is internal to the development, screened from the public road by the proposed dwelling units, conditioned to incorporate landscaping to reduce its bulk and visual dominance and habitable rooms of the affected units are setback more than 4m from the wall. Also, the outermost projection of the proposed dwelling unit on the high side of the wall is located more than 2.5m from the wall, resulting in a 7.5m setback between the two units. It is considered unlikely that significant visual intrusion would occur. As such, it is considered that with conditions the proposed development will comply with specific outcome S1 of the Excavation and Fill Code despite the non-compliance with the probable solution.

Waste collection

The development will be serviced via kerbside collection (with some units serviced from the public street and some from the internal private roads) with each unit having a general waste bin and a recycling bin. Multiple Dwelling developments are generally serviced with centralised bulk bins however this is generally due to access constraints of the site.

The proposal accords with probable solution P11(1)(f) of the Multiple Dwelling code, which allows for on-street collection and an internal road network that allows each unit to be serviced individually. The internal road network has been designed to accommodate a Heavy Rigid Vehicle, however following consultation with Redland Water and Waste it is considered necessary to apply a condition ensuring the internal roads and shared driveway areas are constructed of materials that can withstand the weight of such a vehicle. Further, it is also necessary to apply a condition that address potential obstructions, this includes requirements of the minimum area provided for bins to be stored for collection and requirements that the internal roadway is clear of any obstructions (vegetation, infrastructure and vehicles and the like) to ensure that waste collection is not unreasonably hindered. It is also considered necessary to apply a condition that ensures each unit has access to a secure external storage area for their unit. The majority of the proposed units have side gate access to private open space areas, however 13 units are mid-terrace and will need to be provided with an area (for example to the front of their unit) that is appropriately screened.

With these conditions applied it is considered the waste collection provisions comply with the requirements of the Redlands Planning Scheme.

Sewer

Stage one is located within the northern drainage catchment and as such it connects into the gravity sewer servicing the northern part of the site. Stage two however falls to the south and as such requires a pump station to transport wastewater to the gravity system servicing the northern part of the site. The pump station is located in the south eastern corner of stage two and will be owned and maintained by the body corporate managing the development site. The private pump station rising main will discharge into sanitary drainage located within the townhouse site. None of the infrastructure relating to this catchment will be located within road reserve or public land at any time.

Odour Impact

Due to the location of a private pump station close to adjoining freehold lots, the developer submitted an odour report prepared by Pacific Environment Limited, which recommends that a ground mounted odour control unit be installed and that the unit is checked regularly and the carbon filter cartridge replaced if odour is detected at the outlets (or complaints are received). The pump station and odour control unit will be the responsibility of the body corporate.

It is considered necessary to condition compliance with recommendations of the report to ensure any potential odour nuisance to residents of the proposed development and those adjacent to the site are mitigated.

Stormwater

As discussed above the two stages of the proposed development drain into different catchments, with stage one draining to the north and stage two to the south. The applicant lodged a Stormwater Management Plan in support of the application, which demonstrates that the stormwater runoff within stage one will be captured by infrastructure internal to the site and conveyed to the reticulated system within the proposed road along the northern boundary of balance lot 58 and from there will drain into the stormwater treatment basin along the northern boundary of the subject site (proposed by ROL005951).

Similarly, the stormwater runoff in stage two is captured by internal infrastructure and conveyed to the reticulated stormwater system within the proposed road at the southern boundary of balance lot 59 and from there drains to the stormwater basin proposed as part of ROL005950.

Infrastructure Charges

Stage 1

The proposed development is subject to infrastructure charges in accordance with the State Planning Regulatory Provisions (adopted charges). The total charge applicable to this development is:

Combined charge: \$821,024.80

This charge has been calculated as follows in accordance with Council’s [Adopted Infrastructure Charges Resolution \(No. 2.3\) August 2016](#).

Redland City Council	Notice #001326
Residential Component	
30 X 3 bedroom residential dwellings X \$28,311.20	\$849,336.00
Demand Credit	
1 X 3 bedroom residential dwelling X \$28,311.20	\$28,311.20
Total Council Charge: \$821,024.80	

NB: Credited with 1 lot created as part of ROL005951 (balance lot 58), charged for 30 units on this lot. All units have 3 bedrooms.

Offsets

There are no offsets that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*, however, there is an infrastructure agreement which details offsets applicable to this development.

Refunds

There are no refunds that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

Stage 2

The proposed development is subject to infrastructure charges in accordance with the State Planning Regulatory Provisions (adopted charges). The total charge applicable to this development is:

Combined charge: \$792,713.60

This charge has been calculated as follows in accordance with Council’s [Adopted Infrastructure Charges Resolution \(No. 2.3\) August 2016](#).

Redland City Council

Notice #001327

Residential Component	
29 X 3 bedroom residential dwellings X \$28,000	\$821,024.80
Demand Credit	
1 X 3 bedroom residential dwelling X \$28,000	\$28,311.20
Total Council Charge: \$792,713.60	

NB: Credited with 1 lot created as part of ROL005951 (balance lot 59), charged for 29 units on this lot. All units have 3 bedrooms.

Offsets

There are no offsets that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*, however, there is an infrastructure agreement which details offsets applicable to this development.

Refunds

There are no refunds that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

Infrastructure Agreement

Although this application will not deliver trunk infrastructure there will be cross credits associated with infrastructure to be delivered as part of applications ROL005950 and ROL005951. As such if this application is approved it will need to include a condition that requires compliance with the IA.

State Referrals

- **State Assessment & Referral Agency (SARA)**

SARA provided an amended referral agency response dated 20 January 2016, relating to the referral trigger of State-controlled roads. The Department indicated no objection to the proposed development subject to the referral and had conditions relating to stormwater. The full referral response and conditions are appended to this report and the conditions will be attached to any development approval.

Submissions

The proposed development is Code assessable and did not require public notification. Notwithstanding this 22 submissions were received in relation to the application. The key issues raised by submitters are included in the table below, along with officer comments.

Issue	Officer comments
<p>Vehicular access to Luke Street:</p> <ul style="list-style-type: none"> • SETSP clearly states no vehicular access to Luke Street. • Luke Street is Park Residential because of the semi bushland environment important for fauna. Local Law 2 proposed amendment to include the area as a Koala Area. Even with low volumes of traffic there are already fatalities. The increase will result in more fauna being injured and killed. • Luke Street not designed for the number of cars the proposal would generate (insufficient visibility near intersection with Kodak Close, Thornton Drive and Megan Court). Increased risk to pedestrians – there are no footpaths. • Will create a rat run allowing residents to use Dinwoodie Road via Venn Parade, especially with only a left in/left out access to Boundary Road proposed for the subject site. • Strategic Framework - The direct connection of the higher density development to the east is incompatible with the strategic intent for Conservation land to the west and koala habitat retention due to additional traffic caused by Luke Street connection. • Overall Outcomes of the Reconfiguration code – development does not result in a positive contribution to the existing neighbourhood due to increased danger to wildlife. • Overall Outcomes of the Park Residential Zone code – impact to environmental values. • No need for it – the traffic report stated it is needed to provide access for lots 38-40, but these can take access from Luke Street without needing a connection. • Traffic report – insufficient assessment of likely through traffic. 	<p>The applicant has removed vehicular access to Luke Street.</p>
<p>Left in / left out access from Boundary Road – insufficient.</p> <ul style="list-style-type: none"> • SETSP clearly shows a signalised intersection. • U-turns at Meadowlands Road at peak times are already ridiculous • Exacerbate the difficulty for residents of Meadowlands area to turn right. 	<p>Boundary Road is a State controlled road. Council has no jurisdiction to require an alternative treatment at the intersection/access of the site. It is nonetheless noted that officers raised this matter with officers at the State Assessment Referral Agency (SARA) to confirm that signalisation of this intersection was not triggered by this application. The concurrence agency response issued by SARA and attached to this report, did not include any requirements for the developer to deliver these works.</p>

Issue	Officer comments
	The ultimate design of the intersection is appended to the Traffic Impact Assessment lodged with the application. RCC officers have considered this design and ensured the proposal does not compromise the ultimate delivery of this intersection at a future date.
<p>Lot size adjoining Park Residential lots:</p> <ul style="list-style-type: none"> • 24 lots adjoin Park Residential homes – none comply with the RPS requirement - A minimum of 1200m² with a 25m frontage. 	This matter is addressed under the Redlands Planning Scheme heading of this report.
Potential increase in anti-social behaviour and crime, caused by high density development.	The proposal has been designed to consider Crime Prevention Through Environmental Design (CPTED) principles and assessed against these requirements.
Decline in property value	The effect of development on property value is not a relevant planning consideration.
Erapah Creek / Luke Street Reserve will be placed under huge stress	The impact to Erapah Creek and Luke Street Reserve is a matter that was considered prior to the area being zoned for higher density development. Moreover the proposal will secure a 200m buffer to Erapah Creek through the dedication of 3ha of land zoned for Open Space. The proposal also includes a Stormwater Bio-Retention Basin that will treat stormwater run-off before it drains into the creek.
Preference that the dam left in its natural state but understand that there may be Council regulations preventing this.	This matter is addressed under the relevant heading of this report.
Conflict with covenants on existing Park Residential zoned lots, which are required to have fauna friendly fencing along all boundaries.	<p>Given this is a consequence of the different zonings of adjoining land there is not considered to be a risk of compliance action. It is clear that where the Park Residential zoned lots adjoin the Urban Residential zone the requirements of the covenant cannot be achieved.</p> <p>It is important to note however that if the subject development is approved, the covenants on the adjoining Park Residential zoned properties are still able to achieve their intent and their purpose is not negated by any approval on the subject land. The remaining three boundary fences must still comply with the covenant and enable fauna movement within the Park Residential Zone, where lower densities and more vegetation facilitate that movement.</p>

Deemed Approval

The approval of this application has not been issued under Section 331 of the *Sustainable Planning Act 2009*.

STRATEGIC IMPLICATIONS

Legislative Requirements

The application has been assessed in accordance with the *Sustainable Planning Act 2009*. This development application has been assessed against the Redlands Planning Scheme v7 and other relevant planning instruments.

Risk Management

Standard development application risks apply. In accordance with the *Sustainable Planning Act 2009* the applicant may appeal to the Planning and Environment Court against a condition of approval or against a decision to refuse the application.

Financial

If approved, Council will collect infrastructure contributions in accordance with the State Planning Regulatory Provisions (adopted charges) and Council's Adopted Infrastructure Charges Resolution.

If the development is refused, there is potential that an appeal will be lodged and subsequent legal costs may apply.

People

Not applicable. There are no implications for staff.

Environmental

Environmental implications are detailed within the assessment in the "issues" section of this report.

Social

Social implications are detailed within the assessment in the "issues" section of this report.

Alignment with Council's Policy and Plans

The assessment and officer's recommendation with Council's policies and plans as described within the "issues" section of this report.

CONSULTATION

The Planning Assessment Team has consulted with other internal assessment teams, operational teams and asset management teams where appropriate. Advice has been received from relevant officers and forms part of the assessment of the application.

A copy of the original proposal and subsequent amendments were provided to the Divisional Councillor. The Divisional Councillor, Councillor Golle as well as Councillor Hewlett have requested that the application be brought to Council for determination.

OPTIONS

The development application has been assessed against the Redlands Planning Scheme and relevant State planning instruments. The development application is considered to conflict with part of the Redlands Planning Scheme, however there are considered to be sufficient planning grounds to justify approval despite the conflict. It is therefore recommended that the application be approved subject to the simultaneous approval of ROL005951 and conditions.

Council's options are to:

1. Adopt the officer's recommendation to approve the application subject to approval of ROL005951 and conditions; or
2. Resolve to approve the application, without conditions or subject to different or amended conditions; or
3. Resolve to refuse the application.

OFFICER'S RECOMMENDATION

That Council resolves to issue a Development Permit approval subject to simultaneous approval of ROL005951 and conditions for the Material Change of Use for Multiple Dwelling x 59 at 399 Boundary Road, Thornlands.

<u>ASSESSMENT MANAGER CONDITIONS</u>	<u>TIMING</u>
1. Comply with all conditions of this approval, at no cost to Council, at the timing periods specified in the right-hand column. Where the column indicates that the condition is an ongoing condition, that condition must be complied with for the life of the development.	Ongoing
<u>Approved Plans and Documents</u>	
2. Undertake the development in accordance with the approved plans and documents referred to in Table 1, subject to the conditions of this approval and any notations by Council on the plans.	Prior to the use commencing for each stage and ongoing.

Plan/Document Title	Reference Number	Prepared By	Plan/Doc. Date
Esperance Concept Plans (staging plan) – as amended in red	15-1026 DA03 Rev B	Linear 56 Design	May 2015
Esperance Site One Concept Plans	15-1026 DA03 Rev B Sheet 01 of 11	Linear 56 Design	May 2015
Esperance Site Two Concept Plans	15-1026 DA03 Rev B Sheet 01 of 11	Linear 56 Design	May 2015
Site Based Stormwater Management Plan – Boundary Road Thornlands	3863-01R01V04	Water Technology	17.06.2015
Services Layout Plan Option 'A' Sheet 1 of 2	8160-C version 3	Sheehy & Partners	June 2016
Services Layout Plan Option 'A' Sheet 2 of 2	8160-D version 3	Sheehy & Partners	June 2016
External Stormwater Catchment and Collection Plan Sheet 1 of 2	8160-AX version 1	Sheehy & Partners	July 2016
External Stormwater Catchment and Collection Plan Sheet 2 of 2	8160-AY	Sheehy & Partners	July 2016
Preliminary Odour Assessment of Coulters Farm Stage 2 Pump Station		Pacific Environment Limited	18 May 2016
Landscape Master Plan & Design Intent Stage 3 (all plans contained therein)	Version D	Place Design Group	20 June 2016

Tree Retention Plan	S50059_TRP_001 version B	Place Design Group	05/01/2016
Tree Retention Plan	S50059_TRP_002 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_003 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_004 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_005 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_006 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_007 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_008 version B	S5 Environmental	17/12/2015
Rehabilitation Management Plan	S50139_RMP_001 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_002 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_003 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_004 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_005 version A	S5 Environmental	23/12/2015

Table 1: Approved Plans and Documents

3. Comply with the Infrastructure Agreement that relates to this development approval.	Prior to the use commencing and ongoing. All Stages
Commencement of Works	
4. Do not commence building and/or operational works, including construction works for the Multiple Dwellings, authorised by this Development Permit, until the Survey Plan for balance lots 58 and 59 (approved as part of ROL005951) has been endorsed by Council and issued with a dealing number by the Department of Natural Resources and Mines.	Prior to site works commencing. For each stage.
Lighting	
5. Locate, design and install outdoor lighting, where required, to minimise the potential for light spillage to cause nuisance to neighbours.	Prior to the use commencing and ongoing. For each stage.
Access, Roadworks and Parking	
6. Provide a minimum of 74 car parking spaces generally in accordance with the approved conceptual site layout plans, named Esperance Site One Concept Plans and Esperance Site Two Concept Plans (both referenced 15-1026 DA03 Rev B). The total number of car parks must include: <ul style="list-style-type: none"> • 59 resident/owner parking spaces • 15 visitor parking spaces 	Prior to the use commencing and ongoing. For each stage.

<p>If the development is delivered in stages the minimum parking provision for each stage must be as follows:</p> <p>Stage/Site One (1):</p> <ul style="list-style-type: none"> • 30 resident/owner parking spaces • 8 visitor parking spaces <p>Stage/Site Two (2):</p> <ul style="list-style-type: none"> • 29 resident/owner parking spaces • 7 visitor parking spaces <p>Access to car parking spaces, bicycle spaces, bin bays and driveways must remain unobstructed and available for their intended purpose. The final placement of car parking spaces must not cause an obstruction to waste collection or safe pedestrian movements.</p>	
<p>7. The access driveways must remain clear of obstructions at all times to ensure service vehicles, particularly waste collection vehicles (or equivalent) can access and service the site safely and efficiently.</p> <p>For the avoidance of doubt, this includes landscaping, parked vehicles and the placement of any infrastructure.</p>	<p>Prior to the use commencing and ongoing. All Stages.</p>
<p>8. Submit to Council for approval, engineering plans and details showing the following external works are in accordance with the assessment criteria listed in Table 2: Compliance Assessment of this approval:</p> <ol style="list-style-type: none"> a) Detail all retaining structures, in plans and sections, in particular the ones abutting the future road reserve. These plans should include all relevant features such as fences, service crossings and along the eastern boundary must reflect how the structure interacts with/affects the approved structures on the adjoining property; b) Detail earthworks on the verge including batters, kerbs, underground utilities, footpaths; c) Detail design of the open space in between the two townhouse stages with all features such as retaining structures, fences, landscaping, municipal services, lighting, pedestrian footpath (as required); d) Details of all vehicular crossovers and internal driveways within a minimum 6.0m width, constructed to accommodate the required waste collection vehicle and clearly distinguish pedestrian pathways. 	<p>As part of request for compliance assessment. For each Stage.</p>
<p>Earthworks / Retaining Structures</p>	
<p>9. Design and construct all retaining structures in accordance with Australian Standard 4678-2002 Earth-retaining Structures, in particular the minimum 60 year design life requirements.</p> <p>Where retaining walls exceed 1.5m in height, the retaining wall must be constructed of high quality materials and stepped or terraced 0.75m for every 1.5m in height and the step/terrace must incorporate landscaping. The stepped/terraced area must be located within the unit boundary to the low side of the retaining wall to allow for maintenance and of a height that can be easily and safely accessed for this purpose. Permanent fencing must be installed on top of the highest wall and be a minimum height of 1.5m.</p>	<p>As part of request for compliance assessment. For each stage.</p>

Compliance Assessment		
10. Submit to Council, and receive approval for, Compliance Assessment for the documents and works referred to in Table 2:		Prior to site works commencing. For each stage.

Document or Works Item	Compliance Assessor	Assessment Criteria
Landscape Plan	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 8 Division 8 – Landscape Code • Redlands Planning Scheme Part 9 Schedule 9 – Street Trees • Redlands Planning Scheme Part 11 Policy 3 Chapter 3 – Landscaping and Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions, Chapter 10 – Parks and Open Space and Chapter 11 – Landscaping • Redlands Planning Scheme Part 11 Policy 16 – Safer by Design • Redlands Planning Scheme Part 11 Policy 17 – Streetscape Design Manuals.
Replanting Plan	Redland City Council	<ul style="list-style-type: none"> • Tree Retention and Rehabilitation Management Plans dated 05/01/2016 • Redlands Planning Scheme Part 8 Division 8 – Landscape Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 3 – Landscaping and Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions, Chapter 10 – Parks and Open Space and Chapter 11 – Landscaping • Redlands Planning Scheme Part 11 Policy 16 – Safer by Design
Stormwater Assessment	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 8 Division 9 – Stormwater Management Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions and Chapter 6 – Stormwater Management • Redlands Planning Scheme Part 9 Schedule 11 – Water Quality Objectives • Water Sensitive Urban Design Technical Guidelines for South East Queensland • State Planning Policy December 2013 • Queensland Urban Drainage Manual • Australian Standard 3500.3:2003 – Plumbing and Drainage – Stormwater Drainage.

Water and Wastewater Supply and Reticulation	Redland City Council	<ul style="list-style-type: none"> • SEQ Water Supply and Sewerage Design and Construction Code • Redlands Planning Scheme Part 8 Division 7 – Infrastructure Works Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions, Chapter 7 – Water Reticulation and Chapter 8 – Sewerage Reticulation.
Access and Parking Plans	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 8 Division 1 – Access and Parking Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions and Chapter 15 – Access and Parking • Australian Standard 2890.1&2:2004 – Parking Facilities – Off-street car parking • Australian/New Zealand Standard 2890.6:2009 – Parking Facilities – Off-street parking for people with disabilities.
Road and Footpath Works	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 7 Division 4 – Domestic Driveway Crossover Code • Redlands Planning Scheme Part 8 Division 7 – Infrastructure Works Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions and Chapter 5 – Road and Path Design.
Sediment and Erosion Control Plan	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 8 Division 6 – Erosion Prevention and Sediment Control Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions and Chapter 4 – Erosion Prevention and Sediment Control • Institution of Engineers Australia Erosion and Sediment Control Guidelines.
Earthworks Plans	Redland City Council	<ul style="list-style-type: none"> • Redlands Planning Scheme Part 7 Division 6 – Excavation and Fill Code • Redlands Planning Scheme Part 8 Division 5 – Development Near Underground Infrastructure Code • Redlands Planning Scheme Part 11 Policy 3 Chapter 4 – Security Bonding • Redlands Planning Scheme Part 11 Policy 9 Chapter 2 – Documentation and General Conditions, Chapter 12 – Excavation and Fill and Chapter 13 – Development Near Underground Infrastructure

	<ul style="list-style-type: none"> • Australian Standard 2870:2011 – Residential Slabs and Footings • Australian Standard 4678:2002 – Earth-retaining Structures • Australian Standard 3798:2007 – Guidelines on Earthworks for Commercial and Residential Development.
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Table 2: Compliance Assessment

<u>Stormwater Management</u>	
11. Convey roof water and surface water in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management to: <ul style="list-style-type: none"> • A lawful point of discharge, being the road drainage network, generally in accordance with the conceptual stormwater management plan identified in condition 2 of this approval. 	Prior to the use commencing and ongoing. All stages.
12. Manage stormwater discharge from the site in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management, so as to not cause an actionable nuisance to adjoining properties.	Prior to the use commencing and ongoing. All stages.
13. Submit to Council, and receive Compliance Assessment approval for, a stormwater assessment that addresses both quality and quantity in accordance with the assessment criteria listed in Table 2: Compliance Assessment of this approval. Include the following: <ul style="list-style-type: none"> • Detailed design of site grading and the drainage system, with minimum QUDM Level IV allotment drainage; • Detailed drawings of the proposed stormwater quality treatment and quantity systems and any associated works. The drawings must include longitudinal and cross sections as well as details of treatment media and any associated vegetation; • An electronic copy of the MUSIC model and any other relevant digital electronic files; • A maintenance plan including estimates of asset and maintenance costs. 	As part of request for compliance assessment. For each stage.
<u>Infrastructure and Utility Services</u>	
14. Pay the cost of any alterations to existing public utility mains, services or installations due to building and works in relation to the proposed development, or any works required by conditions of this approval. Any cost incurred by Council must be paid at the time the works occur in accordance with the terms of any cost estimate provided to perform the works, or prior to plumbing final or the use commencing, whichever is the sooner.	At the time of works occurring. All stages.
15. Connect the development to external reticulated sewer, external reticulated water and underground electricity supply in accordance with the assessment criteria listed in Table 2: Compliance Assessment of this approval.	Prior to the use commencing. All stages.
16. Submit sewer design including the connection from the pump station to the discharge manhole in the sewer reticulation.	As part of request for compliance assessment. For stage two (2).

<u>Waste Management</u>	
<p>17. Provide bin service bays for placement of waste and recycling bins for the purpose of emptying bins only (not for storage of bins) to serve units that take access from the internal roads for both stages, generally in accordance with the approved plans. Construct each bin bay of stamped concrete in accordance with the following:</p> <ul style="list-style-type: none"> • 2m long x 1m wide for each unit along the direction of the driveway frontage; • Marked “bin service bay’ in letters of 200mm height <p><i>Note: For the avoidance of doubt, bin bays are not required nor preferred for units that have driveway access to a public road.</i></p>	Prior to the use commencing and ongoing. For each stage.
<p>18. Store all waste and recycling bins securely and externally from the unit. Bins must not be stored within the common areas of the site. For units with no side access to their external open space, a secure screened area must be provided to the front of the unit incorporating landscaping to reduce its visual impact on the common areas of the site.</p>	Prior to the use commencing and ongoing. All stages.
<u>Landscape Works</u>	
<p>19. Submit landscape plans to Council for Compliance Assessment in accordance with the assessment criteria listed in Table 2: Compliance Assessment of this approval. Include the following items:</p> <ul style="list-style-type: none"> • Designs that are generally in accordance with Landscape Master Plan and Design Intent Stage 3 prepared by Place Design Group and date 20 June 2016 (Revision D); • A maintenance plan for the entire landscaping component of the development; • Details of lighting to communal open space, driveways, public car parks and footpaths within the site; and • Details of the waste storage areas for units with no external access to private open space areas, including the landscaping incorporated to reduce their visual prominence. 	As part of request for compliance assessment. For each stage.
<u>Environmental Management</u>	
<p>20. Revegetate the site at the rate calculated under the <i>Environmental Offsets Act 2014</i> for all non-juvenile koala habitat trees removed as a result of the development.</p>	Prior to the commencement of use of the last stage.
<p>21. Submit a plan to Council for Compliance Assessment in accordance with the assessment criteria listed in Table 2: Compliance Assessment of this approval, illustrating where replanting of native vegetation will be undertaken.</p> <p>The rehabilitation must be appropriate to compensate for the removal of at least 121 native trees (over the whole site). Include details of the mix of species proposed.</p>	As part of request for compliance assessment. For each stage.
<u>Water Pollution</u>	
<p>22. Construct two (2) car washing facilities to incorporate the following design criteria:</p> <ul style="list-style-type: none"> • A roof and bund surrounding the carwash area with drainage to the sewer through an approved oil interceptor/separator. The oil interceptor cannot be shared; 	Prior to the use commencing. For each stage.

<ul style="list-style-type: none"> • Limit the entry of rainfall and overland flow into the sewerage system; and • Minimise water usage. <p>There must be one (1) car wash bay for each stage of the development.</p>	
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Air Quality

23. Incorporate odour attenuation into the development as specified in the assessment <i>Preliminary Odour Assessment of Coulters Farm Stage 2 Pump Station</i> , dated 18 May 2016 prepared by Pacific Environment Limited.	Prior to the use commencing and ongoing. For stage two (2).
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ADDITIONAL APPROVALS

The following further Development Permits and/or Compliance Permits are necessary to allow the development to be carried out.

- Building Works approval.

Further approvals, other than a Development Permit or Compliance Permit, are also required for your development. This includes, but is not limited to, the following:

- Compliance assessment as detailed in Table 2 of the conditions.
- Plumbing and drainage works.

REFERRAL AGENCY CONDITIONS

- Queensland Department of Infrastructure, Local Government and Planning (DILGP)
Refer to the attached correspondence from the DTMR dated 20 January 2016 (DILGP reference SDA-0715-022428).

ASSESSMENT MANAGER ADVICE

- Infrastructure Charges

Infrastructure charges apply to the development in accordance with the State Planning Regulatory Provisions (adopted charges) levied by way of an Infrastructure Charges Notice. The infrastructure charges are contained in the attached Redland City Council Infrastructure Charges Notice.

- Live Connections

Redland Water is responsible for all live water and wastewater connections. Contact *must* be made with Redland Water to arrange live works associated with the development.

Further information can be obtained from Redland Water on 07 3829 8999.

- Coastal Processes and Sea Level Rise

Please be aware that development approvals issued by Redland City Council are based upon current lawful planning provisions which do not necessarily respond immediately to new and developing information on coastal processes and sea level rise. Independent advice about this issue should be sought.

- Hours of Construction

Please be aware that you are required to comply with the *Environmental Protection Act* in regards to noise standards and hours of construction.

- Survey and As-constructed Information

Upon request, the following information can be supplied by Council to assist survey and engineering consultants to meet the survey requirements:

- a) A map detailing coordinated and/or levelled PSMs adjacent to the site.
- b) A listing of Council (RCC) coordinates for some adjacent coordinated PSMs.
- c) An extract from Department of Natural Resources and Mines SCDM database for

each PSM.

d) Permanent Survey Mark sketch plan copies.

This information can be supplied without charge once Council received a signed declaration from the consultant agreeing to Council's terms and conditions in relation to the use of the supplied information.

Where specific areas within a lot are being set aside for a special purpose, such as building sites or environmental areas, these areas should be defined by covenants. Covenants are registered against the title as per Division 4A of the *Land Title Act 1994*.

- **Services Installation**

It is recommended that where the installation of services and infrastructure will impact on the location of existing vegetation identified for retention, an experienced and qualified arborist that is a member of the Australian Arborist Association or equivalent association, be commissioned to provide impact reports and on site supervision for these works.

- **Fire Ants**

Areas within Redland City have been identified as having an infestation of the Red Imported Fire Ant (RIFA). Biosecurity Queensland should be notified on 13 25 23 of proposed development(s) occurring in the Fire Ant Restricted Area before earthworks commence. It should be noted that works involving movements of soil associated with earthworks may be subject to movement controls and failure to obtain necessary approvals from Biosecurity Queensland is an offence. It is a legal obligation to report any sighting or suspicion of fire ants within 24 hours to Biosecurity Queensland on 13 25 23. The Fire Ant Restricted Area as well as general information can be viewed on the Department of Agriculture and Fisheries (DAF) website www.daf.qld.gov.au/fireants

- **Cultural Heritage**

Should any aboriginal, archaeological or historic sites, items or places be identified, located or exposed during the course or construction or operation of the development, the *Aboriginal and Cultural Heritage Act 2003* requires all activities to cease. For indigenous cultural heritage, contact the Department of Environment and Heritage Protection.

- **Fauna Protection**

It is recommended an accurate inspection of all potential wildlife habitats be undertaken prior to removal of any vegetation on site. Wildlife habitat includes trees (canopies and lower trunk) whether living or dead, other living vegetation, piles of discarded vegetation, boulders, disturbed ground surfaces, etc. It is recommended that you seek advice from the Queensland Parks and Wildlife Service if evidence of wildlife is found.

- **Environment Protection and Biodiversity Conservation Act**

Under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act* (the EPBC Act), a person must not take an action that is likely to have a significant impact on a matter of national environmental significance without Commonwealth approval. Please be aware that the listing of the Koala as vulnerable under this Act may affect your proposal. Penalties for taking such an action without approval are significant. If you think your proposal may have a significant impact on a matter of national environmental significance, or if you are unsure, please contact Environment Australia on 1800 803 772. Further information is available from Environment Australia's website at www.ea.gov.au/epbc

Please note that Commonwealth approval under the EPBC Act is independent of, and will not affect, your application to Council.

- **Release of Water Contaminants**

Please be aware that prescribed water contaminants must not be released to waters, a roadside gutter, stormwater drainage or into another place so that contaminants could reasonably be expected to move into these areas. Refer to the Environmental Protection Act 1994 for further information on the release of prescribed water contaminants.

- **Dams**

Please be aware that dam dewatering is required to comply with the *Environmental Protection Act 1994* and must not be released to waters, a roadside gutter, stormwater drainage or into another place so that contaminants could reasonably be expected to move into these areas. It is recommended that all water discharged from dams should be discharged onto a vegetated or well grassed area and all necessary measures must be taken to comply with the *Environmental Protection Act 1994*.

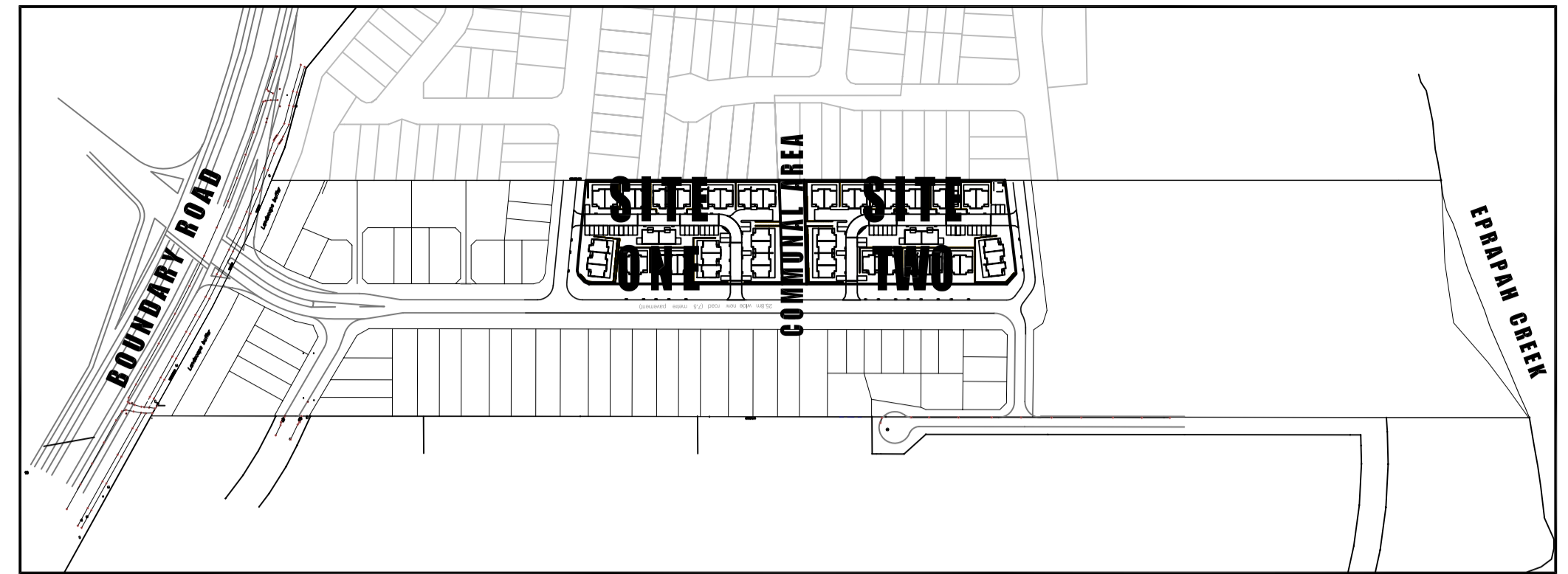
UNIT TYPE LEGEND	
	TYPE A HIPPED ROOF - CONCRETE TILE ROOFING FLAT GARAGE FACADE NO BALCONY
	TYPE A IBI HIPPED ROOF - CONCRETE TILE ROOFING FLAT GARAGE FACADE REAR BALCONY TO UPPER LEVEL END UNITS
	TYPE B SKILLION ROOF - SHEET METAL ROOFING FLAT GARAGE FACADE NO BALCONY
	TYPE B IBI SKILLION ROOF - SHEET METAL ROOFING FLAT GARAGE FACADE REAR BALCONY TO UPPER LEVEL END UNITS
	TYPE C SKILLION ROOF - SHEET METAL ROOFING FLAT GARAGE FACADE NO BALCONY

TOWN PLANNING CALCULATIONS - SITE ONE	
PROPOSED SITE ONE AREA	6732 m ²
PROPOSED JOINT COMMUNAL AREA	830 m ²
PROPOSED SITE TWO AREA	6942 m ²
TOTAL OVERALL COMBINED SITE AREA	14504 m ²
TOTAL DWELLING UNITS ON SITE	30 DWELLING UNITS
TOTAL DWELLING SITE COVERAGE	2303 m ²
TOTAL DWELLING GFA	3047 m ²

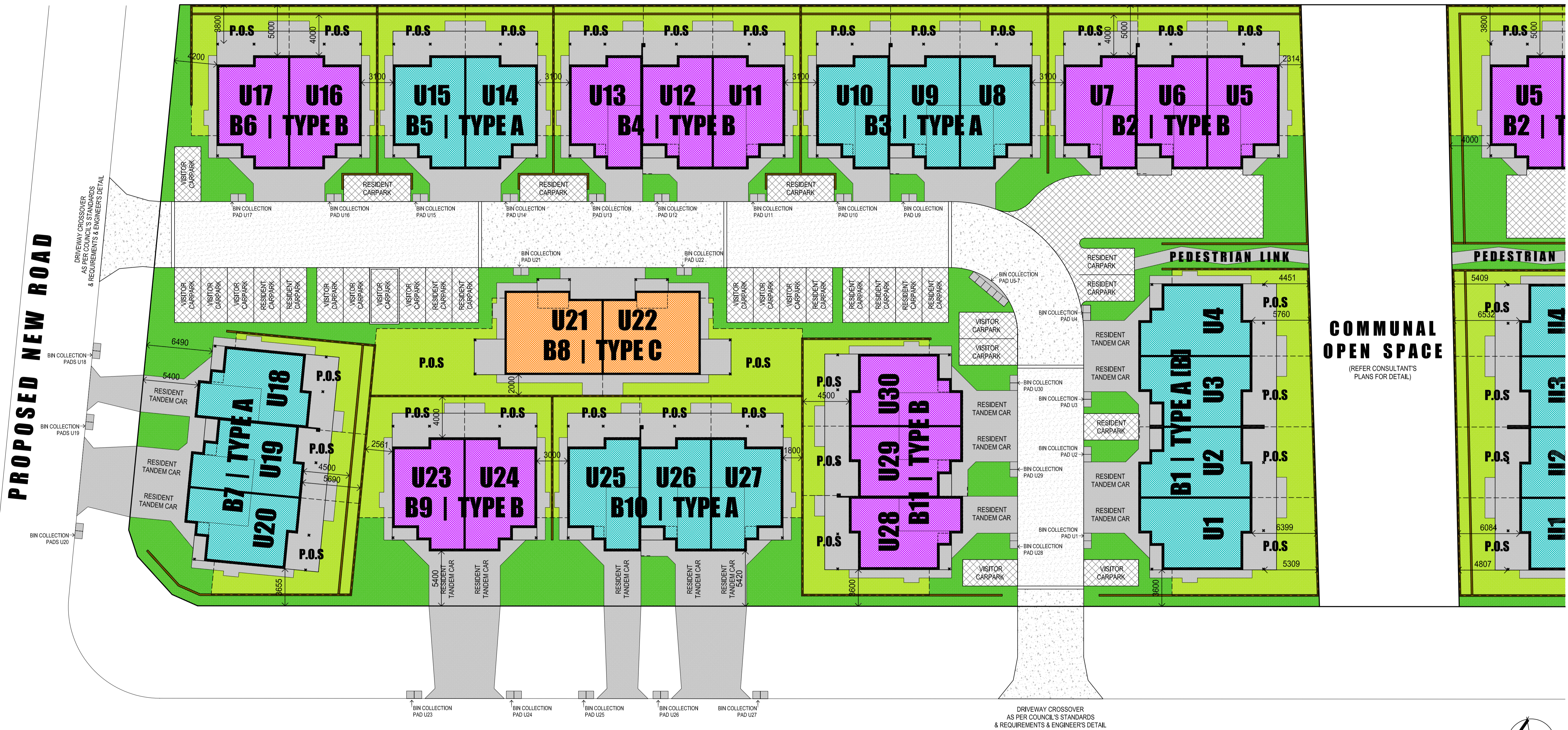
CARPARKING REQUIREMENTS	
RESIDENT'S CARS = 2 cars / unit	60 cars req.
VISITOR'S CARS = 0.5 cars / unit	15 cars req.
TOTAL UNIT GARAGES	30 garages
TOTAL RESIDENT'S CARS IN TANDEM	15 tandem
TOTAL RESIDENT'S CARPARKS	15 carparks
TOTAL RESIDENT'S CAR SPACES	60 car spaces
TOTAL VISITOR'S CARPARKS	15 visitor spaces

SITE LANDSCAPED AREA - SITE ONE	
P6 (1) (a) 15% OF SITE AREA PLANTED/GRASSED IN ADDITION TO OPEN SPACE MINIMUM REQUIREMENTS (min. (20%) open space required = 1346 m ²)	1292 m ²
P7 (1) 20% OF SITE AREA PROVIDED AS OPEN SPACE	
(a) P.O.S AT GROUND LEVEL @ MINIMUM 4.0m DIMENSION & 25m ² AREA	1440 m ²
(b) COMMUNAL OPEN SPACE @ MINIMUM 5% OF SITE AREA @ 5.0m DIMENSION	830 m ²
TOTAL OPEN SPACE AREA (min 20%)	2270 m ²

LEGEND	
	1.8m HIGH FENCING TO PERIMETER BOUNDARY AS REQUIRED. MAX UNARTICULATED LENGTH = 10.0m
	PROPOSED PRIVATE OPEN SPACE LANDSCAPED AREA IN ACCORDANCE WITH R.C.C. REQUIREMENTS
	PROPOSED OPEN SPACE LANDSCAPED AREA IN ACCORDANCE WITH R.C.C. REQUIREMENTS
	WHEELIE BINS TO BE STORED IN EACH PCY OR BIN STORE & TAKEN TO SPECIFIC BIN COLLECTION AREA ON COLLECTION DAY
	BIN PADS FOR COLLECTION DAY



KEY PLAN (N.T.S)



PROPOSED NEW ROAD

'CONCEPT DRAWING' ONLY - NOT TO BE USED FOR CONSTRUCTION

CONCEPTUAL SITE LAYOUT PLAN SCALE 1:200 (A1 SHEET)

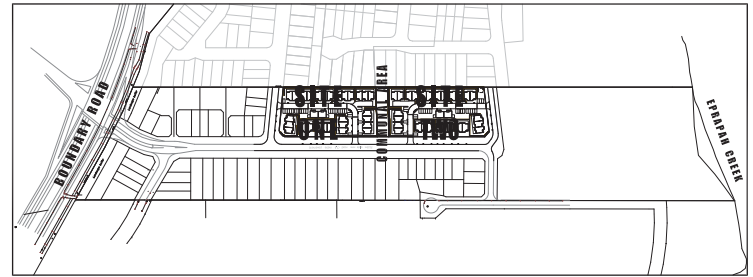
<p>GENERAL NOTES:</p> <p>LINEAR 56 DESIGN TAKE NO RESPONSIBILITY FOR STRUCTURAL SIZES OR DESIGN IF CHANGES OR ALTERATIONS ARE MADE TO THE PLAN DURING OR PRIOR TO CONSTRUCTION WITHOUT WRITTEN NOTICE AND APPROVAL.</p> <p>DO NOT SCALE OFF PLAN. FIGURED DIMENSIONS TAKE PREFERENCE.</p> <p>BUILDER TO VERIFY ALL DIMENSIONS AND LEVELS ON THE PLAN BEFORE COMMENCEMENT OF THE JOB AS NO RESPONSIBILITY TAKEN AFTER STARTING.</p>	<p>ALL DIMENSIONS SHOWN ARE TO NOMINAL FRAME AND/OR BRICK DIMENSIONS AND DO NOT INCLUDE GLAZING THICKNESS UNLESS NOTED OTHERWISE.</p> <p>ELECTRONIC DRAWINGS ARE UNCONTROLLED DOCUMENTS AND ARE ISSUED FOR INFORMATION ONLY. ANY DIMENSIONS NOT NOMINATED MUST BE REFERRED TO THE BUILDING DESIGNER FOR CONFIRMATION.</p>	<p>REAL PROPERTY DESCRIPTION</p> <p>LOT: ON: 399-413 BOUNDARY RD, THORNLANDS</p> <p>PARISH: SITE AREA: LOCAL AUTHORITY: REDLAND C.C.</p> <p>COUNTY: LOCAL AUTHORITY: REDLAND C.C.</p> <p>AUSBUILD Building with you</p>	<p>PROJECT NAME: PROPOSED MULTI-RESIDENTIAL DEVELOPMENT</p> <p>PROJECT ADDRESS: 399-413 BOUNDARY RD, THORNLANDS</p> <p>CLIENT DETAILS: AUSBUILD PTY LTD</p>	<p>COMP FILE NO: 15-1026 S1</p> <p>DATE DRAWN: MAY 2015</p> <p>DRAWN BY: M.K.W.</p> <p>SHEET NO: 01 OF 11</p> <p>DRAWING TITLE: ESPERANCE SITE ONE CONCEPT PLANS</p>						
					<p>REVISIONS:</p> <table border="1"> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> <tr> <td>1</td> <td>17.12.15</td> <td>AMENDED DA ISSUE</td> </tr> <tr> <td>2</td> <td>14.05.15</td> <td>DA ISSUE</td> </tr> </table>	REV	DATE	DESCRIPTION	1	17.12.15
REV	DATE	DESCRIPTION								
1	17.12.15	AMENDED DA ISSUE								
2	14.05.15	DA ISSUE								

TOWN PLANNING CALCULATIONS - SITE TWO	
PROPOSED SITE TWO AREA	6942 m ²
PROPOSED JOINT COMMUNAL AREA	830 m ²
PROPOSED SITE ONE AREA	6732 m ²
TOTAL OVERALL COMBINED SITE AREA	14504 m ²
TOTAL DWELLING UNITS ON SITE	29 DWELLING UNITS
TOTAL DWELLING SITE COVERAGE	2227 m ²
TOTAL DWELLING GFA	2945 m ²

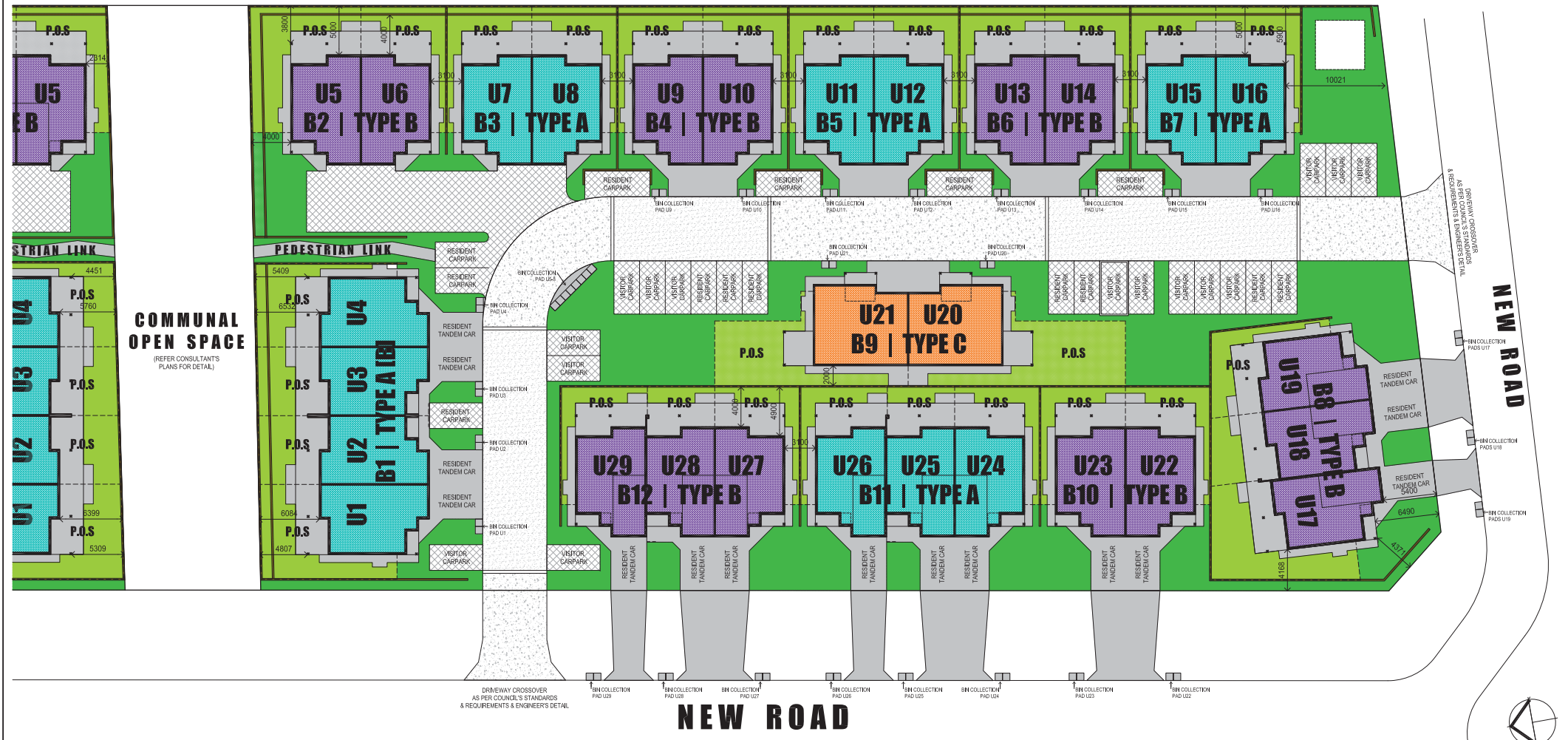
CARPARKING REQUIREMENTS	
RESIDENTS CARS = 2 cars / unit	58 cars req.
VISITORS CARS = 0.5 cars / unit	15 cars req.
TOTAL UNIT GARAGES	29 garages
TOTAL RESIDENTS CARS IN TANDEM	15 tandem
TOTAL RESIDENTS CARPARKS	14 carparks
TOTAL VISITORS CARPARKS	58 car spaces
TOTAL VISITORS CARPARKS	15 visitor spaces

SITE LANDSCAPED AREA - SITE TWO	
P6 (1) (a) 15% OF SITE AREA PLANTED/GRASSED IN ADDITION TO OPEN SPACE MINIMUM REQUIREMENTS (MIN. COVER 100% SPECIFIED) REQUIRED = 1398 m ²	1599 m ²
P7 (1) 20% OF SITE AREA PROVIDED AS OPEN SPACE	
(a) P.O.S. AT GROUND LEVEL @ MINIMUM 4.0m DIMENSION & 25m ² AREA	1449 m ²
(b) COMMUNAL OPEN SPACE @ MINIMUM 5% OF SITE AREA @ 5.0m DIMENSION	830 m ²
TOTAL OPEN SPACE AREA (min 20%)	2279 m ²

- LEGEND**
- 1.8m HIGH FENCING TO PERIMETER BOUNDARY AS REQUIRED. MAX UNARTICULATED LENGTH = 10.0m
 - PROPOSED PRIVATE OPEN SPACE LANDSCAPED AREA IN ACCORDANCE WITH R.C.C. REQUIREMENTS
 - PROPOSED OPEN SPACE LANDSCAPED AREA IN ACCORDANCE WITH R.C.C. REQUIREMENTS
 - WHEELIE BINS TO BE STORED IN EACH PCY OR BIN STORE & TAKEN TO SPECIFIC BIN COLLECTION AREA ON COLLECTION DAY
 - BIN PADS FOR COLLECTION DAY



KEY PLAN (N.T.S.)



'CONCEPT DRAWING' ONLY - NOT TO BE USED FOR CONSTRUCTION

CONCEPTUAL SITE LAYOUT PLAN SCALE 1:200 (A1 SHEET)

GENERAL NOTES:

LINEAR DESIGN TAKE NO RESPONSIBILITY FOR STRUCTURAL, SIZES OR DESIGN CHANGES OR ALTERATIONS ARE MADE TO THE DRAWINGS OR FROM TO CONSTRUCTION WITHOUT WRITTEN NOTICE AND APPROVAL.

DO NOT SCALE OFF PLAN, FIGURED DIMENSIONS TAKE PREFERENCE.

BUILDER TO VERIFY ALL DIMENSIONS AND LEVELS ON THE PLANS BEFORE COMMENCEMENT OF THE JOB AND NO RESPONSIBILITY TAKEN AFTER STARTING.

ALL DIMENSIONS SHOWN ARE TO NOMINAL FRAME AND/OR BRICK DIMENSIONS AND DO NOT INCLUDE CLADDING THICKNESS UNLESS NOTED OTHERWISE.

ELECTRONIC DRAWINGS ARE UNCONTROLLED DOCUMENTS AND ARE ISSUED FOR INFORMATION ONLY. ANY DIMENSIONS NOT MENTIONED MUST BE REFERRED TO THE BUILDING DESIGNER FOR CONFIRMATION.

NO.	DATE	DESCRIPTION
1	15/10/2015	ISSUED FOR APPROVAL
2	15/10/2015	FOR INFO
3	15/10/2015	FOR INFO

AUSBUILD
Building with you

REAL PROPERTY DESCRIPTION

LOT: 101
 SUBLOT: 101
 COUNTY: 101

COPYRIGHT CLAIM

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LINEAR DESIGN
Innovate. Create. Inspire.

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 e: info@linear.com.au
 www.linear.com.au

PROJECT NAME: PROPOSED MULTI-RESIDENTIAL DEVELOPMENT

PROJECT ADDRESS: 399-413 BOUNDARY RD, THORNLANDS

CLIENT DETAILS: AUSBUILD PTY LTD

COMP FILE NO:	DATE DRAWN:	DESIGNER:	ISSUE:
15-1022-51	MAY 2015	DA03	DA03
SHEET NO:	01 OF 11	PROJECT NO:	15-1026
DRAWING TITLE:	ESPERANCE SITE TWO CONCEPT PLANS		



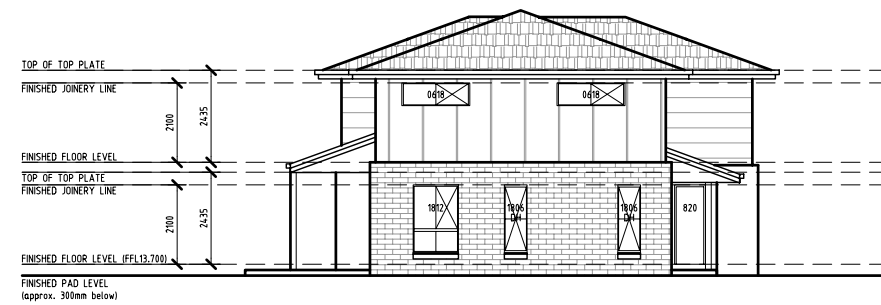
ELEVATION 1 1:200



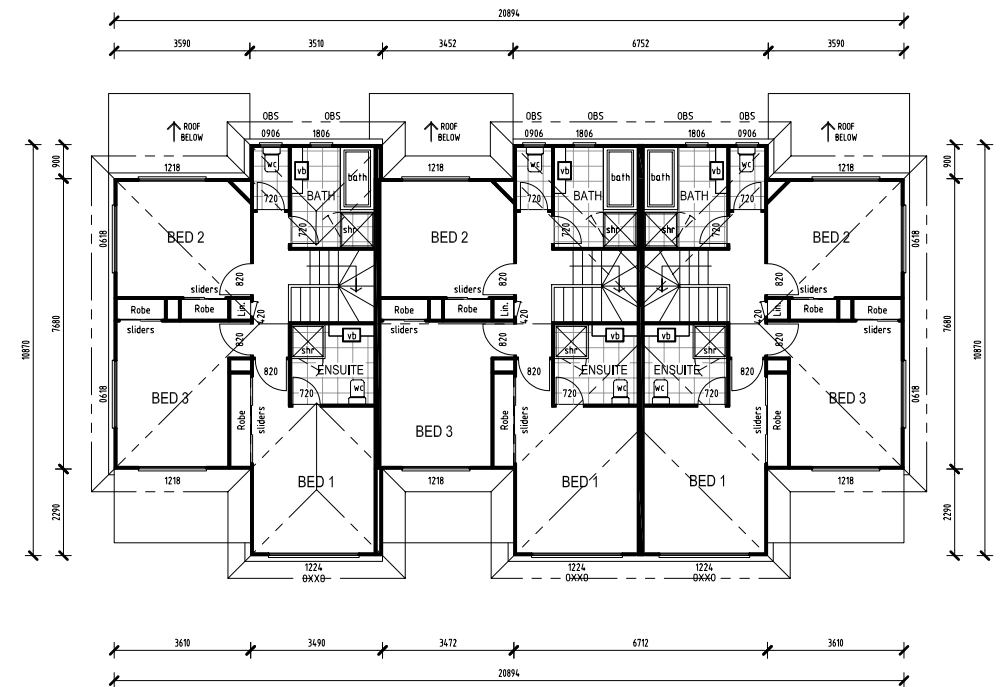
ELEVATION 2 1:200



ELEVATION 3 1:200

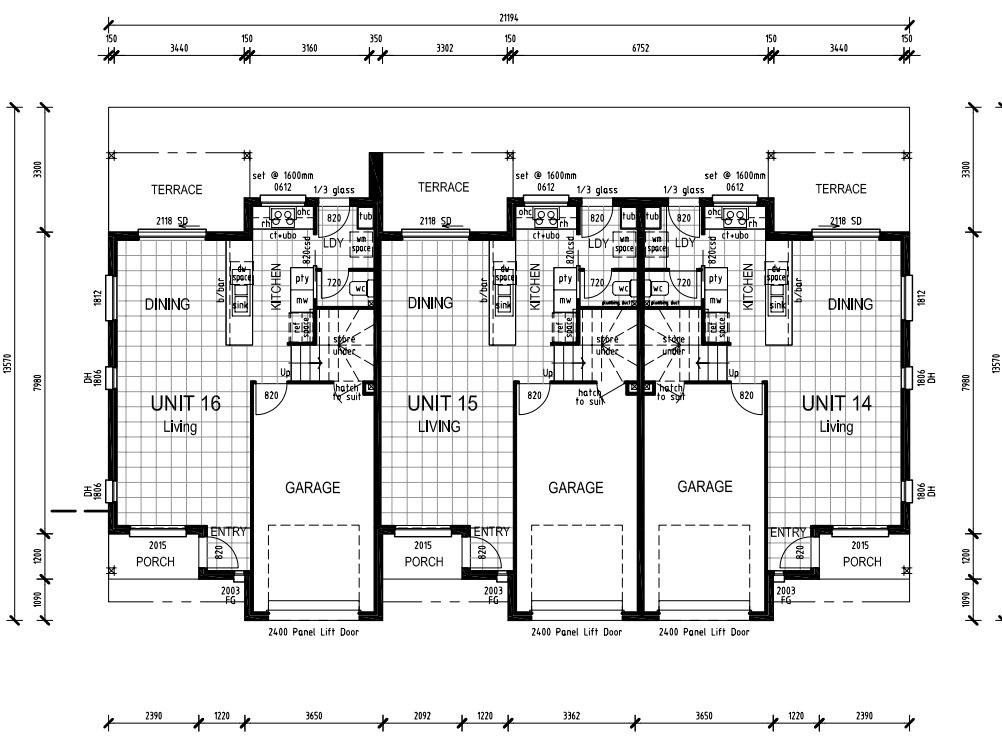


ELEVATION 4 1:200



FIRST FLOOR PLAN 1:200 (A3 Sheet)

INDIVIDUAL UNIT GFA	
GROUND FLOOR GFA	43.136 m ²
FIRST FLOOR GFA	57.869 m ²
TOTAL UNIT GFA	101.005 m²



GROUND FLOOR PLAN 1:200 (A3 Sheet)
'BLOCK 5 - UNITS 14-16' 'TYPE A'

REV	DATE	DESCRIPTION
-	-	-
-	-	-
A	14.05.15	DA ISSUE

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PROJECT NAME:
PROPOSED MULTI-RESIDENTIAL DEVELOPMENT

PROJECT ADDRESS:
**399-413 BOUNDARY ROAD
 THORNLANDS**

CLIENT DETAILS:
AUSBUILD PTY LTD

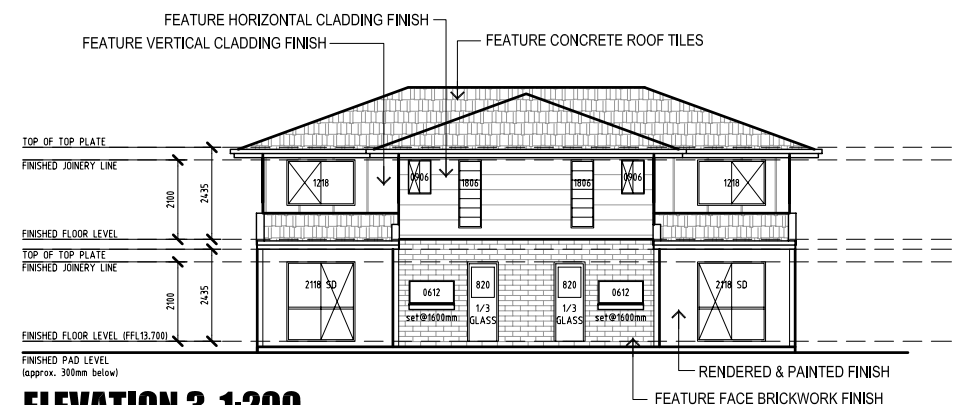
COMP FILE NO:	15-1026	REVISION:	A	ISSUE:	DA01
DATE DRAWN:	MAY 2015	PROJECT NO:		15-1026	
DRAWN BY:	M.K.W.	DRAWING TITLE:			
SHEET NO:	06 OF 11	ESPERANCE - SITE ONE CONCEPT PLANS			



ELEVATION 1 1:200



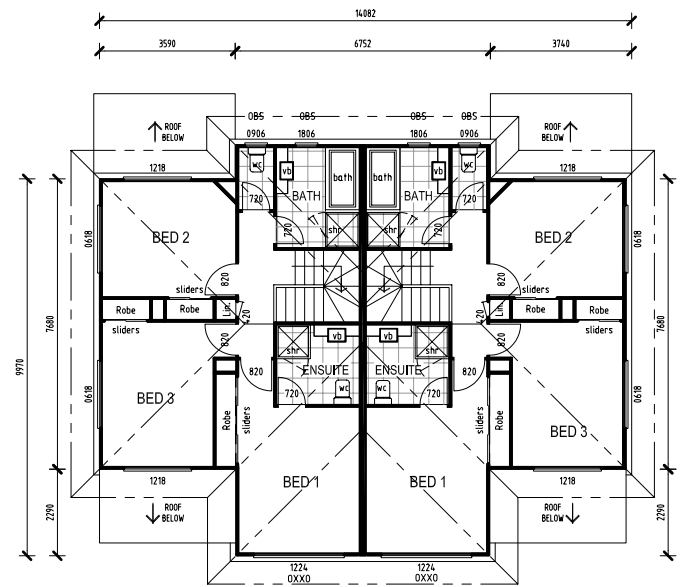
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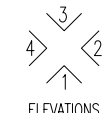
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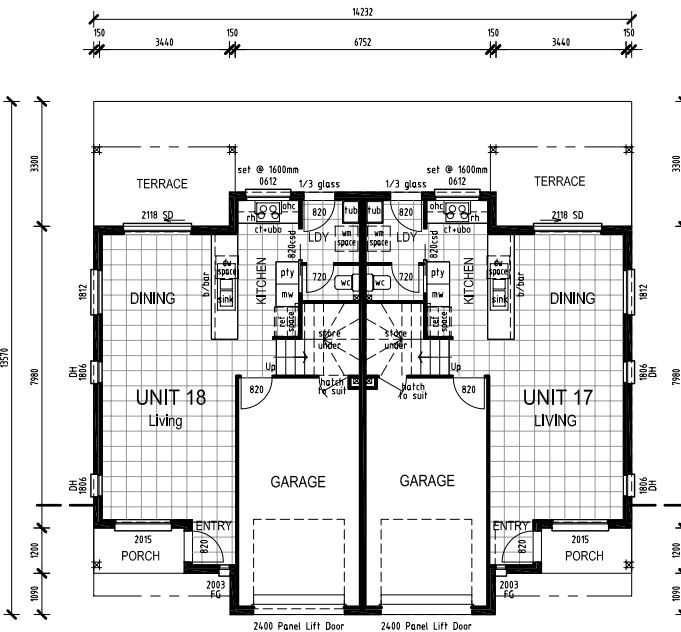
ELEVATION 4 1:200



FIRST FLOOR PLAN 1:200 (A3 Sheet)



INDIVIDUAL UNIT GFA
GROUND FLOOR GFA 43,194 m²
FIRST FLOOR GFA 57,866 m²
TOTAL UNIT GFA 101,060 m²



GROUND FLOOR PLAN 1:200 (A3 Sheet)
'BLOCK 6 - UNITS 17-18' TYPE A

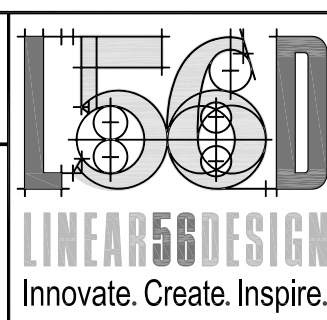


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-	-	-
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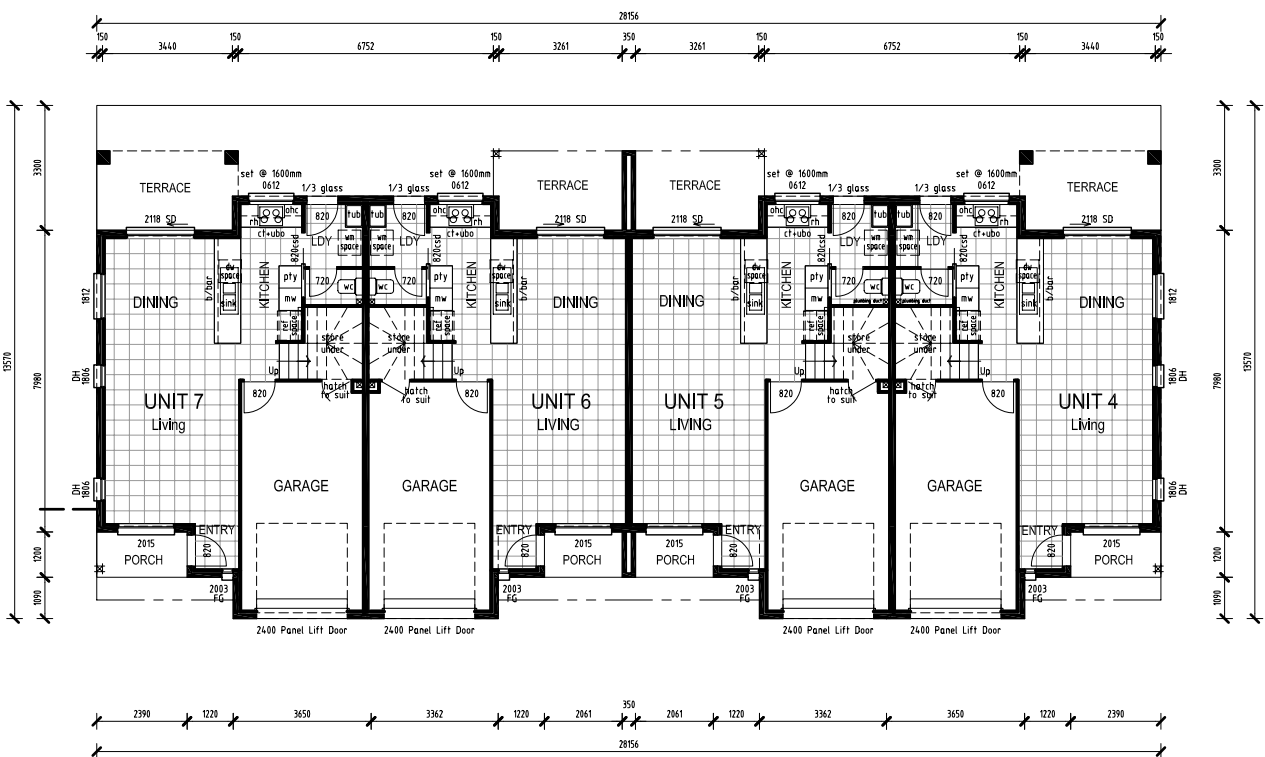
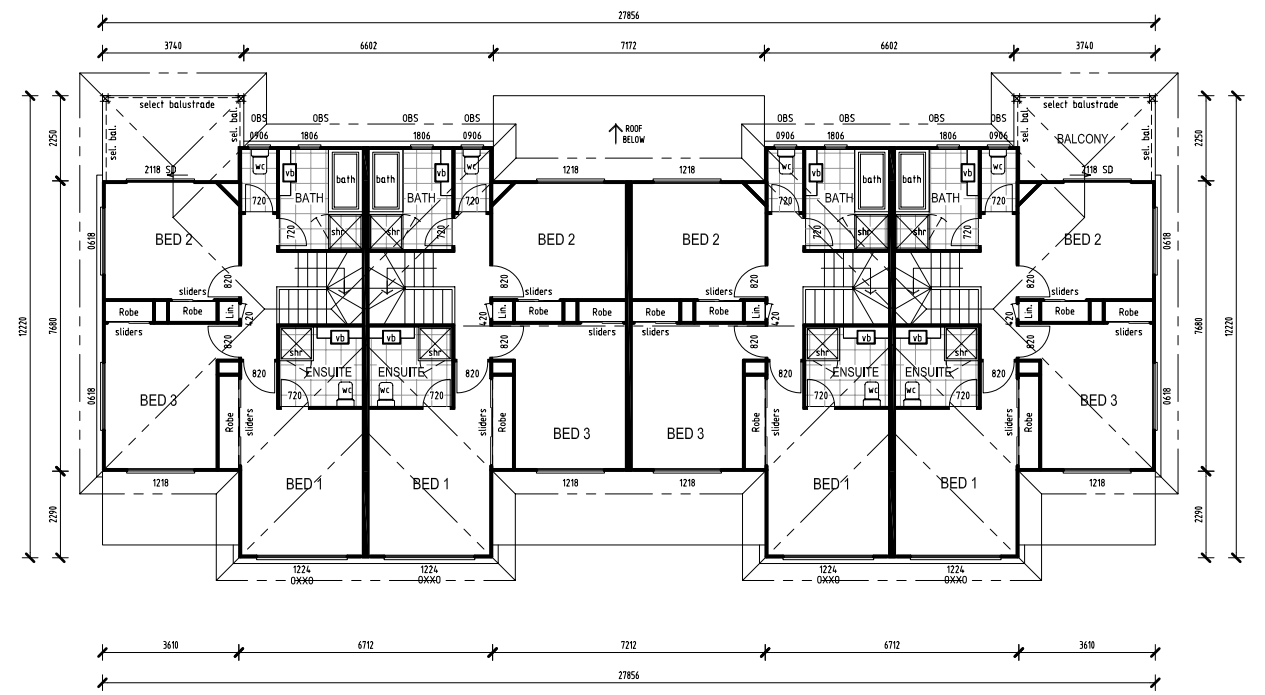
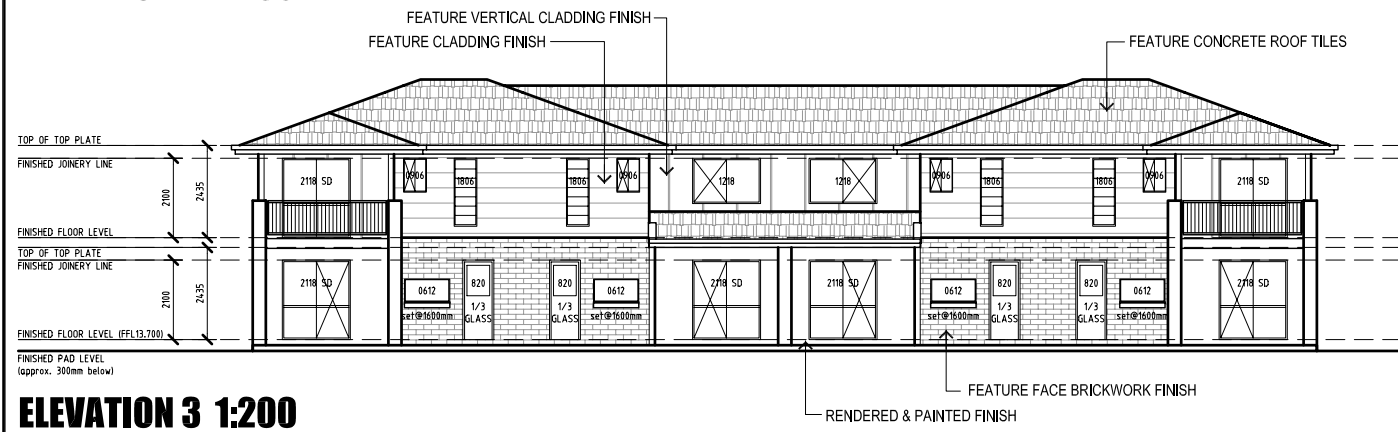
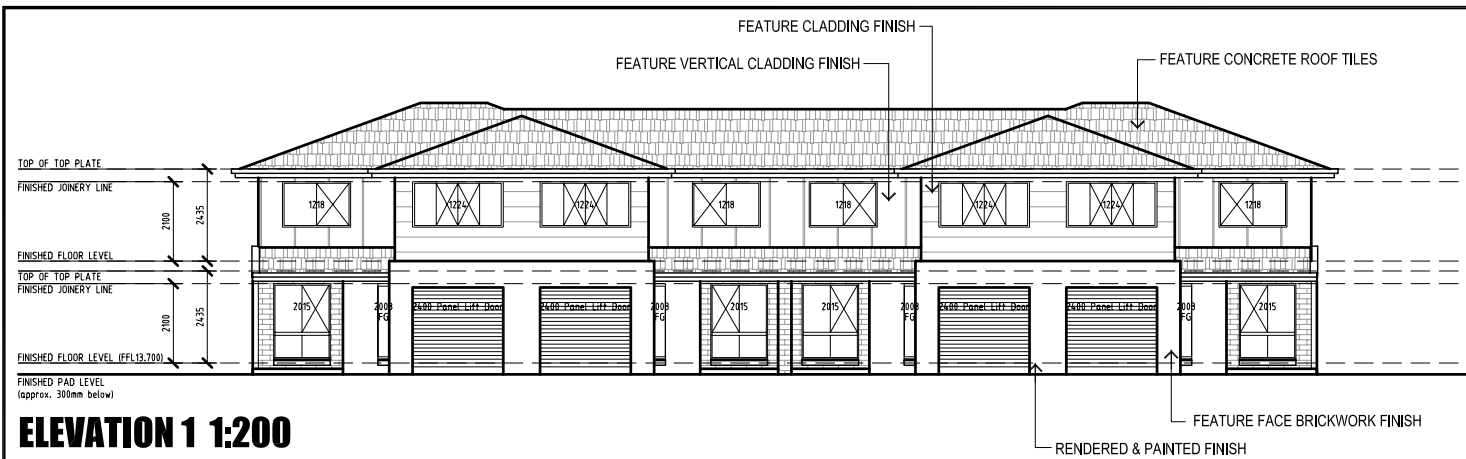
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PROJECT NAME:
PROPOSED MULTI-RESIDENTIAL DEVELOPMENT

PROJECT ADDRESS:
**399-413 BOUNDARY ROAD
THORNLANDS**

CLIENT DETAILS:
AUSBUILD PTY LTD

COMP FILE NO: 15-1026	REVISION: A	ISSUE: DA01
DATE DRAWN: MAY 2015	PROJECT NO: 15-1026	
DRAWN BY: M.K.W.		
SHEET NO: 07 OF 11		
DRAWING TITLE: ESPERANCE - SITE ONE CONCEPT PLANS		



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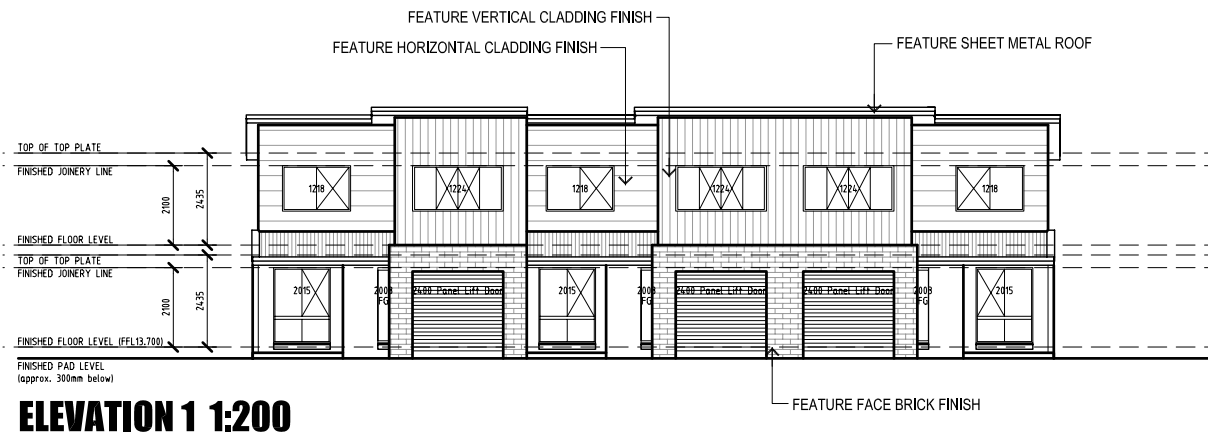
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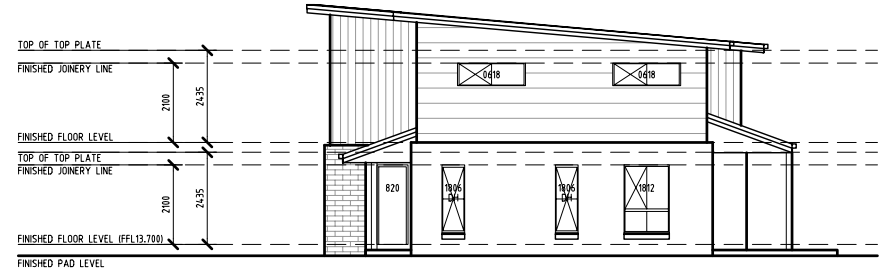
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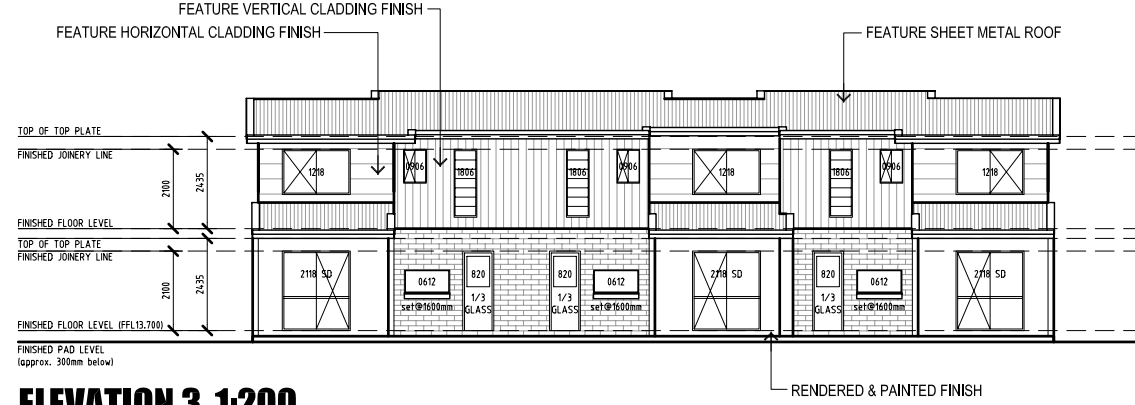
COMP FILE NO:	15-1026	REVISION:	A	ISSUE:	DA01
DATE DRAWN:	MAY 2015	DRAWN BY:	M.K.W.	PROJECT NO:	15-1026
SHEET NO:	03 OF 11	DRAWING TITLE:	ESPERANCE - SITE ONE CONCEPT PLANS		



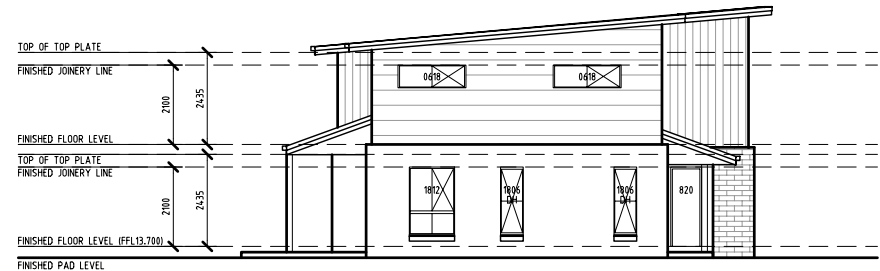
ELEVATION 1 1:200



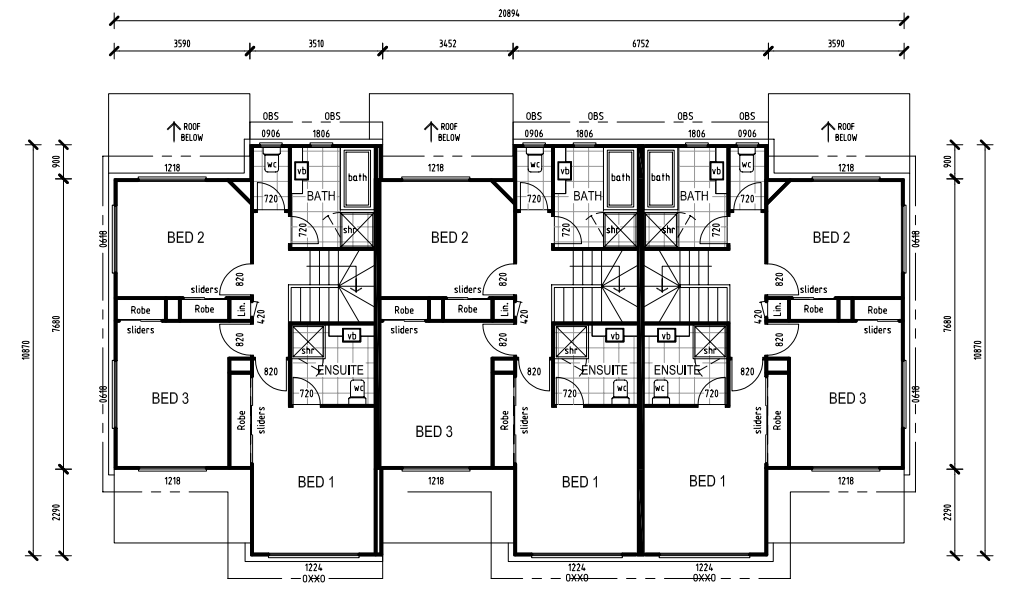
ELEVATION 2 1:200



ELEVATION 3 1:200

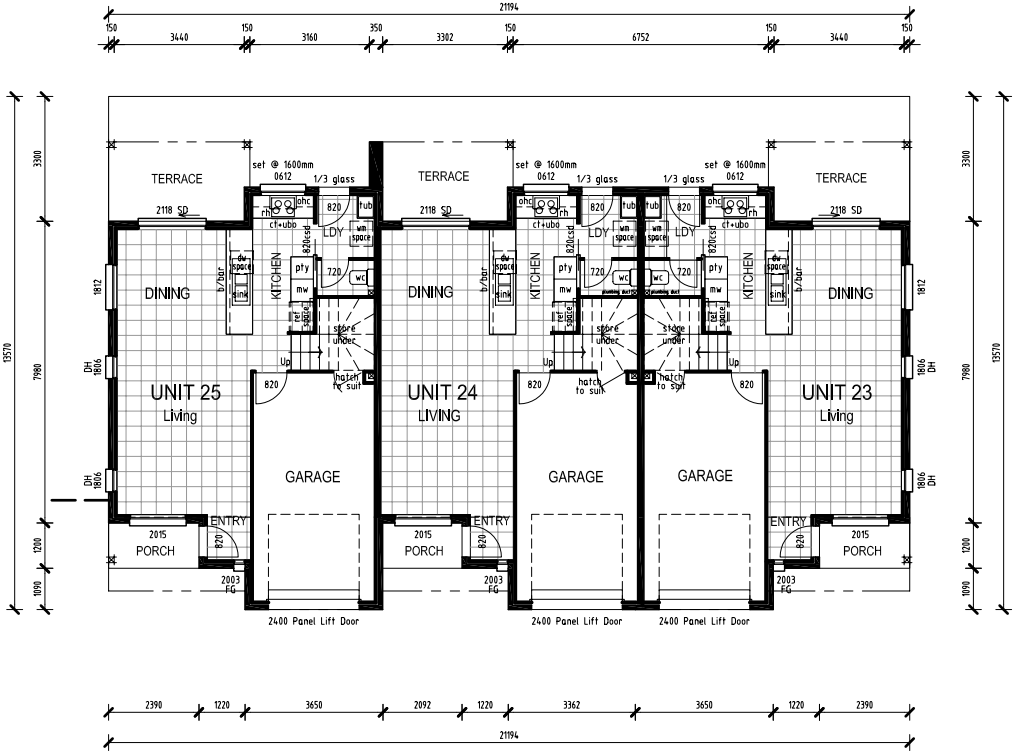


ELEVATION 4 1:200



FIRST FLOOR PLAN 1:200 (A3 Sheet)

INDIVIDUAL UNIT GFA	
GROUND FLOOR GFA	43.136 m ²
FIRST FLOOR GFA	57.868 m ²
TOTAL UNIT GFA	101.004 m²



GROUND FLOOR PLAN 1:200 (A3 Sheet)
'BLOCK 3 - UNITS 8-10' TYPE B'

REV	DATE	DESCRIPTION
-	-	-
-	-	-
A	14.05.15	DA ISSUE

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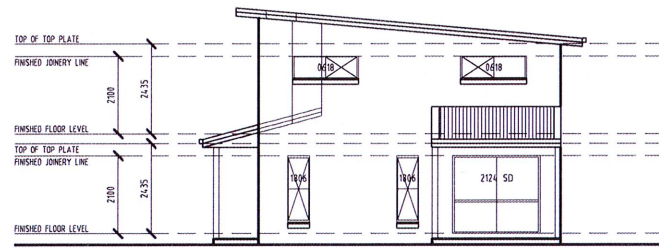
PROJECT ADDRESS:
399-413 BOUNDARY ROAD THORNLANDS

CLIENT DETAILS:
AUSBUILD PTY LTD

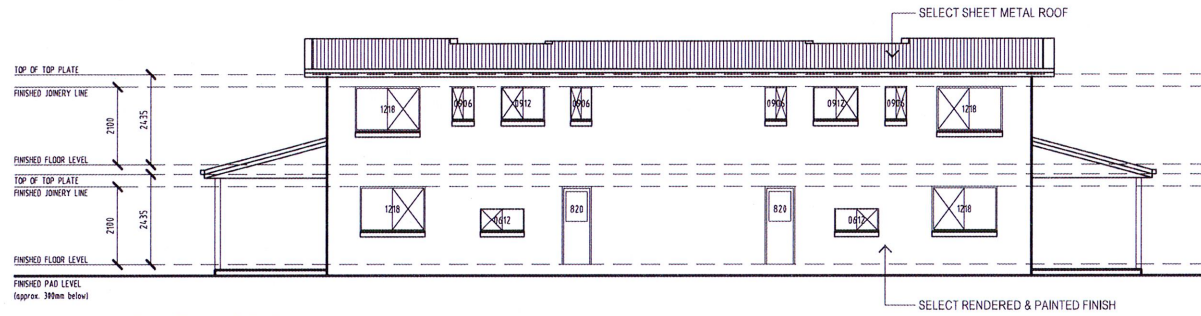
COMP FILE NO:	15-1026	REVISION:	A	ISSUE:	DA01
DATE DRAWN:	MAY 2015	DRAWN BY:	M.K.W.	PROJECT NO:	15-1026
SHEET NO:	04 OF 11	DRAWING TITLE:	ESPERANCE - SITE ONE CONCEPT PLANS		



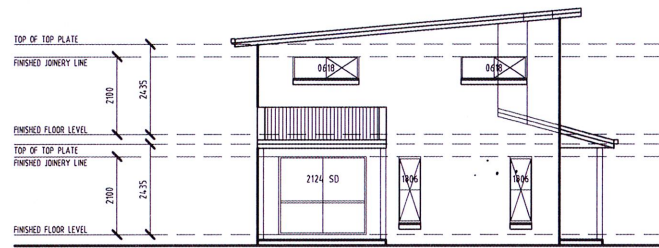
ELEVATION 1 1:200



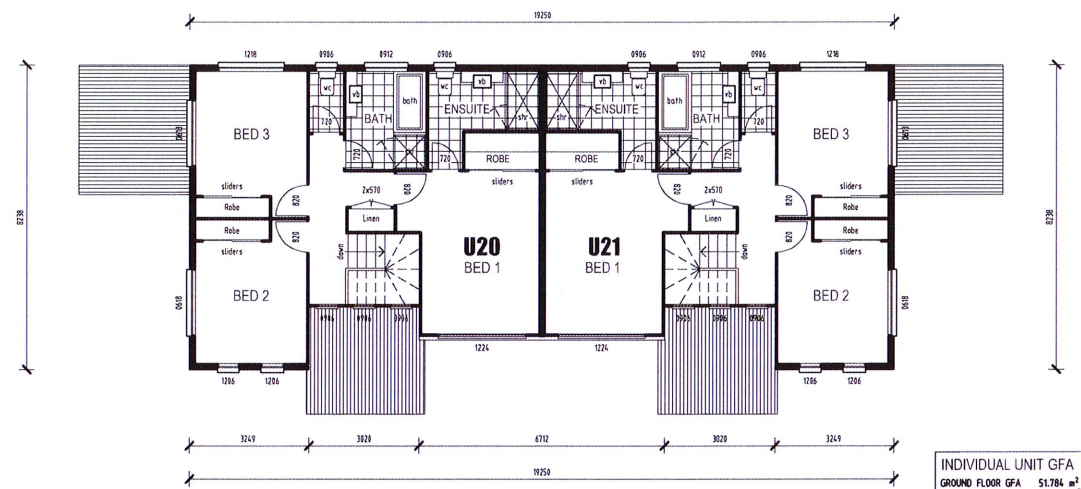
ELEVATION 2 1:200



ELEVATION 3 1:200

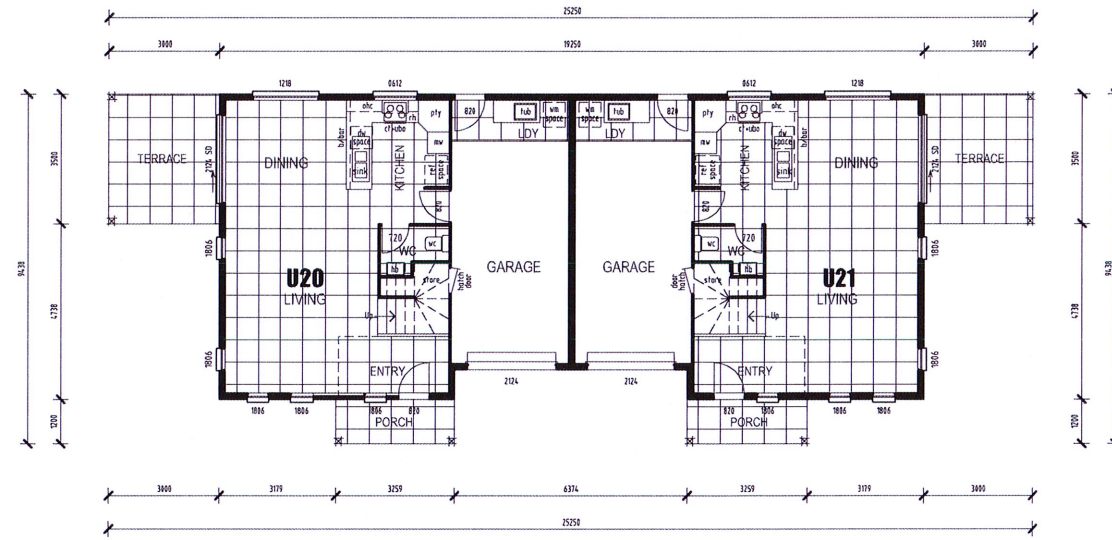


ELEVATION 4 1:200



FIRST FLOOR PLAN 1:200 (A3 Sheet)

INDIVIDUAL UNIT GFA	
GROUND FLOOR GFA	51.704 m ²
FIRST FLOOR GFA	66.404 m ²
TOTAL UNIT GFA	118.108 m ²



GROUND FLOOR PLAN 1:200 (A3 Sheet)

BLOCK 9 | UNITS 20-21 | TYPE C



REV	DATE	DESCRIPTION
B	17.12.15	AMENDED DA ISSUE
A	14.05.15	DA ISSUE

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PROJECT NAME:
 PROPOSED MULTI-RESIDENTIAL DEVELOPMENT

PROJECT ADDRESS:
 399-413 BOUNDARY ROAD
 THORNLANDS

CLIENT DETAILS:
 AUSBUILD PTY LTD

COMP FILE NO:	15-1026	REVISION:	ISSUE:
DATE DRAWN:	MAY 2015	B	DA03
DRAWN BY:	M.K.W.	PROJECT NO:	
SHEET NO:	10 OF 13	15-1026	
DRAWING TITLE:			
ESPERANCE SITE TWO CONCEPT PLANS			

**11.3.7 ROL005950 – 1 INTO 17 LOTS AND PARK AT 399 – 413 BOUNDARY ROAD,
THORNLANDS**

Objective Reference: **A124442**
Reports and Attachments (Archives)

Attachments: [ROL Plan](#)
[Aerial Photo of the Dam](#)
[Alternative Park Location Plan](#)
[Plan of Development Stage 8](#)

Authorising Officer:



Louise Rusan
General Manager, Community and Customer Service

Responsible Officer:

David Jeanes
Group Manager, City Planning and Assessment

Report Author:

Emma Martin
Acting Senior Planner

PURPOSE

Council has received an application seeking a Development Permit for Reconfiguring a Lot on land at 399-413 Boundary Road, Thornlands for the purpose of a 1 into 20 lots subdivision and park dedication. During the course of the assessment alterations to the layout reduced the number of proposed residential lots to 17 lots.

The application has been assessed against the relevant provisions of the Redlands Planning Scheme and the proposed development is considered to comply with the scheme. The key issues identified in the assessment are:

- Lot size and adjoining Park Residential zoned lots
- Existing agricultural dam
- Stormwater
- Wastewater
- Earthworks/retaining walls
- Local Park and open space dedication

It is therefore recommended that the application be granted a Development Permit subject to conditions for the reasons identified in the Officer's Recommendation.

BACKGROUND

The development application was properly made on 30 June 2016. The original application was for 20 lots. In response to matters raised by Council officers, councillors and the community the proposed development was amended to reduce the number of lots adjoining Park Residential zoned lots. The proposal now comprises 17 lots.

The applicant responded to Council's request for further information on 18 July 2016 and amended the proposal as part of the response. The change was considered to meet the minor change test under s.350 of the *Sustainable Planning Act 2009* and was accepted as a change to the application under s.351 and s.353 of the Act.

Planning History

The site has been the subject of previous development applications that are relevant to the consideration of this application:

- An application for Operational Works approval to drain and fill the existing dam was approved in September 2002. This approval has since lapsed.
- A combined application, being a Material Change of Use to rezone the lot to Park Residential and Reconfiguring a Lot for 14 lots. The application was initially granted Preliminary Approval at the 9 March 2004 meeting of the Development Assessment Committee, with a Development Permit granted at the 26 October 2004 meeting of the Committee following the lodgement of a Negotiated Decision request. This approval has since lapsed.

ISSUES

Development Proposal & Site Description

Proposal

The proposal is for stage 8 of the Esperance development by Ausbuild and is located within the South East Thornlands structure plan (SETSP) area and is a Reconfiguring a Lot application for one (1) into 17 lots and park dedication over balance lot 57 (created by ROL005951 for Stage 7 of Esperance) that will result in:

- the dedication of 1 park lot with an area of 3.29ha, comprising a local park with equipped area of play, a kick about area and a covered picnic area, a stormwater bio retention basin and vegetated corridor along Erapah Creek; and
- residential lots with the following characteristics:

Lot type	Lot size range	Approximate lot dimensions	Number of lots
Premium Courtyard	400m ² and 436m ²	16 and 17.5m frontage 25m depth	2
Traditional	596m ² – 998m ²	10m – 20m frontage 20.6 - 50m depth	6
Courtyard	350m ²	14m frontage 25 depth	6
Premium Villa	623m ²	12.5m frontage 50m depth	3

The proposed lot layout is appended to this report at **Attachment 1**.

Each lot has access to a public road. The proposed subdivision layout provides a mix of lot types and frontage widths dispersed throughout the development site to provide visual interest and variety of streetscape.

The application also comprises a bulk concurrence agency referral component, which seeks approval of a Plan of Development for each stage. Where the future dwellings comply with the requirements of the Plan of Development (POD) table, no further concurrence agency referral will be needed to obtain a building approval. Where future dwellings do not comply with the POD, the Redlands Planning Scheme requirements will prevail (or the Queensland Development Code where the scheme does not regulate dwelling houses).

The POD includes requirements for future dwelling houses including site coverage, setbacks, built to boundary walls, open space, car parking provision and number of bedrooms, with different limits for each lot type.

Access to the subject site is via the State controlled road, Boundary Road, with internal vehicular connections to the east at Affinity Way and Marcoola Street (both within the Villaworld site) and to the west at Lungren Drive. The main access road will be a boulevard style road that runs north-south with wide vegetated verges. Pedestrian movement between the site and public areas has been provided for, with pedestrian links to Boundary Road along the boulevard spine road and also south toward the proposed esplanade road adjoining the park at the southern part of stage 8. This will connect the development to the wider off-road pedestrian/cycle network, including a pedestrian and cycle bridge across Erapah Creek, being delivered as part of the Affinity development to the east, which provides access to the Victoria Point major centre.

Changes to the application

In accordance with section 351 of the *Sustainable Planning Act 2009* (SPA) and following a request for further information by officers, the applicant notified Council on 18 July 2016 of a number of minor changes to all three applications. These changes were:

- Reduction in the total number of proposed residential lots from thirty-six (36) to thirty-five (35) for Esperance stage 7 (ROL005951) and twenty (20) to seventeen (17) lots for Esperance stage 8 (ROL005950);
- Variations to the size of the proposed lots along the western boundary of the proposal and the introduction of a 10m wide landscape strip and rear setback to those lots in response to a visual impact assessment of that boundary (this is discussed in more detail under the relevant heading in this report);
- Removal of the proposed vehicular access to Luke Street in response to concerns raised by local residents; and
- Removal of all proposed lots less than 350m².

The above changes are considered to be a 'minor change' in accordance with section 350 of the SPA and as such the changes are considered to have no effect on the IDAS process (section 353).

The State Assessment Referral Agency was notified of the change and had no further comments.

Site & Locality

The subject site is located within the southernmost portion of the South East Thornlands Structure Plan (SETSP) area and is bounded to the north by the State controlled road Boundary Road and to the south by Erapah Creek. To the east is the Villaworld development (previously known as Affinity by Aria) and to the west is an established Park Residential zoned community and Luke Street. The site extends to some 9.79ha, however the developable land comprises less than 5ha, with over 3ha to be dedicated as park (as part of stage 8 / ROL005950) and the rest dedicated for road reserve and drainage.

The site is part of the wider SETSP area, which has been incorporated into the Redlands Planning Scheme to accommodate a significant portion of the expected future population growth within Redland City.

As such, the site forms part of an emerging residential community. The part of the site zoned for development is predominately clear of vegetation. The current use of the site is for a single dwelling unit with associated outbuildings and a large dam to the rear of the property, however it was until fairly recently utilised as a cattle farm. All existing structures will be removed from the development site prior to construction. The part of the site the subject of this application falls away from Boundary Road to Eprapah Creek at the rear of the site and comprises a former agricultural dam close to the Luke Street frontage of the site.

Application Assessment

Sustainable Planning Act 2009

The application has been made in accordance with the *Sustainable Planning Act 2009* Chapter 6 – Integrated Development Assessment System (IDAS) and constitutes an application for Reconfiguring a Lot under the Redlands Planning Scheme.

SEQ Regional Plan 2009-2031

The site is located within the Urban Footprint in the SEQ Regional Plan 2009-2031.

State Planning Policies & Regulatory Provisions

State Planning Policy / Regulatory Provision	Applicability to Application
<p>SEQ Koala Conservation SPRP</p>	<p>The site is located within an assessable area under the SEQ Koala Conservation SPRP and is within a Koala Broad-Hectare Area. Division 3 of the SPRP applies. The developable part of the site is designated as Medium Value Rehabilitation, with the open space toward the rear of the site split between Low Value Rehabilitation, Medium Value Bushland and Low Value Bushland.</p> <p>Division 3 requires the development design to incorporate movement corridors and food species for koalas. There are no direct requirements for replanting. Schedule 2 acknowledges constraints from development such as subdivision design and its associated infrastructure and edge effects. The proposed layout does not obstruct fauna movement itself, and it is recognised that any residential subdivision will have some level of impact on koala movement. The SPRP requirements are considered to be met through the provision of movement corridors via street tree planting (in particular along the boulevard road, which benefits from extra wide verges) and the buffer planting to the site frontage (delivered as part of ROL005951). It is not considered appropriate for koala food trees to be planted in these areas as it would attract koalas to the area which could put them at risk of attack from domestic animals and being struck by vehicles. The species for planting will be determined as part of the Operational Works stage of the development.</p> <p>A more appropriate location to encourage comprehensive planting of koala habitat and food trees is the Open Space zoned land at the rear of the site proposed for dedication. This part of the site will provide the most effective and valuable corridor for fauna movement along Eprapah Creek. This is also the intended location of a wildlife corridor for fauna movement under the SETSP overlay code.</p> <p>Although it is noted above that the applicable division of the SPRP does not require replanting, the Environmental Offsets Act 2014 (EO Act) provides Council with the jurisdiction to require environmental offsets to counterbalance a significant residual impact to a prescribed environmental matter.</p>

State Planning Policy / Regulatory Provision	Applicability to Application
	<p>Relevantly, non-juvenile koala habitat trees located within an area identified as bushland habitat, high value rehabilitation or medium value rehabilitation in the SPRP is a prescribed environmental matter for this purpose. A significant residual impact is the impact of development after any on-site rehabilitation.</p> <p>On this basis it is considered appropriate to impose conditions that ensure any non-juvenile koala habitat trees removed from the site are either replaced on site (completely or partially) at the rate required by the EO Act (referenced above), with any unmet replanting requirements addressed with an environmental offset (an environmental offset relates to offsite revegetation or a financial contribution in lieu of planting). The replanting rate required by the EO Act is three (3) trees for every non-juvenile koala habitat tree removed.</p>
SPRP (Adopted Charges)	<p>The development is subject to infrastructure charges in accordance with the SPRP (adopted charges) and Council's adopted resolution. Details of the charges applicable have been provided under the Infrastructure Charges heading of this report.</p>
State Planning Policy April 2016	<p>The site is mapped as having the following State designations:</p> <ul style="list-style-type: none"> f) KOALA BUSHLAND g) REGULATED VEGETATION – Wetland h) HIGH ECOLOGICAL SIGNIFICANCE - Wetland i) NATURAL HAZARDS, RISK & RESILIENCE – Potential bushfire impact buffer and medium bushfire hazard area j) WATER QUALITY - Climatic regions – stormwater management design <p>No development is proposed in the parts of the subject site affected by designations a) – d). In relation to e) the submitted Stormwater Management Plan adequately demonstrates that the SPP requirements in relation to water quality have been met. Conditions have been included to approve the development generally in accordance with these plans and subject to detailed designs that require Operational Works approval.</p>

Redlands Planning Scheme

The application has been assessed under the Redlands Planning Scheme version 7.

The application is subject to code assessment and the following codes are applicable to the assessment:

- Urban Residential Zone code
- Medium Density Residential Zone code
- Open Space Zone code
- Community Purpose Zone code
- Acid Sulfate Soils Overlay code
- Flood Prone, Storm Tide and Drainage Constrained Land Overlay code
- Habitat Protection Overlay code
- Landslide Hazard Overlay code
- Road and Rail Noise Impacts Overlay code
- South-East Thornlands Structure Plan Overlay code
- Waterways, Wetlands and Moreton Bay Overlay code
- Reconfiguration code
- Development Near Underground Infrastructure code

- Excavation and Fill code
- Infrastructure Works code
- Stormwater Management code

Reconfiguring a Lot

Lot size and adjoining Park Residential zoned lots

Specific outcome S3.3 of the SETSP Overlay code requires development to be designed and located to protect the amenity of dwelling houses on existing lots included in the Park Residential Zone by:

- Requiring reconfiguration of land directly adjoining the Park Residential Zone to achieve a minimum site area of 1200m² and a frontage of 25m.
- Restricting the establishment of dual occupancies and multiple dwellings on newly created lots which directly adjoin existing Park Residential zoned lots.

The proposal as originally lodged included 8 lots ranging from 593m² to 797m², with frontages between 10m and 16m and depths of 25m – 50m. The application was not accompanied by any analysis demonstrating that this solution complied with the Redlands Planning Scheme requirements. It was not considered to comply with the abovementioned specific outcome. The relevant overall outcomes of the UR zone code and SETSP code indicate that development should:

- Be predominantly low-rise detached houses on individual lots of various sizes;
- Achieve a density of 12-15 dwellings/ha with a low-rise building form;
- Deliver a density of development that makes efficient use of scarce developable land; and
- Achieve a high standard of amenity by:
 - having access to natural light and ventilation, privacy and private open space commensurate with the use; and
 - mitigating potential conflicts and impacts between new residential uses and existing dwelling houses on Park Residential zoned land adjoining the structure plan area.

The applicant lodged an amended proposal on 18 July 2016. The amended layout comprises 6 lots adjoining the existing Park Residential zoned lots to the west of the subject site, ranging in size from 605m² to 998m², with frontages between 10m for Lot 37 to 20m at Lot 22. It should be noted that although proposed Lot 1 comprises a 10m frontage, it is an irregular shaped lot with an area of 605m² and an average width of 24.8m. To inform the changes necessary to address the overall outcomes the applicant undertook a rural residential interface assessment of the western boundary to determine the site specific context, considering topographical features, existing vegetation, the siting of domestic outbuildings on the adjoining properties, the proximity of the existing dwellings and the siting of their private outdoor amenity areas. In undertaking this assessment the applicant identified the areas along the boundary that are most sensitive to amenity impacts from future development of the subject land. This has been reflected in the updated lot design, with larger lots proposed in flatter more exposed areas along the boundary and smaller lots in areas where vegetation, buildings and the ground levels create natural buffers to the proposal.

In addition to this the applicant has proposed to include development envelopes on these lots to prevent built development being located within 10m of the adjoining boundary on all blocks with screening vegetation to be conditioned within that buffer (located at the rear of the proposed lots). Lot 37 will allow for a driveway to be constructed within this setback zone.

Building/Development Envelopes

Unlike covenants, development envelopes are not registered on the property title and as such it will be necessary to apply a condition requiring compliance with the development envelopes and specifying a minimum 10m setback to the western boundary of proposed lots 21 – 25 and 37. Fencing and garden sheds requiring only minor building works (i.e. less than 10m²) are recommended as exceptions to this requirement, as well as the driveway for lot 37. It will be necessary to ensure the development envelopes are recorded on Council's red-e-map system, so they are easily discoverable to potential purchasers and building certifiers. Any future residents wishing to undertake development (other than the exceptions listed above) within this setback would need to seek an amendment to the approval. The *Sustainable Planning Act 2009* states that a permissible change must not result in substantially different development. Statutory Guideline 06/09 '*Substantially different development when changing applications and approval*' identifies a number of scenarios that may be considered to result in substantially different development, including the removal of an incentive or offset that would have balanced a negative impact of the development. It is considered that the conditioned building envelopes are an offset that address the potential impact of the proposed development on the amenity of adjoining residents. It is not therefore considered likely that a request to amend the approval to facilitate development within this setback could be supported. However, should circumstances change in the future that negate the need for the building envelopes, for example if there were a change of zoning to the Park Residential land and/or an approved development/subdivision of the adjoining Park Residential zoned land that increased the density of that development (and therefore reduced the impact of the development of the subject site), a permissible change to the approval to remove a building envelope may be supported. This approach is a considerably more affordable and simple process for future homeowners than the process required to remove a covenant from the title (which could also be supported where circumstances had changed and the envelopes were no longer required). It is considered that this approach gives sufficient certainty and that a covenant need not be sought. Notwithstanding this, if Council disagrees and wishes to ensure more certainty, it could resolve to apply a condition that requires the registration of a covenant on the affected lots to ensure the setback remain free of buildings and structures. Although it is still recommended that exceptions be made for fencing and small garden sheds not exceeding an area of 10m² and deemed to be minor buildings works.

It is considered that with the recommended condition to comply with the building envelope and the maintenance of a 10m setback to the western boundary for the lots mentioned above (subject to exceptions) the amended layout complies with the overall outcomes of the SETSP Overlay code mitigating the potential amenity impacts of the proposed development, whilst also addressing the conflicting intent of the overall outcomes of the UR Zone code, which seek to maximise the efficient use of land.

Existing agricultural dam

The development application includes the proposal to fill the existing agricultural dam as part of the construction of the local park (and associated infrastructure) planned for the area within the SETSP overlay and the Priority Infrastructure Plan (PIP). An aerial view of the dam is appended to this report at **Attachment 2**. It is important to note that no part of the Redlands Planning Scheme (RPS) requires that the dam be retained. This has been specified for other dams in the area, one within the SETSP area and others within the Kinross Road Structure Plan area. It should therefore be considered that during the drafting of the structure plan there was no intention to retain this dam. The only general references to dam retention in the Redlands Planning Scheme are located within *Planning Scheme Policy 14 Waterways, Wetlands and Moreton Bay*. Section 14.5.3 *Enhancement of existing constructed waterbodies* states that where waterbodies are located within waterway buffer zones they should be retained and where a waterbody forms a component of a natural drainage line the preference is that it be retained, although it is accepted that in some circumstances modification may be required. The dam on the subject site is not located within a waterway buffer zone or within a natural drainage line and is not therefore recommended for retention under the RPS.

Notwithstanding this and appreciative of the concern raised by the community and councillors, the developer commissioned environmental consultants to undertake a Waterbody Values Assessment to consider whether the dam warrants retention, bearing in mind that filling the dam is a considerable development cost. The report demonstrates that the dam is a stable agricultural dam in good condition but has limited long-term ecological value and is unlikely to provide habitat and biodiversity outcomes post-development. The critical factor is the development of the subject land, which is zoned for residential development. Development of the balance of the subject land will significantly change the quality of water draining into the dam, which will have a considerable impact on its ecological health and values. This means that in a heavy rain event, overflow of the dam will likely have a detrimental impact on the water quality of Eprapah Creek. Further, a local park and urban development nearby will affect the utility of the site for local fauna as it brings humans and domestic pets within close contact. Stringybark consulting advises that the riparian area closer to Eprapah Creek represents a more suitable focal point for habitat improvement and biodiversity enhancement as it is better connected to a wider habitat corridor and further from human activity. Finally it is considered that retaining the dam would require substantial investigation, remediation and long term maintenance which puts a cost burden on Council to manage water levels, monitor and maintain macrophyte cover, manage aquatic weeds (and remove where necessary) and monitor water quality.

Despite this, the applicant has provided Council with an alternative development option that enables the retention of the dam whilst maintaining the delivery of the local park required by the Priority Infrastructure Plan. This is appended at **Appendix 3**. This provides Council with an alternative option to refusing the application if the matter of the removal of the dam is the cause of an unfavourable decision. In considering the alternative option Council should consider the implications. In the first instance the alternative location of the local park raises considerable accessibility and CPTED concerns. It is located at the bottom of a steep slope and is surrounded by vegetation. This means all ability access of the park will be more constrained than as currently proposed and the views into/out of the park will be limited, with opportunities for casual surveillance significantly hindered.

There is potential to split the various functions of the park to have part of the park next to the retained dam with the remainder in the proposed alternative location. This does not relieve the CPTED concerns raised above and given the proposal would include an unfenced waterbody, unobstructed sight lines are surely even more critical.

Also, to assist Council's decision, Planning officers have sought further advice from Council's City Infrastructure Group to understand the operational impacts of retaining the dam. Officers from City Infrastructure have provided an estimate of cost implications for Council consideration in this matter:

- Using the best- available data, the lifecycle cost of a constructed wetland (the closest approximation to an artificial waterbody) is \$550,000.
- This lifecycle cost (above) incorporates the following assumptions:
 - The waterbody is well maintained and in good condition for: structural integrity; water quality; public safety; maintenance access and weeds and pest species (e.g. fish).
 - The lifecycle maintenance cost for a constructed wetland is based on a unit rate of \$2m²; maintenance activity once-per-year; average area of wetland being 2,000m²; maintained over a life-span of 50 years (the nominal life of a well-maintained constructed wetland).
 - The total lifecycle costs comprise: lifecycle maintenance (\$200,200); renewal cost (\$324,299) and disposal cost (\$13,000).
- The Waterbody Management Guideline (section 2.5.4) and the Queensland Urban Drainage Manual (QUDM) identify specific issues that must be considered if a waterbody is to be retained, including:
 - Modification to batter slopes
 - Modification to dam depth
 - Modification to total area
 - Identification of areas that may require restriction/partial restriction of public access
 - Planting (aquatic and land based) that may assist someone to get out of the water if they fell in
 - signage.
- The costs listed above do not include this work. Officers in City Infrastructure have advised that it is highly likely that the subject dam will require significant modification. They have clarified that the dam is a Turkey Nest dam, this means the material was dug out to create the basin and the removed earth was used to form the dam wall. The construction of the dam wall was not engineered and cannot be certified. They also note that the large number of trees along the bank, whilst helping with stability whilst alive are a considerable risk to the stability of the dam should they die. The roots of the tree weave through the bank toward the water source and if a tree were to die the holes created by the roots become pipes for the water to escape and erode the bank. It is likely therefore that the actual retention cost for the subject dam will be considerably more than the lifecycle cost quoted above.

It is therefore recommended that the proposal to fill the dam is approved given:

- It is considered there is no head of power under the Redlands Planning Scheme to require the retention of the dam;
- Specialist advice presented by the developer's ecological consultant advising that the ongoing ecological value of the dam will be irreversibly affected by the development of the subject site;
- There is likely ongoing cost implications for Council if the dam is retained as well as a public liability risk;
- Retaining the dam will result in a less than preferable outcome for the local park, this is considered to be a disadvantage for the local community; and
- Council has previously approved an Operational Works application to the fill the dam in 2002, which has subsequently lapsed.

Stormwater Management

The applicant has provided a Stormwater Management Plan that identifies a complying solution for the site. The site has a ridgeline which results in two catchments, north to Boundary Road and south to Eprapah Creek. The southern catchment, the area the subject of this application, the applicant has proposed a bioretention basin to the south of the lots, within the lot to be dedicated to the State for open space. This basin will manage the full southern catchment, including a part of proposed townhouse development MCU013526.

Specific outcome S4.2 of the SETSP overlay code requires the incorporation of measures to reduce reticulated water usage and minimise wastewater production. This requirement is associated with the now defunct part of the Queensland Development Code, which previously mandated rainwater tanks for new dwellings. The amendment of this instrument indicates that the costs associated with installing and maintaining the tanks generally outweighed the overall community benefit. Therefore and following the State Government advice, it is not considered appropriate to require the installation of rainwater tanks to satisfy this policy requirement. Dwelling owners will still have the ability to add rainwater tanks in the future if they wish.

S4.2 also indicates that the measures which integrate water supply, wastewater and stormwater will assist in protecting waterway health by improving stormwater quality and reducing site run off. It is considered that the exclusion of rainwater tanks will not result in reduced water quality as the proposed stormwater treatment facility will be designed to meet relevant standards.

Wastewater

Due to the topography of this part of the site, all lots will need to be connected to a low pressure sewer. This low pressure system will feed into the gravity sewer constructed as part of ROL005951. Each lot which feeds into the low pressure sewer will have an underground property kit within the frontage of the site, an underground tank/macerating pump, a control panel and an alarm. Wastewater from each future dwelling will be discharged to the holding tank, macerated and then pumped into the low-pressure sewer. The individual site owners will be responsible for the property kit within their lot. Redland Water has not raised any concerns with the proposed low pressure sewer system. It is noted that a number of lots approved under applications ROL005780 and ROL005869 on the adjoining land to the east will also be connected to such a system.

Earthworks / Retaining Walls

The proposal (Esperance Stage 8) falls south-southeast. Concept earthworks plans have been provided for the development. The majority of retaining walls will be 1.5 metres high or less, however in two locations there is a pad change between adjoining lots of more than 1.5m. The Excavation and Fill code identifies as a probable solution (P1) that retaining walls should be set back half their height and be stepped back 0.75m for every 1.5m in height. Specific outcome S1 clarifies that this is to ensure the structures do not reduce the amenity of adjoining properties in relation to solar access, privacy and overbearing visual intrusion. Given all burdened lots are new lots created by the development it is considered that new buyers will be aware of the structures before purchase and can select a dwelling design and siting that will address these issues. Notwithstanding this and considering a 1.8m boundary fence will be situated on top of the retaining structures adding to their bulk and dominance, a condition is recommended to ensure these retaining walls are stepped, landscaped and incorporate a mix of materials to reduce the bulk and visual impact of the wall from the low side of the block.

The two retaining walls mentioned above are approximately 1.7m and 2.2m in height and located along the rear boundaries of lots 37 and 31. Lot 37 is 605m² in size and considered to be of a sufficient size to accommodate the proposed retaining wall design and maintain sufficient space for a dwelling and useable private open space. Lot 31 is smaller at 350m², however it is considered that there is sufficient space to accommodate a variety of house types and ensure useable private open space. Notwithstanding this, it is noted that the exact height of all retaining walls will not be determined until the Operational Works stage of development, as such it is recommended that a condition be attached to any approval that requires all retaining walls above 1.5m be stepped back 0.75m for every 1.5m in height, incorporate landscaping within the setback and provide a mix of materials to reduce the visual impact of the structure, in accordance with the Excavation and Fill code.

Overall, considering the topography of the site and the intended use and density of development as encouraged in the planning scheme, the proposed earthworks are considered to meet the outcomes of the Excavation and Fill code. It is considered that the earthworks proposed are necessary to deliver the development intent of the RPS and will not adversely affect the character and amenity of the site or the surrounding area.

Infrastructure Charges

The proposed development is subject to infrastructure charges in accordance with the State Planning Regulatory Provisions (adopted charges). The total charge applicable to this development is:

Combined charge: \$424,668.00

This charge has been calculated as follows in accordance with Council's [Adopted Infrastructure Charges Resolution \(No. 2.3\) August 2016](#).

Redland City Council**Notice #001317**

Residential Component	
17 X 3 bedroom residential dwellings X \$28,311.20	\$452,979.20
Demand Credit	
1 X 3 bedroom residential dwelling X \$28,311.20	\$28,311.20
Total Council Charge:	\$424,668.00

NB: This includes a credit for balance lot 57 created as part of ROL005951 and a charge for 17 new lots.

OFFSETS

There are no offsets that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

REFUNDS

There are no refunds that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

Infrastructure Agreement

The proposal includes the provision of trunk infrastructure, being a local park identified in Council's Priority Infrastructure Plan and therefore requires an Infrastructure Agreement to confirm the terms. The Agreement details the infrastructure charges payable under the Adopted Infrastructure Charges Resolution (the amount for this stage is noted above), the offsets applicable for the trunk infrastructure being delivered by the applicants, the agreed embellishments for that infrastructure, agreed planned values for the infrastructure and the matters relating to ROL005951.

A condition should be applied requiring compliance with the Infrastructure Agreement at all times.

State Referral

- **State Assessment & Referral Agency (SARA)**

SARA provided a referral agency response dated 1 September 2015 in regards to State-controlled roads, the response indicated no objection to the proposed development subject to the referral conditions.

Submissions

The proposed development is Code assessable and did not require public notification. Notwithstanding this 22 submissions were received in relation to the application. The key issues raised by submitters are included in the table below, along with officer comments.

Issue	Officer comments
<p>Vehicular access to Luke Street:</p> <ul style="list-style-type: none"> • SETSP clearly states no vehicular access to Luke Street. • Luke Street is Park Residential because of the semi bushland environment important for fauna. Local Law 2 proposed amendment to include the area as a Koala Area. Even with low volumes of traffic there are already fatalities. The increase will result in more fauna being injured and killed. • Luke Street not designed for the number of cars the proposal would generate (insufficient visibility near intersection with Kodak Close, Thornton Drive and Megan Court). Increased risk to pedestrians – there are no footpaths. • Will create a rat run allowing residents to use Dinwoodie Road via Venn Parade, especially with only a left in/left out access to Boundary Road proposed for the subject site. • Strategic Framework - The direct connection of the higher density development to the east is incompatible with the strategic intent for Conservation land to the west and koala habitat retention due to additional traffic cause by Luke Street connection. • Overall Outcomes of the Reconfiguration code – development does not result in a positive contribution to the existing neighbourhood due to increased danger to wildlife. • Overall Outcomes of the Park Residential Zone code – impact to environmental values. • No need for it – the traffic report stated it is needed to provide access for lots 38-40, but these can take access from Luke Street without needing a connection. • Traffic report – insufficient assessment of likely through traffic. 	<p>The applicant has removed vehicular access to Luke Street.</p>

Issue	Officer comments
<p>Left in / left out access from Boundary Road – insufficient.</p> <ul style="list-style-type: none"> • SETSP clearly shows a signalised intersection. • U-turns at Meadowlands Road at peak times are already ridiculous. • Exacerbate the difficulty for residents of Meadowlands area to turn right. 	<p>Boundary Road is a State controlled road. Council has no jurisdiction to require an alternative treatment at the intersection/access of the site. It is nonetheless noted that officers raised this matter with officers at the State Assessment Referral Agency (SARA) to confirm that signalisation of this intersection was not triggered by this application. The concurrence agency response issued by SARA and attached to this report, did not include any requirements for the developer to deliver these works. The ultimate design of the intersection is appended to the Traffic Impact Assessment lodged with the application. RCC officers have considered this design and ensured the proposal does not compromise the ultimate delivery of this intersection at a future date.</p>
<p>Lot size adjoining Park Residential lots:</p> <ul style="list-style-type: none"> • 24 lots adjoin Park Residential homes – none comply with the RPS requirement - A minimum of 1200m² with a 25m frontage. 	<p>This matter is addressed under the Redlands Planning Scheme heading of this report.</p>
<p>Potential increase in anti-social behaviour and crime, caused by high density development.</p>	<p>The proposal has been designed to consider Crime Prevention Through Environmental Design (CPTED) principles and assessed against these requirements.</p>
<p>Decline in property value</p>	<p>The effect of development on property value is not a relevant planning consideration.</p>
<p>Erapah Creek / Luke Street Reserve will be placed under huge stress</p>	<p>The impact to Erapah Creek and Luke Street Reserve is a matter that was considered prior to the area being zoned for higher density development. Moreover the proposal will secure a 200m buffer to Erapah Creek through the dedication of 3ha of land zoned for Open Space. The proposal also includes a Stormwater Bio-Retention Basin that will treat stormwater run-off before it drains into the creek.</p>
<p>Preference that the dam left in its natural state but understand that there may be Council regulations preventing this.</p>	<p>This matter is addressed under the relevant heading of this report.</p>

Issue	Officer comments
<p>Conflict with covenants on existing Park Residential zoned lots, which are required to have fauna friendly fencing along all boundaries.</p>	<p>Given this is a consequence of the different zonings of adjoining land there is not considered to be a risk of compliance action. It is clear that where the Park Residential zoned lots adjoin the Urban Residential zone the requirements of the covenant cannot be achieved.</p> <p>It is important to note however that if the subject development is approved, the covenants on the adjoining Park Residential zoned properties are still able to achieve their intent and their purpose is not negated by any approval on the subject land. The remaining three boundary fences must still comply with the covenant and enable fauna movement within the Park Residential Zone, where lower densities and more vegetation facilitate that movement.</p>

Bulk Concurrence Agency Referral

In accordance with the Sustainable Planning Regulation 2009 Schedule 7 Table 1 Item 20, Council is a concurrence agency for future development applications for dwelling houses on the proposed lots. Council's jurisdiction as a concurrence agency relates to whether the future dwellings comply with the Redlands Planning Scheme (RPS) as detailed in the assessment section below.

Referral Agency Response before Application is Made

The Applicant has submitted this request for all proposed lots prior to lodgement of a development application to the assessment manager (ie building certifier). Council is therefore assessing the application and providing a pre-lodgement response under s271 of the *Sustainable Planning Act 2009*.

Proposal

The applicant is seeking concurrence agency approval for a Plan of Development over the proposed lots (ROL005950), which establishes siting parameters for new dwelling houses, with alternative provisions to those identified under the Redlands Planning Scheme (which refers to QDC standards) in relation to setbacks and site cover. The Plan of Development is appended to this report at **Appendix 4**. The table below details the proposed setbacks and site cover for the various lot types, the standards that are alternative to those identified in QDC are highlighted in grey below. The rest are compliant with QDC and do not require referral.

	Villa		Premium Villa		Courtyard		Premium Courtyard		Traditional		Premium (rear access)	
	10m x 25-32m		12.5m x 25-50m		14m x 25-50m		16m x 32m - 50m		18m x 25m - 32m		24m x 25-32m	
Typical Lot dimensions	250 - 350m ²		300 - 650m ²		350 - 700m ²		800m ²		450 - 600m ²		800+m ²	
setback location	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor
front	3.0m	3.0m	3.0m	3.5m	3.0m	3.5m	3.5	4.5	3.5	4.5	3.5	4.5
front (lots on boulevard rd)	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m
rear	.75m	1.0m	1.0m	1.5m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m
side boundary												
	Recommended		Recommended		Recommended		Optional		Optional		Optional	
Built to boundary	0.0 - 0.2m	0.9m	0.0 - 0.2m	1.0m	0.0 - 0.2m	1.5m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m
Non built to boundary	0.75m	0.9m	1.0m	1.0m	1.0m	1.5m	1.2m	2.0m	1.5m	2.0m	1.5m	2.0m
Corner lots - secondary road frontage*	1.2m	1.5m	1.5m	1.5m	2.0m	2.0m	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m
Site Cover	162.5m ² -327.5m ² (65%)		180m ² -390m ² (60%)		152.5m ² -385m ² (55%)		440m ² (55%)		247.5m ² -330m ² (55%)		440m ² (55%)	
Open Space	Min area = 50sqm		Min area 70sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm	
Number of Bedrooms	3		min. 3		min. 3		min. 3		min. 3		min. 3	
On site Parking	2		2		3		3		3		3	
Garage door Setback	5.4m		5.4m		5.4m		5.4m		5.4m		5.4m	

*Concession for open structures supporting post/pier can be located 1.0m from secondary road frontage

The front setbacks for *Premium (rear access)* lots have been crossed out as these lots do not have a front setback requirement as they do not have site frontage. The main boundaries of the lot are considered to be side/rear boundaries for the purpose of assessment against QDC requirements.

Referral under SPR Schedule 7 Table 1 Item 20

Applicability:	This applies to building works that comply with all relevant self-assessable criteria of the RPS <u>except</u> for setbacks and site cover. The level of assessment is not escalated but is instead referred to Council for concurrence assessment.
Jurisdiction:	Whether the building complies with the relevant specific outcome of the RPS in regards to setbacks and site cover.
Assessment	<p><u>Front Setbacks</u></p> <p><i>Proposed:</i></p> <ul style="list-style-type: none"> a) 3 – 3.5m b) 2m where adjoining the boulevard road <p><i>QDC:</i></p> <ul style="list-style-type: none"> a) 3 – 6m (3-4m for lots less than 450m² and 6m for all those above 450m²) <p>In relation to a) it should be noted that this applies to 4 lots (proposed lots 34 - 37) each with an area between 596m² and 615m². The verges on this road frontage appear to be between 4m and 8m and are therefore compliant with the standard across Redland City or wider. The road is a cul-de-sac, with half the lots taking access from the road 6000m² or larger and as such is a low-speed low traffic volume environment. It is considered that a reduced setback in this location is unlikely to cause nuisance or safety concerns with adequate visibility to access and exit the lots. The Plan of Development also requires all lots to maintain a minimum 5.4m to the garage, which ensures the lots can accommodate additional off-road car parking. It is considered that this alternative provision achieves Performance Criteria P1 of the QDC.</p> <p>In relation to b) it is considered that a reduced setback to 2m is appropriate in this case given the significant verge widths along the boulevard road. The width varies but is generally 9m wide for the majority of its length. There is a pinch point to the front of proposed lot 33 where the verge is 4-5m wide, however as this lot is located at the end of the boulevard road a driver will have good sightlines of traffic coming from the east and north. Given the character of the area is yet to be established and the significant landscaping along the boulevard road, it is considered that even with a small setback of just 2m the streetscape will be dominated by the landscaping in the street</p>

rather than any built development. As mentioned above the lots will still be required to provide a minimum setback of 5.4m to the garage to facilitate off-street parking on driveways. It is considered that this alternative provision achieves Performance Criteria P1 of the QDC.

Side Setback

Proposed:

- a) *1m – 1.5m at ground level*
- b) *1m – 2m at first floor level*
- c) *Built to boundary walls (up to 15m in length)*

QDC:

- a) *1.5m where the building is 4.5m or less*
- b) *2m where the building is between 4.5m and 7.5m in height*
- c) *0.75m – 1.425m for lots less than 15m wide and buildings 4.5m or less*
- d) *1m – 1.9m for lots less than 15m wide and buildings between 4.5m and 7.5m*

The proposal identifies alternative provisions for side setbacks for both ground and first floors. It also nominates potential future built to boundary walls that align with the intended location of the garage. It identifies where built to boundary walls are recommended and where they may be optional.

In relation to a) the traditional and premium villa lot types comply with the QDC acceptable solutions. All the courtyard lots have frontages of 14m, with QDC requiring side setbacks of 1.275m, where the proposed minimum side setback is 1m. The Premium Courtyard lots are proposed to have a minimum 1.2m side setback at ground level where QDC requires 1.5m.

In relation to b) the minimum side setbacks proposed for the premium courtyard and traditional lots all comply with QDC acceptable solutions. The premium villa lot type seeks a side setback of 1m where QDC identifies 1.4m as an acceptable solution. Finally the courtyard lot type sets a minimum side setback of 1.5m where QDC sets an acceptable solution of 2m.

The side setbacks sought represent a reduction of between 0.275m – 0.5m of those identified as acceptable solutions in the QDC, which is considered a minor deviation and does not prevent future dwelling houses having suitable access to sunlight and ventilation. It is relevant to consider that the Plan of Development also seeks to establish potential and optional built to boundary walls for most proposed lots (the exceptions are lots 34-37). Doing so ensures future lot owners know the likely location of built to boundary walls on adjoining lots and can therefore plan the orientation of their house to maximise solar access and ventilation. It is acknowledged that built to boundary walls will generally be located on the high side of retaining structures. Whilst it would be preferred for built to boundary walls to be incorporated with the retaining structure to further improve access to sunlight and ventilation for east-west oriented lots and reduce the visual impact of retaining structures, it is accepted that doing so would result in significant problems during construction. It would require the garages of dwelling houses to be incorporated within the construction of the retaining wall, which would in turn cause problems for maintenance access to these structures.

Notwithstanding this, given the width of proposed lot 21 (18m), especially when compared to the width of the adjoining lot (proposed lot 20 – 14m wide) it is not considered appropriate to approve a built to boundary wall in this case. Lot 21 is of a sufficient size and width to facilitate a positive outcome for the future homeowner. The impact of a retaining structure and built to boundary wall on the adjoining lot is not considered to be justified by the need to maximise useable space as they are for narrower lots. If the future owner of the lot has a design that requires built to boundary construction this can be

considered on its merits. The optional built to boundary wall for lot 21 is therefore recommended for refusal.

Site Cover and Open Space

Proposed: 55% – 60%

QDC: 50%

The Plan of Development allows site coverage ranging from 55% to 60% for stage 8 (ROL005950), with site coverage increasing as lot sizes decrease. The larger lots permit a site coverage of 55% and lots with a frontage of 12.5m permitting 60% site coverage. The Dwelling House code requires development to be appropriately sized and located on site. The Plan of Development requires all lots to provide 2 - 3 parking spaces on site (varying with lot type) and sets minimum requirements in terms of open space. The open space requirements range from 70sqm-80sqm. In context, the Multiple Dwelling code sets a minimum open space requirement for townhouses of 25sqm at ground level. Given the minimum requirements are almost treble that required for a multiple dwelling and considering the proximity of the site to the planned local park and kick about space (which incorporates bbq/picnic facilities) and wider Eprapah Creek corridor, it is considered that the proposed site cover alterations meet the requirements under specific outcome S2 of the Dwelling House code and will deliver dwellings that are suitably sized and located.

Conclusion

The proposed development is considered to comply with S2 of the Dwelling House Code in the Redlands Planning Scheme. The proposed development is considered to ensure future dwellings will be appropriately sized and located on site. It is recommended that the application be approved subject to concurrence agency conditions.

Officer's Recommendation

That Council, in its role as a concurrence agency under Schedule 7 Table 1(20) of the Sustainable Planning Regulation, support the proposed development of dwelling houses on the proposed lots (ROL Plan Drawing No. 1114096_04 rev A, dated 20.06.2016) currently on Lot 6 on SP119615 situated at 399-413 Boundary Road, Thornlands, subject to the conditions contained at the end of this report.

Deemed Approval

The approval of this application has not been issued under Section 331 of the *Sustainable Planning Act 2009*.

STRATEGIC IMPLICATIONS

Legislative Requirements

The application has been assessed in accordance with the *Sustainable Planning Act 2009*. This development application has been assessed against the Redlands Planning Scheme v7 and other relevant planning instruments.

Risk Management

Standard development application risks apply. In accordance with the *Sustainable Planning Act 2009* the applicant may appeal to the Planning and Environment Court against a condition of approval or against a decision to refuse the application.

Financial

If approved, Council will collect infrastructure contributions in accordance with the State Planning Regulatory Provisions (adopted charges) and Council's Adopted Infrastructure Charges Resolution.

If the development is refused, there is potential that an appeal will be lodged and subsequent legal costs may apply.

People

Not applicable. There are no implications for staff.

Environmental

Environmental implications are detailed within the assessment in the "issues" section of this report.

Social

Social implications are detailed within the assessment in the "issues" section of this report.

Alignment with Council's Policy and Plans

The assessment and officer's recommendation with Council's policies and plans as described within the "issues" section of this report.

CONSULTATION

The Planning Assessment Team has consulted with other internal assessment teams, operational teams and asset management teams where appropriate. Advice has been received from relevant officers and forms part of the assessment of the application.

A copy of the original proposal and subsequent amendments were provided to the Divisional Councillor. The Divisional Councillor, Councillor Golle as well as Councillor Hewlett have requested that the application be brought to Council for determination.

OPTIONS

The development application has been assessed against the Redlands Planning Scheme and relevant State planning instruments. The development application is considered to comply with these instruments and it is therefore recommended that the application be approved subject to the simultaneous approval of ROL005951 and conditions. Likewise the Concurrence Agency Referral is considered to comply with the Redlands Planning Scheme and Queensland Development Code and it is recommended that a referral approval be granted subject to the approval of ROL005950 and ROL005951 and conditions.

Council options are to:

1. Adopt the officer's recommendation to approve the application subject to approval of ROL005951 and conditions; or
2. Resolve to approve the application, without conditions or subject to different or amended conditions; or
3. Resolve to refuse the application.

OFFICER'S RECOMMENDATION

That Council resolves to issue a Development Permit approval subject to simultaneous approval of ROL005951 and conditions for the Reconfiguring a Lot for 1 into 17 lots and park and at 399-413 Boundary Road, Thornlands and Concurrence Agency Approval for Dwelling Houses subject to conditions also at 399 – 413 Boundary Road, Thornlands.

SECTION 1 - PERMIT TO WHICH THE FOLLOWING CONDITIONS RELATE:**DEVELOPMENT PERMIT FOR RECONFIGURING A LOT - 1 INTO 17 LOTS AND PARK**

<u>ASSESSMENT MANAGER CONDITIONS</u>	<u>TIMING</u>
1. Comply with all conditions of this approval, at no cost to Council, at the timing periods specified in the right-hand column. Where the column indicates that the condition is an ongoing condition, that condition must be complied with for the life of the development.	
<u>Approved Plans and Documents</u>	
2. Undertake the development in accordance with the approved plans and documents referred to in Table 1, subject to the conditions of this approval and any notations by Council on the plans.	Prior to Council approval of the Survey Plan.

Plan/Document Title	Reference Number	Prepared By	Plan/Doc. Date
ROL Plan	1114096_03 Revision A	Place Group Design	20/06/2016
Plan of Development Stage Eight (as amended in red)	1114096_04 Revision A	Place Group Design	20/06/2016
Site Based Stormwater Management Plan – Boundary Road Thornlands	3863-01 R01 v04	Water Technology	17/06/2015
Earthworks Layout Plan Sheet 1 of 2	8160-J version 3	Sheehy & Partners	June 2016
Earthworks Layout Plan Sheet 2 of 2	8160-K version 3	Sheehy & Partners	June 2016
Road Hierarchy Layout Plan – as amended in red	8160-A version 3	Sheehy & Partners	June 2016
Services Layout Plan Option 'A' Sheet 1 of 2	8160-C version 3	Sheehy & Partners	June 2016
Services Layout Plan Option 'A' Sheet 2 of 2	8160-D version 3	Sheehy & Partners	June 2016
External Stormwater Catchment and Collection Plan Sheet 1 of 2	8160-AX version 1	Sheehy & Partners	July 2016

External Stormwater Catchment and Collection Plan Sheet 2 of 2	8160-AY	Sheehy & Partners	July 2016
Southern Bio Retention Basin Plan	8160-AI	Sheehy & Partners	June 2016
Luke Street cul-de-sac layout plan and details	8160-AJ	Sheehy & Partners	June 2016
Tree Retention Plan	S50059_TRP_001 version B	Place Design Group	05/01/2016
Tree Retention Plan	S50059_TRP_002 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_003 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_004 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_005 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_006 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_007 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_008 version B	S5 Environmental	17/12/2015
Rehabilitation Management Plan	S50139_RMP_001 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_002 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_003 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_004 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_005 version A	S5 Environmental	23/12/2015
Landscape Master Plan & Design Intent Stage 2 (all plans contained therein)	Revision D	Place Design Group	20/06/2016

Table 1: Approved Plans and Documents

- | | |
|---|--|
| 3. Submit to Council a Survey Plan for Compliance Certificate approval, in accordance with the approved plans, following compliance with all relevant conditions and requirements of this approval. | Prior to expiry of the relevant period for the approved development. |
|---|--|

<p>4. Comply with the Infrastructure Agreement that relates to this development approval.</p>	<p>Prior to Council approval of the Survey Plan and ongoing</p>
<p><u>Existing Structures</u></p>	
<p>5. Demolish or relocate/remove all existing structures on site, including all slabs and footings, in accordance with the approved plan(s) and cap all services prior to demolition commencing.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p>6. Remove any existing fences and/or incidental works that straddle the new boundaries, or alter to realign with the new property boundaries or to be wholly contained within one of the new properties.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p><u>Utility Services</u></p>	
<p>7. Relocate any services (eg water, sewer, electricity, telecommunications and roofwater) that are not wholly located within the lots that are being serviced.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p>8. Pay the cost of any alterations to existing public utility mains, services or installations due to building and works in relation to the proposed development, or any works required by conditions of this approval. Any cost incurred by Council must be paid in accordance with the terms of any cost estimate provided to perform the works.</p>	<p>At the time the works occur, or prior to Council approval of the Survey Plan, whichever is the sooner.</p>
<p>9. Design and install underground electricity and telecommunication conduits to service all lots in accordance with the requirements of the relevant service providers and the Redlands Planning Scheme Infrastructure Works code and Planning Scheme Policy 9 – Infrastructure Works. Provide Council with written confirmation of the service provider agreements to the supply of electricity and telecommunication services.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p><u>Building Envelope</u></p>	
<p>10. Comply with the building envelopes for Lots 21-25 and Lot 37 as depicted on the <i>Plan of Development stage eight (as amended in red) revision A reference 1114096_03</i> dated 20.06.2016 prepared by Place Design Group, ensuring no buildings or structures are located within 10m of the western boundary of each lot, except for fencing and a garden shed and for Lot 37 a driveway/access and any works associated with the driveway/access.</p> <p>Maintain a 10m setback from the western boundary at all times.</p> <p><i>Note: For the avoidance of doubt a garden shed is taken to be no larger than 10sqm and requires minor building works only.</i></p>	<p>Ongoing</p>
<p><u>Land Dedication and Design</u></p>	
<p>11. Dedicate land to the State with Council as trustee, in accordance with the approved <i>ROL plan 1114096_03 rev A</i> and <i>Southern Bioretention Basin 8160-A1</i>, for the following purposes:</p> <p>a) Open space (Park and stormwater management area) b) Road.</p> <p><i>Note: This does not include the land situated between balance lots 58 and 59.</i></p>	<p>Prior to Council approval of the Survey Plan.</p>

<p>12. Grant easements for the following and submit the relevant easement documentation to Council for approval. Once approved by Council, register the easements on the property title.</p> <p>a) Maintenance access easement for all sewer manholes and rising mains in favour of Redland City Council and its agents where located in private property or open space;</p> <p>b) Temporary turning areas for refuse service vehicle turn-around, where such area is located over private property, in favour of Redland City Council and its agents, where necessary;</p> <p>c) Stormwater drainage purposes, covering the roofwater system (including inlet pits and pipes) and surface channel, all designed for a major 1% AEP, in favour of the upstream property owners where a roofwater line serves more than two lots.</p>	<p>As part of the request for compliance assessment of the Survey Plan.</p>
<p><u>Split Valuation</u></p>	
<p>13. Pay a contribution to Council for the purposes of paying the State Government Split Valuation Fees. The current value of the contribution is \$35.25 per allotment (2016/2017 Financial Year). The amount of contribution must be paid at the rate applicable at the time of payment. A Split Valuation Fee is required for each allotment contained on the Plan(s) of Survey, including balance lots.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p><u>Access and Roadworks</u></p>	
<p>14. Submit to Council, and receive Operational Works approval for detailed design of all roads in accordance with the provisions of <i>Complete Streets</i> and the <i>Redlands Planning Scheme: Infrastructure Works Code, Planning Scheme Policy 9 – Infrastructure Works, Schedule 6 – Movement Network and Road Design</i> and the <i>South East Thornlands Structure Plan</i>, unless otherwise stated as part of a specific condition of this approval.</p>	<p>As part of the application for Operational Works.</p>
<p>15. Provide traffic calming consistent with the provisions of <i>Complete Streets</i>, the <i>Redlands Planning Scheme Infrastructure Works Code, Planning Scheme Policy 9 – Infrastructure Works</i> and <i>Schedule 6 – Movement Network and Road Design</i>.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p>16. Remove all redundant vehicle crossovers and reinstate kerb and channel, road pavement, service and footpaths as specified in accordance with the standards in the <i>Redlands Planning Scheme Policy 9 – Infrastructure Works</i>.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p>17. Submit to Council, <u>and gain approval for</u>, a road naming plan, in accordance with Council's road naming guidelines, detailing specific road names and designations for all existing and proposed new public roads within the site. Use original road names on all new roads to avoid duplication of any existing road names in the City.</p>	<p>Prior to preparing your Survey Plan.</p>
<p><u>Stormwater Management</u></p>	
<p>18. Convey roof water and surface water in accordance with the <i>Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management</i> to:</p> <ul style="list-style-type: none"> • A lawful point of discharge, as identified in the approved <i>Site Based Stormwater Management Plan – Boundary Road Thornlands (Reference 3863-01 R01 v04)</i> prepared by Water Technology. 	<p>Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner.</p> <p>Ongoing condition.</p>

<p>19. Manage stormwater discharge from the site in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management, so as to not cause an actionable nuisance to adjoining properties.</p>	<p>Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner.</p> <p>Ongoing condition.</p>
<p>20. Submit to Council, and receive Operational Works approval for, a detailed stormwater assessment that is generally in accordance with the Site Based Stormwater Management Plan – Boundary Road Thornlands, (reference 3863-01 R01 v04) dated June 2015 and prepared by Water Technology and addresses both quality and quantity in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management, and the following:</p> <ul style="list-style-type: none"> • Design of road and drainage system to a minimum of QUDM Level III standard. • Hydraulic calculations and/or modelling of the overland flow path at critical locations of the road network such as road bends, intersection and sags to demonstrate that the major (1% AEP) overland flow paths can be fully contained within road reserve based on a 50% blockage, in accordance with Redlands Planning Scheme Part 11, Planning Scheme Policy 9, Chapter 6 and relevant sections of the Queensland Urban Drainage Manual 2013. • Overland flow assessment within the park area to ensure efficient drainage without causing public nuisance or risk to the park for all design storm events and provision of a 2m wide easement from lots 21 to 37 (rear), in favour of upstream properties, also in favour of Lot 22 on SP143405. • Details of the on-site detention system (southern catchments) to ensure no-worsening conditions can be adequately achieved at the boundary to the adjoining neighbours as well as to Erapah Creek for all range of design storm events. • Detailed design of the bio-retention systems including coarse sediment forebay in accordance with the <i>Water by Design</i> guidelines and Section 5.3.3 (Bioretention Basins) of the <i>WSUD Technical Design Guidelines for South East Queensland</i>, including but not limited to the following: <ul style="list-style-type: none"> a) Detailed plan and cross sections, showing adequate provisions of maintenance access tracks; b) Submit MUSIC modelling, with sub-catchment plan, that is in accordance with the MUSIC Modelling Guidelines to reflect actual layout; and c) Submit Design checklist and summary • All computer modelling files employed for the stormwater design and assessment. • A maintenance plan prepared in accordance with <i>Maintaining Vegetated Stormwater Assets (Water by Design 2012)</i>, intended to be implemented during the defect liability period prior to asset transfer. 	<p>As part of the application for Operational Works or prior to Council approval of the Survey Plan, whichever is the sooner.</p>

<u>Water and Wastewater</u>	
21. Connect all lots to the existing reticulated sewerage and reticulated water systems. Submit to Council for approval an application for Operational Works showing the proposed works are in accordance with the SEQ Water Supply and Sewerage Design and Construction Code and the Redlands Planning Scheme Policy 9 – Infrastructure Works.	Prior to Council approval of the Survey Plan.
22. Remove any redundant sewerage connections within the site or servicing the development and provide documentary evidence to Council or its delegate that this has occurred.	Prior to Council approval of the Survey Plan.
<u>Excavation and Fill</u>	
23. Apply to Council and obtain Operational Works approval for earthworks and retaining structures associated with the reconfiguration. Design and construct all retaining structures in accordance with Australian Standard 4678-2002 (as amended) Earth-retaining Structures, in particular the minimum 60 year design life requirements. Retaining walls, including the footings, are to be fully contained within allotments of the subject site, with drainage discharging to the road drainage system. Where retaining walls exceed 1.5m in height, the retaining walls must be constructed of high quality materials and stepped or terraced 0.75m for every 1.5m in height and the step/terrace must incorporate landscaping. The stepped/terraced area must be located within the property boundary on the low side of the retaining wall to allow for maintenance and of a height that can be easily and safely accessed for this purpose. Permanent fencing must be installed on top of the highest wall and be a minimum height of 1.5m.	Prior to Council approval of the Survey Plan.
<u>Sediment and Erosion Control</u>	
24. Submit to Council and obtain Operational Works approval for details of all erosion and sediment control measures in accordance with the <i>Redlands Planning Scheme Policy 9 – Infrastructure Works, Chapter 4</i> and the Institute of Engineers' Erosion and Sediment Control Guidelines, including but not limited to: <ul style="list-style-type: none"> The measures must be staged with the works program to reflect the construction sequences; and Construction sequences the establishment of sediment basins and/or conversion to permanent bio-retention basin, as well as temporary protective measures, in accordance with <i>Construction and Establishment Guidelines for Bioretention Systems (Water by Design 2010)</i>. 	Prior to Council approval of the Survey Plan.
<u>Survey Control Information</u>	
25. Submit Survey Plan(s) that include connections to at least two separate corners from two RCC control marks with a valid Department of Natural Resources and Mines Order or RCC Accuracy. These must be shown on the face of the Survey Plan(s) within the Reference Mark or Permanent Survey Mark tables. List the mark number and coordinate in the cover letter.	As part of the request for compliance assessment of the Survey Plan.
26. Survey and present all asset infrastructure in accordance with the Redlands Planning Scheme Part 11 Policy 9 – Infrastructure Works. The horizontal datum for all work must be Redland City Council Coordinates (RCC) and the vertical datum must be Australian Height Datum (AHD).	As part of the request for compliance assessment of the Survey Plan.

<p>27. Supply a Permanent Survey Mark (PSM) Sketch with the Survey Plan for any new PSMs placed. Include the following on the PSM Sketch:</p> <ul style="list-style-type: none"> • the mark's AHD Reduced Level; • the datum origin mark number; and • the datum RL adopted. <p>Comply with the requirements of the <i>Survey and Mapping Infrastructure Act 2003</i>.</p>	<p>As part of the request for compliance assessment of the Survey Plan.</p>
<u>Environmental Management</u>	
<p>28. Revegetate the site at the rate calculated under the <i>Environmental Offsets Act 2014</i> for all non-juvenile koala habitat trees removed as a result of the development.</p>	<p>Prior to requesting an inspection for on-maintenance of the development.</p>
<p>29. Provide a plan illustrating where replanting of native vegetation will be undertaken in accordance with the proposal described in the Tree Retention and Rehabilitation Management Plans dated 05/01/2016, that is, appropriate rehabilitation to compensate for removal of at least 121 native trees. Include details of the mix of species proposed.</p>	<p>As part of the application for Operational Works.</p>
<u>Landscaping Works</u>	
<p>30. Submit a Landscape Plan, prepared in accordance with the Redlands Planning Scheme Policy 9 – Infrastructure Works Chapters 2, 10 and 11, to Council for Operational Works approval. Include the following items in addition to the requirements of the Policy:</p> <ol style="list-style-type: none"> a) Designs that are generally in accordance with the Landscape Master Plan & Design Intent Stage 1 dated 20 June 2016, prepared by Place Design Group. b) Details of street tree planting in accordance with the Landscape Code with species selected from Schedule 9 of the Redlands Planning Scheme, unless otherwise approved as part of the Operational Works approval. c) Details of treatment and embellishments to the recreation area of the open space. The standard of treatment must be consistent with the open space park treatment in Section 9.10.7 of Planning Scheme Policy 9, Chapter 10. d) Details of all rehabilitation planting to the open space area. e) Details of bollards provided along all roads that adjoin parkland, plus one metal slide rail in the vicinity of rehabilitation/park/bio-basin areas to allow access for maintenance vehicles. f) A plan showing the tree protection zones (TPZs) around any existing trees identified for retention. The TPZs must be determined in accordance with Australian Standard A.S.4970-2009 – Protection of Trees on Development Sites. 	<p>As part of the application for Operational Works.</p>
<p>31. Submit to Council and obtain Operational Works approval for an Arborist report in relation to trees within the park open space area that will be within public use/accessible areas prepared by a qualified Arborist who is a member of the Australian Arborist Association or equivalent professional organisation. The Arborist report must address the following:</p> <ul style="list-style-type: none"> • What impact the development proposal will have on the existing trees/vegetation; 	<p>Prior to Council approval of the Survey Plan.</p>

<ul style="list-style-type: none"> • Conclusions and recommendations which can be incorporated into the design and construction; • Any pruning to be in accordance with <i>Australian Standard AS4373:2007 "Pruning of Amenity Trees"</i>; • The tree assessment must be considered in accordance with <i>Australian Standard AS4970-2009 "Protection of Trees on Development Sites"</i>. 	
<p>32. Submit to Council and obtain Operational Works approval for a Parks Maintenance Plan (PMP) identifying how all landscaping will be maintained for the entire On-Maintenance period (minimum 12 months). The Plan must be prepared in accordance with the following work sections in the AUS-SPEC Urban and Open Spaces package:</p> <ul style="list-style-type: none"> • Classification No. TG401 – Guide to Parks and Recreation Areas Maintenance Management Model and Documentation; • Classification No. TG402 – Guide to Adapting Asset Delivery Documentation to Parks and Recreation Areas Maintenance; and • Classification No. 0164 – Parks and Recreation Area Management Plan. 	<p>Prior to Council approval of the Survey Plan.</p>
<p>33. Remove all weed species, as identified in Part B of Council's Pest Management Plan 2012-2016.</p>	<p>Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner.</p>

ADDITIONAL APPROVALS

The following further Development Permits and/or Compliance Permits are necessary to allow the development to be carried out.

- Operational Works approval is required for the following works as detailed in the conditions of this approval:
 - Bulk Earthworks, including retaining structures;
 - Stormwater Management;
 - Roadworks and drainage;
 - Water reticulation, including water network modelling;
 - Sewer reticulation;
 - Electrical reticulation;
 - Erosion and sediment control;
 - Landscaping; and
 - Environmental management (tree planting)
- Building works – demolition:
 - Provide evidence to Council that a Demolition Permit has been issued for structures that are required to be removed and/or demolished from the site in association with this development. Referral Agency Assessment through Redland City Council is required to undertake the removal works.

Further approvals, other than a Development Permit or Compliance Permit, are also required for your development. This includes, but is not limited to, the following:

- Capping of Sewer – for demolition of existing buildings on site.
- Road Opening Permit – for any works proposed within an existing road reserve.

REFERRAL AGENCY CONDITIONS

- Queensland Department of Infrastructure, Local Government and Planning (DILGP)
Refer to the attached correspondence from DILGP dated 1 September 2015 (DILGP reference SDA-0715-022429).

ASSESSMENT MANAGER ADVICE

- **Infrastructure Charges**
Infrastructure charges apply to the development in accordance with the State Planning Regulatory Provisions (adopted charges) levied by way of an Infrastructure Charges Notice. The infrastructure charges are contained in the attached Redland City Council Infrastructure Charges Notice.
 - **Live Connections**
Redland Water is responsible for all live water and wastewater connections. Contact *must* be made with Redland Water to arrange live works associated with the development.
Further information can be obtained from Redland Water on 07 3829 8999.
 - **Coastal Processes and Sea Level Rise**
Please be aware that development approvals issued by Redland City Council are based upon current lawful planning provisions which do not necessarily respond immediately to new and developing information on coastal processes and sea level rise. Independent advice about this issue should be sought.
 - **Hours of Construction**
Please be aware that you are required to comply with the *Environmental Protection Act* in regards to noise standards and hours of construction.
 - **Performance Bonding**
Security bonds may be required in accordance with the Redlands Planning Scheme Policy 3 Chapter 4 – Security Bonding. Bond amounts are determined as part of an Operational Works approvals and will be required to be paid prior to the pre-start meeting or the development works commencing, whichever is the sooner.
 - **Survey and As-constructed Information**
Upon request, the following information can be supplied by Council to assist survey and engineering consultants to meet the survey requirements:
 - a) A map detailing coordinated and/or levelled PSMs adjacent to the site.
 - b) A listing of Council (RCC) coordinates for some adjacent coordinated PSMs.
 - c) An extract from Department of Natural Resources and Mines SCDM database for each PSM.
 - d) Permanent Survey Mark sketch plan copies.

This information can be supplied without charge once Council received a signed declaration from the consultant agreeing to Council's terms and conditions in relation to the use of the supplied information.

Where specific areas within a lot are being set aside for a special purpose, such as building sites or environmental areas, these areas should be defined by covenants. Covenants are registered against the title as per Division 4A of the *Land Title Act 1994*.
 - **Services Installation**
It is recommended that where the installation of services and infrastructure will impact on the location of existing vegetation identified for retention, an experienced and qualified arborist that is a member of the Australian Arborist Association or equivalent
-

association, be commissioned to provide impact reports and on site supervision for these works.

- **Fire Ants**

Areas within Redland City have been identified as having an infestation of the Red Imported Fire Ant (RIFA). It is recommended that you seek advice from the Department of Agriculture, Fisheries and Forestry (DAFF) RIFA Movement Controls in regards to the movement of extracted or waste soil, retaining soil, turf, pot plants, plant material, baled hay/straw, mulch or green waste/fuel into, within and/or out of the City from a property inside a restricted area. Further information can be obtained from the DAFF website www.daff.qld.gov.au

- **Cultural Heritage**

Should any aboriginal, archaeological or historic sites, items or places be identified, located or exposed during the course or construction or operation of the development, the *Aboriginal and Cultural Heritage Act 2003* requires all activities to cease. For indigenous cultural heritage, contact the Department of Environment and Heritage Protection.

- **Fauna Protection**

It is recommended an accurate inspection of all potential wildlife habitats be undertaken prior to removal of any vegetation on site. Wildlife habitat includes trees (canopies and lower trunk) whether living or dead, other living vegetation, piles of discarded vegetation, boulders, disturbed ground surfaces, etc. It is recommended that you seek advice from the Queensland Parks and Wildlife Service if evidence of wildlife is found.

- **Environment Protection and Biodiversity Conservation Act**

Under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act* (the EPBC Act), a person must not take an action that is likely to have a significant impact on a matter of national environmental significance without Commonwealth approval. Please be aware that the listing of the Koala as **vulnerable** under this Act may affect your proposal. Penalties for taking such an action without approval are significant. If you think your proposal may have a significant impact on a matter of national environmental significance, or if you are unsure, please contact Environment Australia on 1800 803 772. Further information is available from Environment Australia's website at www.ea.gov.au/epbc

Please note that Commonwealth approval under the EPBC Act is independent of, and will not affect, your application to Council.

- **Release of Water Contaminants**

Please be aware that prescribed water contaminants must not be released to waters, a roadside gutter, stormwater drainage or into another place so that contaminants could reasonably be expected to move into these areas. Refer to the Environmental Protection Act 1994 for further information on the release of prescribed water contaminants.

SECTION 2 - PERMIT TO WHICH THE FOLLOWING CONDITIONS RELATE:**CONCURRENCE AGENCY REFERRAL – DWELLING HOUSES**

<u>CONCURRENCE AGENCY CONDITIONS</u>	<u>TIMING</u>
1. Comply with all conditions of this approval, at no cost to Council, at the timing periods specified in the right-hand column. Where the column indicates that the condition is an ongoing condition, that condition must be complied with for the life of the development.	
<u>Approved Plans and Documents</u>	
2. Undertake the development in accordance with the approved plans and documents referred to in Table 1, subject to the conditions of this approval and any notations by Council on the plans.	Prior to the use commencing and ongoing.

Plan/Document Title	Reference Number	Prepared By	Plan/Doc. Date
Plan of Development Stage Eight (as amended in red)	1114096_04 Revision A	Place Design Group	20.06.2016

Table 1: Approved Plans and Documents

3. The setback for dwelling houses on the approved lots must comply with the Plan of Development Stage Eight (as amended in red) prepared by Place Design Group and dated 20.06.2016.	Prior to the use commencing and ongoing.
4. The site cover for dwelling houses on the approved lots must comply with the Plan of Development Stage Eight (as amended in red) prepared by Place Design Group and dated 20.06.2016.	Prior to the use commencing and ongoing.
<u>Self-assessable Criteria</u>	
5. Comply with the following acceptable solutions applicable to self-assessable development: <ul style="list-style-type: none"> • Section 8.5.4 of the Development Near Underground Infrastructure Code • Section 7.4.4 of the Domestic Driveway Crossover Code • Section 8.6.4 of the Erosion Prevention and Sediment Control Code • Section 7.6.4 of the Excavation and Fill Code • Section 5.1.8 of the Acid Sulphate Soils Overlay Code. 	Prior to the use commencing and ongoing.

REASONS FOR CONDITIONS

In accordance with the *Sustainable Planning Act 2009* s289, conditions have been imposed to ensure the development complies with Performance Criteria P1, P2 and P3 of the Queensland Development Code and Specific Outcome S2 of the Dwelling House Code in the Redlands Planning Scheme.

CONCURRENCE AGENCY ADVICE

- **Other Approvals**
Please be aware that other approvals may be required for your development. This may include, but is not limited to, the following:
 - Building works.
 - Plumbing and drainage works.
 - Development over or near relevant infrastructure.

- **Hours of Construction**

Please be aware that you are required to comply with the *Environmental Protection Act* in regards to noise standards and hours of construction.

- **Live Connections**

Redland Water is responsible for all live water and wastewater connections. Contact *must* be made with Redland Water to arrange live works associated with the development.

Further information can be obtained from Redland Water on 07 3829 8999.

- **Coastal Processes and Sea Level Rise**

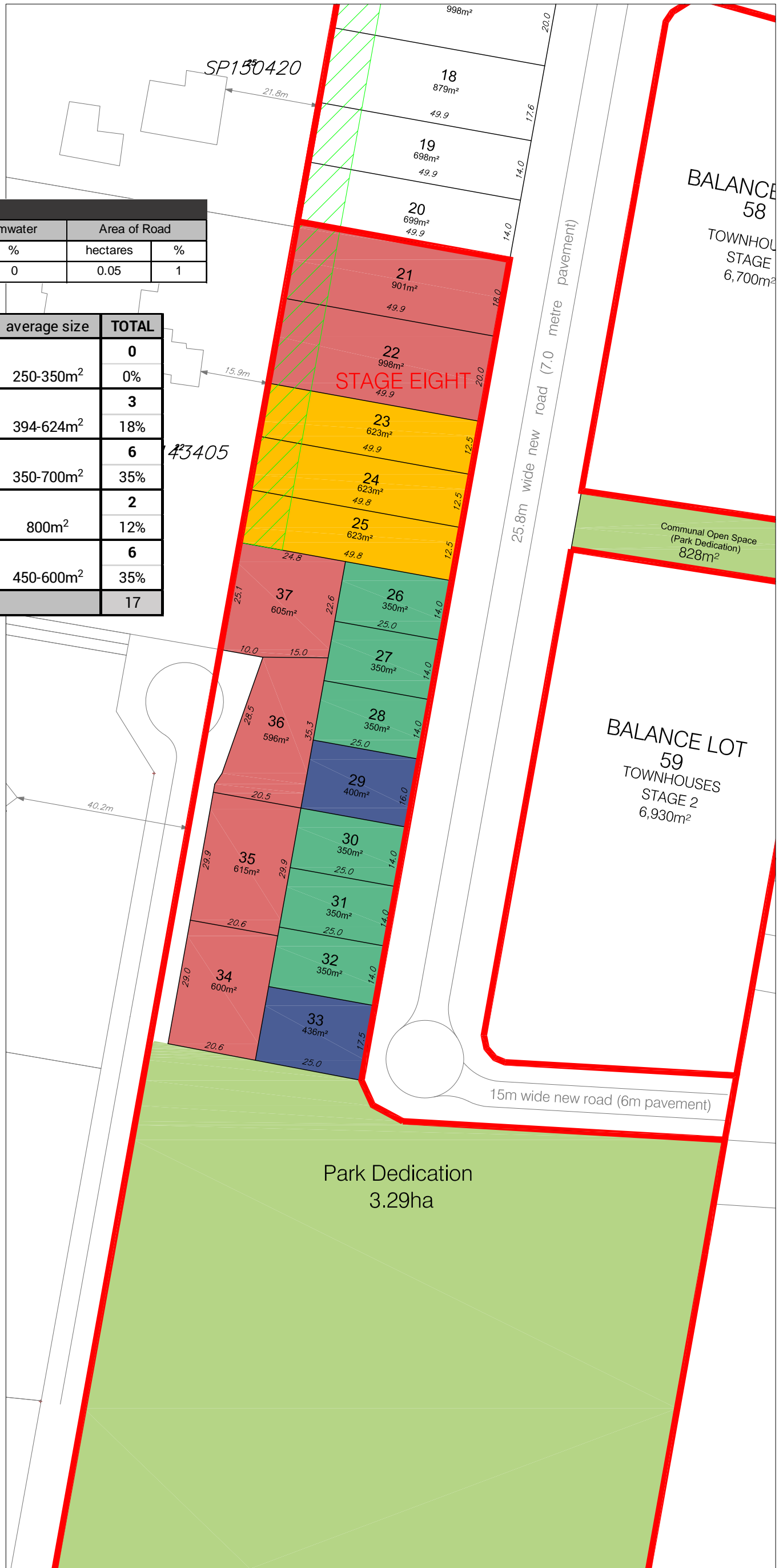
Please be aware that approvals issued by Redland City Council are based upon current lawful planning provisions which do not necessarily respond immediately to new and developing information on coastal processes and sea level rise. Independent advice about this issue should be sought.

LEGEND

- SUBJECT SITE
- PARK
- 10M WIDE LANDSCAPE BUFFER ADJACENT RURAL RESIDENTIAL LOTS

DEVELOPMENT STATISTICS (STAGE 8)									
TOTAL AREA	Area of Lots		Area of Park		Area of Stormwater		Area of Road		
hectares	hectares	%	hectares	%	hectares	%	hectares	%	
4.25	0.91	22	3.29	77	0.00	0	0.05	1	

YIELD AND MIX (STAGE 8)		average width	average depth	average size	TOTAL
	Villa	10m	25-32m	250-350m ²	0
	Premium Villa	12.5m	32-50m	394-624m ²	3
	Courtyard	14m	25-50m	350-700m ²	6
	Premium Courtyard	16m	32m-50m	800m ²	2
	Traditional	18m	25m-32m	450-600m ²	6
TOTAL LOTS				17	



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NOT FOR CONSTRUCTION



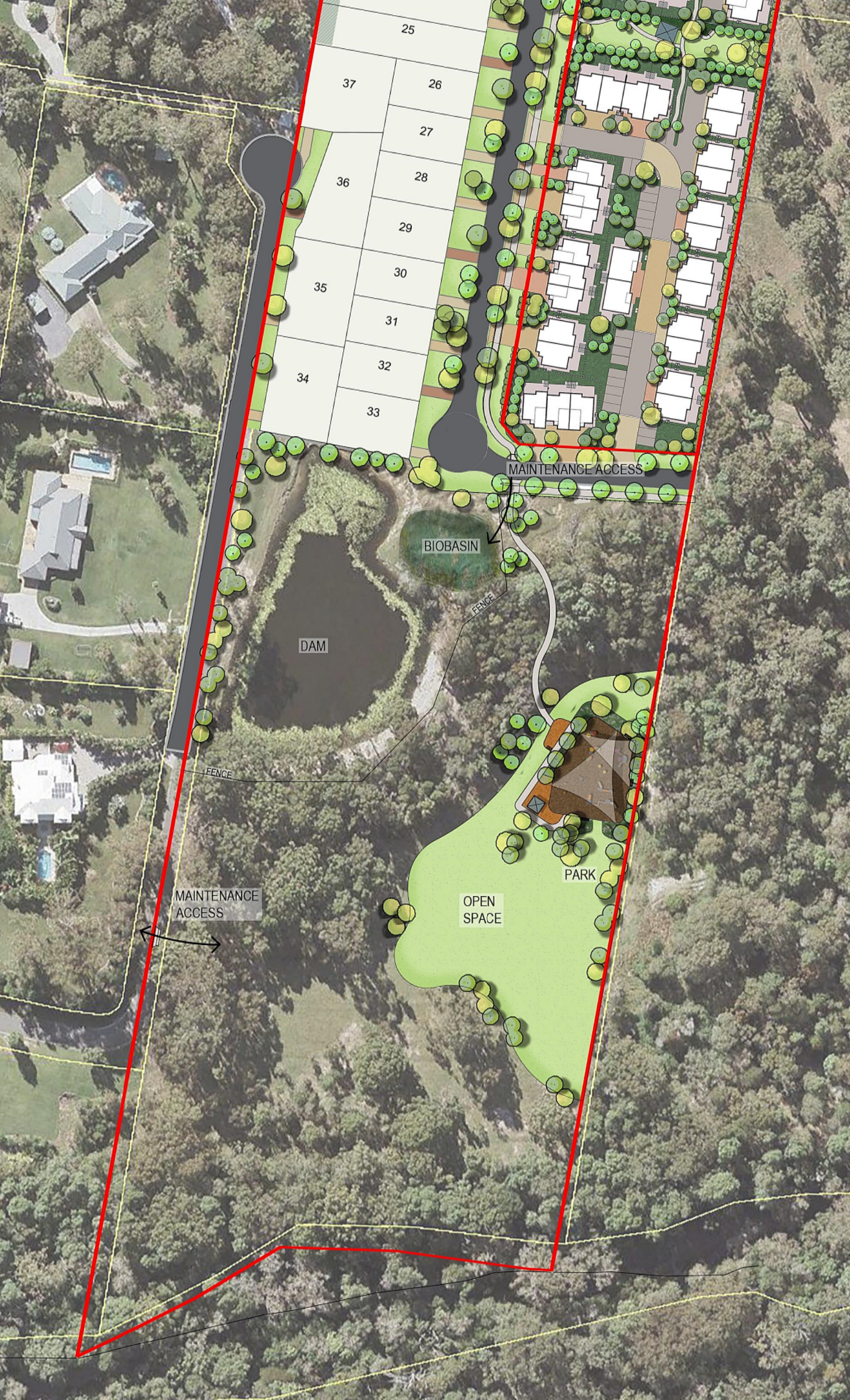
DRAWING TITLE
ROL PLAN
Esperance Stage 8 for Shiacove Pty Ltd
DRAWING NO. 1114096_03 **DATE : 20.06.2016**

REVISION: A **SCALE: 1:1000@A3**

R:\Logo\Logo - Revised\Place_Logo_Final.jpg

ATTACHMENT 2 – AERIAL PHOTO OF DAM





25

37

26

27

36

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31

34

32

33

MAINTENANCE ACCESS

BIOBASIN

FENCE

DAM

FENCE

PARK

MAINTENANCE ACCESS

OPEN SPACE

LEGEND

- Subject Site
- Park
- Stormwater
- Recommended Built to Boundary
- Optional Built to Boundary
- Indicative driveway location
- Building Envelope
- Indicative Private Open Space

This built to boundary wall is not approved

Parking:

- Minimum off street requirements are 2 spaces per dwelling, which may be in tandem, with a minimum of one space in front of a garage or carport.
- Off street parking space to be provided in the form of a carport or garage.
- Parking spaces on driveways do not have to comply with gradients in AS2890.

Site Cover:

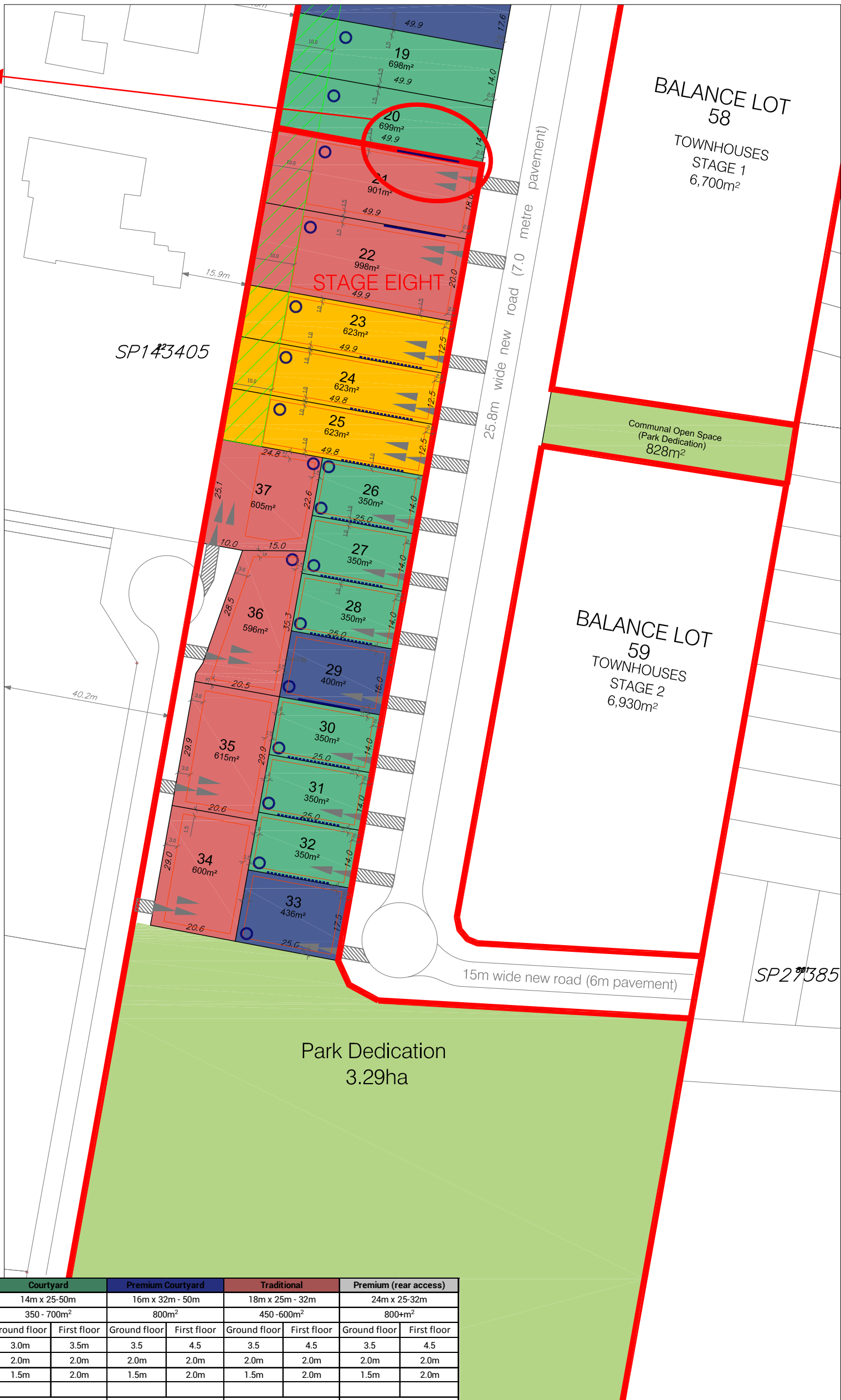
- Site cover for each dwelling is specific to the allotment type and shown in the site setback table (Floor area definition as per QDC MP1.1).

Private Open Space:

- Private open space criteria is detailed in the Site Setback Table.
- The space can be made up from areas in two locations providing 30% of the area specified in the table and is to be accessed from the main living area.

Fencing:

- Fencing on all primary street frontages to be either 50% transparent or not to exceed 1.2m in height.
- Where private open space is provided within the front or secondary setback, the fence can be up to 1.8m in height and 20% transparent for at least 60% of the boundary with the remaining fencing at 1.5m high and 20% transparent.
- Acoustic fencing to be installed as per the Environmental Noise Assessment Report.



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NOT FOR CONSTRUCTION

	Villa		Premium Villa		Courtyard		Premium Courtyard		Traditional		Premium (rear access)	
Typical Lot dimensions	10m x 25-32m		12.5m x 25-50m		14m x 25-50m		16m x 32m - 50m		18m x 25m - 32m		24m x 25-32m	
	250 - 350m ²		300 - 650m ²		350 - 700m ²		800m ²		450 - 600m ²		800+m ²	
setback location	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor
front	3.0m	3.0m	3.0m	3.5m	3.0m	3.5m	3.5	4.5	3.5	4.5	3.5	4.5
front (lots on boulevard rd)	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m
rear	.75m	1.0m	1.0m	1.5m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m
side boundary												
	Recommended		Recommended		Recommended		Optional		Optional		Optional	
Built to boundary	0.0 - 0.2m	0.9m	0.0 - 0.2m	1.0m	0.0 - 0.2m	1.5m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m
Non built to boundary	0.75m	0.9m	1.0m	1.0m	1.0m	1.5m	1.2m	2.0m	1.5m	2.0m	1.5m	2.0m
Corner lots- secondary road frontage*	1.2m	1.5m	1.5m	1.5m	2.0m	2.0m	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m
Site Cover	162.5m ² -327.5m ² (65%)		180m ² -390m ² (60%)		152.5m ² -385m ² (55%)		440m ² (55%)		247.5m ² -330m ² (55%)		440m ² (55%)	
Open Space	Min area = 50sqm		Min area 70sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm	
Number of Bedrooms	3		min. 3		min. 3		min. 3		min. 3		min. 3	
On site Parking	2		2		3		3		3		3	
Garage door Setback	5.4m		5.4m		5.4m		5.4m		5.4m		5.4m	

*Concession for open structures supporting post/pier can be located 1.0m from secondary road frontage



DRAWING TITLE

**PLAN OF DEVELOPMENT_STAGE EIGHT
Esperance Stages 7 & 8 for Shiacove Pty Ltd**

DRAWING NO. 1114096_04

DATE : 20.06.2016

REVISION: A

SCALE: 1:1000@A3

**11.3.8 ROL005951 – ROL 1 INTO 35 LOTS AND 3 BALANCE LOTS AT 399 – 413
BOUNDARY ROAD, THORNLANDS**

Objective Reference: **A124442**
Reports and Attachments (Archives)

Attachments: [ROL Plan Stage 7](#)
[Aerial Photo](#)
[Plan of Development Stage 7](#)

Authorising Officer:



Louise Rusan
**General Manager, Community and Customer
Service**

Responsible Officer:

David Jeanes
Group Manager, City Planning and Assessment

Report Author:

Emma Martin
Acting Senior Planner, Planning Assessment

PURPOSE

Council has received an application seeking a Development Permit for Reconfiguring a Lot on land at 399-413 Boundary Road, Thornlands for the purpose of a 1 into 36 lots subdivision with 3 balance lots. During the course of the assessment alterations to the layout reduced the number of proposed residential lots to 35.

The application has been assessed against the relevant provisions of the Redlands Planning Scheme and the proposed development is considered to conflict with parts of the scheme. The key areas of conflict identified in the assessment are:

- Type of development – The Redlands Planning Scheme intends for part of the subject site to deliver a higher density form of development, such as multiple dwellings, apartment buildings and/or aged care and special needs housing (the area zoned Urban Residential, sub-area 1 or UR1).

Although the proposed use does not comply with the intent of the site's zoning, it is considered there are sufficient grounds to justify the decision despite the conflict.

It is therefore recommended that the application be granted a Development Permit subject to conditions.

BACKGROUND

The development application was properly made on 30 June 2016. The original application was for 36 lots and 3 balance lots. In response to matters raised by Council officers, councillors and the community the proposed development was amended to reduce the number of lots adjoining Park Residential zoned lots. The proposal now comprises 35 lots and 3 balance lots.

The applicant responded to Council's request for further information on 18 July 2016 and amended the proposal as part of the response. The change was considered to meet the minor change test under s.350 of the *Sustainable Planning Act 2009* and was accepted as a change to the application under s.351 and s.353 of the Act.

Planning History

The site has been the subject of previous development applications that are relevant to the consideration of this application:

- An application for Operational Works approval to drain and fill the existing dam was approved in September 2002. This approval has since lapsed.
- A combined application, being a Material Change of Use to rezone the lot to Park Residential and Reconfiguring a Lot for 14 lots. The application was initially granted Preliminary Approval at the 9 March 2004 meeting of the Development Assessment Committee, with a Development Permit granted at the 26 October 2004 meeting of the Committee following the lodgement of a Negotiated Decision request. This approval has since lapsed.

ISSUES

Development Proposal & Site Description

Proposal

Reconfiguring a Lot

The proposal is for stage 7 of the Esperance development by Ausbuild, located within the South East Thornlands Structure Plan (SETSP) area and is a Reconfiguring a Lot application for one (1) into 35 lots and 3 balance lots that will result in the creation of:

Lot type	Lot size range	Approximate lot dimensions	Number of lots
Premium (Internal lots)	888m ² - 942m ²	Internal measurement: 20m-30m X 30m depth	4
Premium Courtyard	449m ² and 879m ²	16 – 18m frontage 30 - 50m depth	2
Traditional	468m ² – 998m ²	19 - 21m frontage 25 - 50m depth	4
Courtyard	350m ² - 743m ²	14m – 16m frontage 25 - 50m depth	13
Premium Villa	400m ² - 689m ²	12.5m frontage 32 - 50m depth	8
Villa	350m ² - 462m ²	10m frontage 35 m depth	4
Balance Lot 57	42,580m ²	N/A	1
Balance Lot 58	6,700m ²	N/A	1
Balance Lot 59	6,930m ²	N/A	1

The ROL Plan detailing the layout is appended to the report at **Attachment 1**.

Each lot has access to a public road. The proposed subdivision layout provides a mix of lot types and frontage widths dispersed throughout the development site to provide visual interest and variety of streetscape. The subdivision includes dedication of land for road reserve, drainage and acoustic buffer purposes.

The three balance lots are the subject of two separate applications. ROL005950 has been lodged over balance lot 57 and proposes a reconfiguration to create a further 17 residential lots and park (stage 8 of the Esperance development). The final two balance lots (58 and 59) are subject to development application MCU013526 for Multiple Dwellings x 59 (comprising 30 and 29 units respectively).

Access to the subject site is via Boundary Road (State controlled road), with internal vehicular connections to the east at Affinity Way and Marcoola Street (both within the Villaworld Affinity development site) and to the west at Lungren Drive. The main access road will be a boulevard style road that runs north-south with wide vegetated verges. Pedestrian movement between the site and public areas has been provided for, with pedestrian links to Boundary Road along the boulevard spine road and also south toward the proposed esplanade road adjoining the park at the southern part of stage 8. This will connect the development to the wider off-road pedestrian/cycle network, including a planned pedestrian and cycle bridge across Erapah Creek, being delivered as part of the Affinity development to the east, which provides off-road access to the Victoria Point major centre.

Bulk Concurrence Agency Referral – Dwelling House

The application also comprises a bulk concurrence agency referral component, which seeks approval of a Plan of Development for each stage. Where the future dwellings comply with the requirements of the Plan of Development (POD) table, no further concurrence agency referral will be needed to obtain a building approval. Where future dwellings do not comply with the POD, the Redlands Planning Scheme requirements will prevail (or the Queensland Development Code where the scheme does not regulate dwelling houses). The POD includes requirements for future dwelling houses including site coverage, setbacks, built to boundary walls, open space, car parking provision and number of bedrooms, with different limits for each lot type.

Changes to the application

In accordance with section 351 of the *Sustainable Planning Act 2009* (SPA) and following a request for further information by officers, the applicant notified Council on 18 July 2016 of a number of minor changes to all three applications. These changes were:

- Reduction in the total number of proposed residential lots from thirty-six (36) to thirty-five (35) for Esperance stage 7 (ROL005951) and twenty (20) to seventeen (17) lots for Esperance stage 8 (ROL005950);
- Variations to the size of the proposed lots along the western boundary of the proposal and the introduction of a 10m wide landscape strip and rear setback to those lots in response to a visual impact assessment of that boundary (this is discussed in more detail under the relevant heading in this report);
- Removal of the proposed vehicular access to Luke Street in response to concerns raised by local residents; and
- Removal of all proposed lots less than 350m².

The above changes are considered to be a 'minor change' in accordance with section 350 of the SPA and as such the changes are considered to have no effect on the IDAS process (section 353).

The State Assessment Referral Agency was notified of the change and had no further comments.

Site & Locality

The subject site is located within the southernmost portion of the South East Thornlands Structure Plan (SETSP) area and is bounded to the north by Boundary Road and to the south by Eprapah Creek. To the east is the Villaworld development (Affinity) and to the west is an established Park Residential zoned community. The site extends to some 9.79ha, however the developable component comprises less than 5ha, with over 3ha to be dedicated as park (as part of stage 8 / ROL005950) and the rest dedicated for road reserve and drainage.

An aerial view of the site is appended to this report at **Attachment 2**.

The site is part of the wider SETSP area, which has been incorporated into the Redlands Planning Scheme to accommodate a significant portion of the expected future population growth within Redland City. The part of the site zoned for development is predominately clear of vegetation, with a cluster of mature eucalypts located at the centre of the site that will be cleared as part of the proposed development. The current use of the site is for a single dwelling unit with associated outbuildings and a large dam to the rear of the property, however it was until fairly recently utilised as a cattle farm. All existing structures will be removed from the development site prior to construction. There is an existing easement (Easement A on SP150427) for stormwater drainage, a condition is proposed that it is extinguished once the formal stormwater facilities are constructed.

Application Assessment

Sustainable Planning Act 2009

The application has been made in accordance with the *Sustainable Planning Act 2009* Chapter 6 – Integrated Development Assessment System (IDAS) and constitutes an application for Reconfiguring a Lot under the Redlands Planning Scheme.

SEQ Regional Plan 2009-2031

The site is located within the Urban Footprint in the SEQ Regional Plan 2009-2031.

State Planning Policies & Regulatory Provisions

State Planning Policy / Regulatory Provision	Applicability to Application
SEQ Koala Conservation SPRP	<p>The site is located within an assessable area under the SEQ Koala Conservation SPRP and is within a Koala Broad-Hectare Area. Division 3 of the SPRP applies. The developable part of the site is designated as Medium Value Rehabilitation, with the open space toward the rear of the site split between Low Value Rehabilitation, Medium Value Bushland and Low Value Bushland.</p> <p>Division 3 requires the development design to incorporate movement corridors and food species for koalas. There are no direct requirements for replanting. Schedule 2 acknowledges constraints from development such as subdivision design and its associated infrastructure and edge effects. The proposed layout does not obstruct fauna movement itself, and it is recognised that any residential subdivision will have some level of impact on koala movement. The SPRP requirements are considered to be met through the provision of movement corridors via street tree planting (in particular along the boulevard road, which benefits from extra</p>

State Planning Policy / Regulatory Provision	Applicability to Application
	<p>wide verges) and the buffer planting to the site frontage. It is not considered appropriate for koala food trees to be planted in these areas as it would attract koalas to the area which could put them at risk of attack from domestic animals and being struck by vehicles. The species for planting will be determined as part of the Operational Works stage of the development.</p> <p>A more appropriate location to encourage comprehensive planting of koala habitat and food trees is the Open Space zoned land at the rear of the site (to be dedicated as park as part of ROL005950). This part of the site will provide the most effective and valuable corridor for fauna movement along Erapah Creek. This is also the intended location of a wildlife corridor for fauna movement under the SETSP overlay code.</p> <p>Although it is noted above that the applicable division of the SPRP does not require replanting, the <i>Environmental Offsets Act 2014</i> (EO Act) provides Council with the jurisdiction to require environmental offsets to counterbalance a significant residual impact to a prescribed environmental matter. Relevantly, non-juvenile koala habitat trees located within an area identified as bushland habitat, high value rehabilitation or medium value rehabilitation in the SPRP is a prescribed environmental matter for this purpose. A significant residual impact is the impact of development after any on-site rehabilitation.</p> <p>On this basis it is considered appropriate to impose conditions that ensure any non-juvenile koala habitat trees removed from the site are either replaced on site (completely or partially) at the rate required by the EO Act (referenced above), with any unmet replanting requirements addressed with an environmental offset (an environmental offset relates to offsite revegetation or a financial contribution in lieu of planting). The replanting rate required by the EO Act is three (3) trees for every non-juvenile koala habitat tree removed.</p>
SPRP (Adopted Charges)	<p>The development is subject to infrastructure charges in accordance with the SPRP (adopted charges) and Council's adopted resolution. Details of the charges applicable have been provided under the Infrastructure Charges heading of this report.</p>
State Planning Policy April 2016	<p>The site is mapped as having the following State designations:</p> <ul style="list-style-type: none"> k) KOALA BUSHLAND l) REGULATED VEGETATION – Wetland m) HIGH ECOLOGICAL SIGNIFICANCE - Wetland n) NATURAL HAZARDS, RISK & RESILIENCE – Potential bushfire impact buffer and medium bushfire hazard area o) WATER QUALITY - Climatic regions – stormwater management design <p>No development is proposed in the parts of the subject site affected by designations a) – d).</p> <p>In relation to e) the submitted Stormwater Management Plan adequately demonstrates that the SPP requirements in relation to water quality have been met. Conditions have been included to approve the development generally in accordance with these plans and subject to detailed designs that require Operational Works approval.</p>

Redlands Planning Scheme

The application has been assessed under the Redlands Planning Scheme version 7.

The application is subject to code assessment and the following codes are applicable to the assessment:

- Urban Residential Zone code
- Medium Density Residential Zone code
- Open Space Zone code
- Community Purpose Zone code
- Acid Sulfate Soils Overlay code
- Flood Prone, Storm Tide and Drainage Constrained Land Overlay code
- Habitat Protection Overlay code
- Landslide Hazard Overlay code
- Road and Rail Noise Impacts Overlay code
- South-East Thornlands Structure Plan Overlay code
- Waterways, Wetlands and Moreton Bay Overlay code
- Reconfiguration code
- Development Near Underground Infrastructure code
- Excavation and Fill code
- Infrastructure Works code
- Stormwater Management code

The development complies with some of the codes and conflicts with others. Where the proposal conflicts with a code, it is considered that sufficient planning grounds have been established to justify approval of the development. The pertinent issues in the assessment are discussed below.

Reconfiguring a Lot

Type of Development and Density

The proposed lots on the western side of the boulevard road are contained within the Urban Residential Zone, with the lots proposed on the eastern side contained within Urban Residential Zone Sub-Area 1. The proposal is for a standard format plan reconfiguration with the likely future use to be 1-2 storey detached dwellings. Lot sizes on this part of the subject site range from 350m² - 998m².

Within the area zoned Urban Residential this range is considered to comply with the specific outcomes and/or the overall outcomes of the UR Zone code as it provides for low-rise detached housing on individual lots of various sizes, provides for housing choice and affordability, and also addresses the impact to amenity on Park Residential lots to the west. It is noted that the proposed lot sizes and dimensions adjoining Park Residential zoned land do not comply with specific outcome S3.3 of the South East Thornlands Structure Plan (SETSP) Overlay code. Notwithstanding this, it is considered that the proposal satisfies the overall outcomes of the code and does not therefore constitute a conflict with the scheme. This matter and the impact on the amenity of existing residents is discussed separately under the relevant heading in this report.

Within the area zoned UR1 along the eastern boundary of the subject site the lot sizes range from 350m² - 942m². The larger lots in this range relate to four (4) internal lots that are between 888m² - 942m². The remaining lots in this area range in size from 350m² - 489m².

The specific outcomes and overall outcomes relating to the UR1 sub-area and sub-precinct 2a in the SETSP overlay code however indicate a clear intent for the area to be developed with mid-rise buildings, with less compact forms of housing excluded. Instead encouraging the provision of a range of residential uses including multiple dwellings, aged persons/special needs housing and apartment buildings. The relevant overall outcomes of these codes indicate that residential uses should:

- Provide a mix of housing densities and dwelling types that offer housing choice and affordability;
- Deliver a density of development that makes efficient use of scarce developable land;
- Utilise land efficiently through provision of a range of lot sizes and infill development that respects existing streetscapes; and
- In sub-area UR1/sub-precinct 2a:
 - Provide an increased range of residential uses to include aged persons and special needs housing and multiple dwellings such as town houses, villas and terraced housing;
 - Provide a transition from mid-rise medium density residential to urban residential housing forms; and
 - Be within walking distance or adjacent to local and district parkland, or the Mixed Use – Local Centre Precinct or Victoria Point Major Centre.

It is also noted that the proposal does not meet specific outcome S2.3 of the Reconfiguration Code, which states that in Urban Residential sub-area UR1 lots are of a size and width that:

- Achieve a density of development anticipated in these zones and meets expected population growth;
- Facilitates the range of housing types anticipated in these zones, such as aged persons and special needs housing and multiple dwellings, among others;
- Encourages amalgamation rather than reconfiguration in these zones.

The part of the proposed development to the east of the boulevard road, zoned UR1, does not therefore comply with the overall and specific outcomes given it proposes 15 individual freehold lots over part of the site where the scheme encourages 19 multiple dwellings/aged care units. This raises two key issues of conflict, firstly the density of development proposed and secondly the type of development. Despite the conflict with the overall outcomes it is considered that there are sufficient grounds to support the development despite the conflict considering:

- The overall mix of development to be delivered on the subject site and the wider SETSP area. The development of the whole site provides a variety of development types with small, medium and large lot housing as well as townhouse development. This will create a diverse mix of housing meeting a wide variety of community needs, producing a mixed and vital neighbourhood, whilst maximising the use of developable land in sustainable locations. Further a large number of townhouse developments have already been approved within the SETSP area and a considerable number are still anticipated across Boundary Road (at the corner of Redland Bay Road and Boundary Road). This proposal provides for a further diversity of housing product to that already on offer within the SETSP area.

The table below clarifies the difference between what is proposed on the subject site (across all three development applications) and what the RPS identifies as probable solutions. It is important that the table is considered concurrently with the assessment reports for those development applications and the other parts of this report (e.g. *Adjoining Park Residential Lots*), which consider the opportunities and constraints of the various parts of the subject land in more detail. It demonstrates that despite variations to what was intended by the RPS the overall balance of development is not substantially different to that intended with 10 dwelling units more than compliance with the probable solutions would deliver.

Development Stage	Application Number	Zone / SETSP precinct	Probable Solution	Proposal	Difference (dwelling units)
7	ROL005951	UR1 Sub-precinct 2a	19 townhouses	15 lots	- 4
7	ROL005951	UR	13 lots	20 lots	+ 7
8	ROL005950	UR	17 lots	17 lots	-
Townhouse 1 Balance Lot 58	MCU013526	UR1 Sub-precinct 2a	17 townhouses	30 townhouses	+ 13
Townhouse 2 Balance Lot 59	MCU013526	MDR4 Sub-precinct 3a	35 apartments	29 townhouses	- 6
TOTAL			101	111	+10
Attached Units/Townhouses					-12
Freehold Lots					+22

This is based on approximately 6,930m² of land zoned MDR sub-area 4, 14,555m² of land zoned UR1 and 22,286m² of land zoned UR (these calculations are based on useable land, excluding land for drainage and road). MDR land has been calculated at 1 dwelling unit per 200m², UR1 land at 1 dwelling unit per 400m² and UR land at 1 dwelling per 1200m² where adjoining park residential lots and 1 per 350m² thereafter. It is noted that the Redlands Planning Scheme prescribes a rate of 12-15 dwellings per hectare for the UR zone, however given this accounts for undevelopable parts of the land (e.g. road) and this has already been accounted for, it is considered appropriate to use the minimum lot size for the purposes of this calculation. It should also be noted that the density intended for MDR4 is actually to be determined by setbacks, site cover and an increased height limit (4 storeys). The density of the MDR4 component would likely be well above 1/200m² and would therefore mean that the proposed development was not above that anticipated by the scheme.

- In relation to the type of development being delivered, it is important to consider the topographical features of this area of the site, as well as the existing development to the east. Significant retaining structures are required that range up to approximately 2.7m. It is considered that the proposed development is better able to mitigate the impact of these structures on future residents, by incorporating them into the larger internal lots. For example, if this area of the site was to be developed for a townhouse development consistent with the expectations of the RPS, a significant portion of the site would be used for communal open space, visitor car parking and an internal driveway. This would most likely push townhouses closer to the retaining walls, which could affect the level of natural light and ventilation to those units. Alternatively the developer

could choose an increased level of fill on the site to limit the height of those structures and reduce the impact to the dwelling units, however this is likely to increase retaining walls elsewhere (likely visible from the public realm), would limit the efficacy of the acoustic barrier along Boundary Road and would also significantly increase the development costs, which would no doubt be passed on to future purchasers. It is considered that the proposed development will achieve a superior outcome in this regard.

In summary, it is considered that there are sufficient planning grounds to justify the conflict with the overall outcomes of the UR Zone and SETSP Overlay codes. The degree of conflict with the RPS, when considered in the context of all three development applications over the site is considered to be low-moderate. The proposed reconfiguration is considered to facilitate the creation of residential lots that will satisfy population growth and meet the diverse and changing needs of the community, whilst ensuring the development is suited to the landscape setting. These matters are considered sufficient to outweigh the level of conflict with the RPS.

Adjoining Park Residential zoned lots

Specific outcome S3.3 of the SETSP overlay code requires development to be designed and located to protect the amenity of dwelling houses on existing lots included in the Park Residential Zone by:

- Requiring reconfiguration of land directly adjoining the Park Residential Zone to achieve a minimum site area of 1200m² and a frontage of 25m.
- Restricting the establishment of dual occupancies and multiple dwellings on newly created lots which directly adjoin existing Park Residential zoned lots.

The proposal as originally lodged included 13 lots ranging from 475m² to 799m², with frontages between 10m and 16m and depths of 35m – 50m. This was not considered to comply with the abovementioned specific outcome. The relevant overall outcomes of the UR zone code and SETSP code indicate that development should:

- Be predominantly low-rise detached houses on individual lots of various sizes;
- Achieve a density of 12-15 dwellings/ha with a low-rise building form;
- Deliver a density of development that makes efficient use of scarce developable land; and
- Achieve a high standard of amenity by:
 - having access to natural light and ventilation, privacy and private open space commensurate with the use; and
 - mitigating potential conflicts and impacts between new residential uses and existing dwelling houses on Park Residential zoned land adjoining the structure plan area.

The applicant lodged an amended proposal on 18 July 2016. The amended layout comprises 14 lots adjoining the existing Park Residential zoned lots to the west of the subject site, ranging in size from 624m² - 998m², with frontages between 10m for Lot 1 to 20m at Lot 17. It should be noted that although proposed Lot 1 comprises a 10m frontage, it is an irregular shaped lot with an area of 689m² and an average width of 19.5m. To inform the changes necessary to address the overall outcomes the applicant undertook a rural residential interface assessment of the western boundary to determine the site specific context, considering topographical features, existing vegetation, the siting of domestic outbuildings on the adjoining properties, the

proximity of the existing dwellings and the siting of their private outdoor amenity areas. In undertaking this assessment the applicant identified the areas along the boundary that are most sensitive to amenity impacts from future development of the subject land. This has been reflected in the updated lot design, with larger lots proposed in flatter more exposed areas along the boundary and smaller lots in areas where vegetation, buildings and the ground levels create natural buffers to the proposal. In addition to this the applicant has proposed to include development envelopes on these lots to prevent built development being located within 10m of the adjoining boundary on all but 2 blocks (lots 1 and 6 – both of which adjoin the Park Residential lots along their side boundary instead of the rear), with screening vegetation to be conditioned within that buffer (located at the rear of the proposed lots).

Building/Development Envelopes

Unlike covenants, development envelopes are not registered on the property title and as such it will be necessary to apply a condition requiring compliance with the development envelopes and specifying a minimum 10m setback to the western boundary of proposed lots 9 – 20. Fencing and garden sheds requiring only minor building works (i.e. less than 10m²) are recommended as exceptions to this requirement. It will be necessary to ensure the development envelopes are recorded on Council's red-e-map system, so they are easily discoverable to potential purchasers and building certifiers. Any future residents wishing to undertake development (other than the exceptions listed above) within this setback would need to seek an amendment to the approval. The *Sustainable Planning Act 2009* states that a permissible change must not result in substantially different development. Statutory Guideline 06/09 '*Substantially different development when changing applications and approval*' identifies a number of scenarios that may be considered to result in substantially different development, including the removal of an incentive or offset that would have balanced a negative impact of the development. It is considered that the conditioned building envelopes are an offset that address the potential impact of the proposed development on the amenity of adjoining residents. It is not therefore considered likely that a request to amend the approval to facilitate development within this setback could be supported. However, should circumstances change in the future that negate the need for the building envelopes, for example if there were a change of zoning to the Park Residential land and/or an approved development/subdivision of the adjoining Park Residential zoned land that increased the density of that development (and therefore reduced the impact of the development of the subject site), a permissible change to the approval to remove a building envelope may be supported. This approach is a considerably more affordable and simple process for future homeowners than the process required to remove a covenant from the title (which could also be supported where circumstances had changed and the envelopes were no longer required). It is considered that this approach gives sufficient certainty and that a covenant need not be sought. Notwithstanding this, if Council disagree and wish to ensure more certainty, it could resolve to apply a condition that requires the registration of a covenant on the affected lots to ensure the setback remain free of buildings and structures. Although it is still recommended that exceptions be made for fencing and small garden sheds not exceeding an area of 10m² and deemed to be minor buildings works.

It is considered that with the recommended condition to comply with the building envelope and the maintenance of a 10m setback to the western boundary for the lots mentioned above, the amended layout complies with the overall outcomes of the

SETSP Overlay code mitigating the potential amenity impacts of the proposed development, whilst also addressing the conflicting intent of the overall outcomes of the UR Zone code, which seek to maximise the efficient use of land.

Movement Network

Two areas within the subject site are zoned Community Purpose in order to secure the delivery of specific road connections in accordance with the SETSP intent. The first is to ensure connectivity to the adjoining land to the west via Lungren Drive. The second is detailed in specific outcome S2.4 of the SETSP overlay code, which clarifies that its purpose is to ensure the delivery of a boulevard road with a minimum width of 25m incorporating a substantial median and verges to achieve a high quality landscaped pedestrian link between Boundary Road and the Eprapah Creek corridor.

The proposed boulevard road extends approximately 465m from the intersection with Boundary Road to the Open Space zoned part of the site to the south. It includes a 3.5m wide vegetated median for the first 40m at the site entrance from Boundary Road. The verge adjoining this part of the road ranges from 3m at its narrowest to 7.5m at its widest. The reason for these variances is the alignment required at the intersection with Boundary Road. The median does not extend for the entire length of the boulevard road, it is however noted that the road reserve maintains a 25m width for its entirety and where the median ends (at the intersection with the Lungren Drive extension) the road verges increase to 9m on each side of the road.

The specific outcome does not specify that the median must extend for the length of the road. The road design provides for an attractive landscaped streetscape and high quality green pedestrian link, and incorporates substantial landscaped verges and a median. Further, it is considered that the proposed layout will achieve improved accessibility for future residents accessing and egressing from the lots along the boulevard road as well as legibility and safety for pedestrians wishing to cross the road. It is therefore considered that the design of the CP zoned roads complies with the requirements of the SETSP Overlay.

Stormwater

The proposed development is contained within a catchment where a regional stormwater solution (quantity and quality) in the form of a wetland, on the opposite side of Boundary Road, has been planned for within Council's Priority Infrastructure Plan (PIP). The proposed development however comprises an onsite permanent stormwater solution in the form of two stormwater basins at the Boundary Road frontage.

The applicant has argued that the proposed stormwater solution will reduce both Council's ongoing infrastructure expenditure and the developer's construction overheads. They argue that the proposal will reduce Council's initial establishment costs associated with the wetland (due to the reduced size of the wetland) and will negate the need for Council to upgrade the Boundary Road stormwater culverts. They also put forward that although the cost of maintenance per square metre is less for a regional wetland the larger size of the wetland actually nullifies this saving and results in a higher cost overall.

By accepting the proposed bio-basins as a permanent stormwater solution, it is also noted this will decrease the required size of the regional wetland. Council's Engineering Assessment team and Infrastructure Planning & Charging Unit have reviewed the representations made and following consultation with Council's City Infrastructure Group (responsible for the maintenance of this infrastructure) are

satisfied that the wetland remains viable and agree that the alternative solution ensures the same standard of service is maintained albeit through the provision of different infrastructure to that envisaged by the PIP and does not result in an increased service cost for Council.

The applicant has provided further reassurance of the cost savings for Council by agreeing to pay the full capped charge for stormwater with no offset for the construction of the basins. The Infrastructure Agreement (IA) prepared and signed by the landowners and Council's delegate which, amongst other matters (discussed under the Infrastructure heading of this report), agrees that:

- The stormwater basins are non-trunk and therefore not eligible for any infrastructure credits, offsets or refunds; and
- The developer will not make a conversion application pursuant to s659 of SPA for the proposed stormwater basins.

Finally, it is important to consider that the future wetland is planned for on land that is in private ownership and is yet to be developed. For the regional solution to be constructed now, it is likely that Council would need to compulsorily acquire the land. Given a suitable solution has been identified within the development site and the developer has demonstrated, to the satisfaction of the Infrastructure Planning and Charging unit that there will be no adverse cost imposition to Council of the alternative arrangement, it is not considered necessary to proceed with a mandatory acquisition.

Specific outcome S4.2 of the SETSP overlay code requires the incorporation of measures to reduce reticulated water usage and minimise wastewater production. The Stormwater Management Plan does not include a requirement to provide rainwater tanks with re-use options. In terms of water efficiency, it is relevant to consider that the State Government removed the requirement to install mandatory rainwater tanks in new buildings previously required by the Queensland Development Code. This suggests that the cost associated with mandated rainwater tanks for new houses generally outweighs the overall benefit to the community. On this basis and following the State Government advice, it is not considered appropriate to require rainwater tank provision for water efficiency purposes. Dwelling owners will have the ability to add rainwater tanks in the future if they wish. S4.2 also indicates that the integration of water supply, wastewater and stormwater will assist in protecting waterway health by improving stormwater quality and reducing site run-off. It is considered that the exclusion of rainwater tanks will not result in reduced water quality as the proposed stormwater treatment facilities have been designed to meet the relevant standards for water quality.

Earthworks

The proposal (Esperance Stage 7) falls north-northeast. Concept earthworks plans have been provided for the development. The majority of retaining walls will be less than 1.5 metres in height. In two locations there is a pad change between adjoining lots of more than 1.5m. A condition will be required to ensure these retaining walls are stepped to reduce the bulk and visual impact of the wall from the low side of the block.

The affected retaining walls are approximately 2-2.5m in height and located along side boundaries, however both lots are large internal lots (888m² and 942m²) with sufficient space to manage the stepping and landscaping whilst maintaining adequate space for a house, vehicular circulation and adequate open space.

It is noted that the exact height of retaining walls will not be determined until the Operational Works stage of development, as such it is recommended that a condition be attached to any approval that requires all retaining walls be stepped back 0.75m for every 1.5m in height and incorporate landscaping within the setback, in accordance with the Excavation and Fill code.

Overall, considering the topography of the site and the intended use and density of development as encouraged in the planning scheme, the proposed earthworks are considered to meet the outcomes of the Excavation and Fill code. It is considered that the earthworks proposed are necessary to deliver the development intent of the RPS and will not adversely affect the character and amenity of the site or the surrounding area.

Amenity / Noise

The development has been designed to achieve a high standard of residential amenity by:

- Ensuring the size and width of the lots allow for access to natural light and ventilation, privacy and sufficient areas of open space; and
- Mitigating impacts associated with noise nuisance, whilst maintaining an acceptable streetscape.

The site adjoins a State controlled road, Boundary Road. To address noise impacts an acoustic assessment was submitted that recommends the construction of a 2m high acoustic barrier along the Boundary Road frontage (adjoining lots 1-5, 56 and 54), returning along the western boundary of lot 1, the eastern boundary of lot 54 and the common boundaries between lots 5 and 56 and the main access to the site. 1.8m high acoustic fences are also recommended along the retained northern and eastern boundaries of lots 52 and 55.

Future houses will also need to comply with State legislation which requires building construction techniques and materials to be used to future protect residents from road noise. The mitigated noise levels are considered suitable for a residential environment. In relation to amenity, specific outcome S1.2 of the Road and Rail Noise Impacts overlay code states that acoustic fencing should only be considered an option where the following cannot be implemented:

- Siting of development to minimise the noise impact through distance, layout and orientation;
- Design and construction techniques; and
- Soft engineering measures, such as vegetated buffers and vegetated earth mounds.

Although fencing is not the preferred option, it is agreed that the most effective option for the site is a combination of acoustic fences, design/construction techniques and vegetated buffers given the location of the site next to a heavily trafficked road and the need to provide a moderate density of dwellings within the structure plan area. The likelihood that the developments would require acoustic fencing to mitigate noise impacts was anticipated at the time the structure plan was developed, and the landscaping/acoustic zone was included to assist in improving the streetscape within the public domain. The fence is considered to be effectively screened from the street by the mounded 10m wide landscape strip that incorporates trees, shrubs and understorey.

Landscaped Buffer to Boundary Road

The frontage of the subject land is zoned Community Purpose to ensure the provision of a 10m wide landscaped/acoustic treatment. Specific outcome S2.7 of the SETSP overlay code states that noise attenuation measures undertaken within DTMR road corridors (including Boundary Road) is erected on property boundaries and screened from the road carriageway by landscaping and landscaped earth mounds of at least ten (10) metres in width. The proposed acoustic fence is located along the proposed lot boundaries and comprises a 10m landscape buffer. It is considered that a high quality treatment will be delivered along the full frontage, achieving the specific outcome.

Dedication of Open Space zoned land

The applicant has proposed to dedicate the open space zoned land (828m²) between balance lots 58 and 59 in accordance with specific outcome S1.3 and the overall outcomes of the Open Space zone code. Council's City Spaces Group was consulted on this matter and it is considered that the costs associated with maintaining this parcel of land, which is not connected to any other parkland, significantly outweigh the community benefits of its dedication. This is accentuated by the proximity of the area (c.140m) to approximately 3ha of parkland proposed for dedication as part of application ROL005950, which incorporates an equipped local park, kick about area and picnic area and connects to a wider open space corridor along Eprapah Creek. It is therefore recommended that the ROL Plans are amended to ensure the land is retained in private ownership.

Wastewater

All lots proposed as part of ROL005951 (Esperance Stage 7) will be connected to gravity sewer that will connect to infrastructure delivered by the adjoining Villaworld development to the east (ROL005780).

Bulk Concurrence Agency Referral

In accordance with the Sustainable Planning Regulation 2009 Schedule 7 Table 1 Item 20, Council is a concurrence agency for future development applications for dwelling houses on the proposed lots. Council's jurisdiction as a concurrence agency relates to whether the future dwellings comply with the Redlands Planning Scheme (RPS) as detailed in the assessment section below.

Referral Agency Response before Application is Made

The Applicant has submitted this request for all proposed lots prior to lodgement of a development application to the assessment manager (ie building certifier). Council is therefore assessing the application and providing a pre-lodgement response under s271 of the *Sustainable Planning Act 2009*.

Proposal

The applicant is seeking concurrence agency approval for a Plan of Development over the proposed lots (ROL005951), which establishes siting parameters for new dwelling houses, with alternative provisions to those identified under the Redlands Planning Scheme (which refers to QDC standards) in relation to setbacks and site cover. The table below details the proposed setbacks and site cover for the various lot types, the standards that are alternative to those identified in QDC are highlighted in grey below. The rest are compliant with QDC and do not require referral.

	Villa		Premium Villa		Courtyard		Premium Courtyard		Traditional		Premium (rear access)	
Typical Lot dimensions	10m x 25-32m		12.5m x 25-50m		14m x 25-50m		16m x 32m - 50m		18m x 25m - 32m		24m x 25-32m	
	250 - 350m ²		300 - 650m ²		350 - 700m ²		800m ²		450 - 600m ²		800+m ²	
setback location	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor
front	3.0m	3.0m	3.0m	3.5m	3.0m	3.5m	3.5	4.5	3.5	4.5	3.5	4.5
front (lots on boulevard rd)	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m
rear	.75m	1.0m	1.0m	1.5m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m
side boundary												
	Recommended		Recommended		Recommended		Optional		Optional		Optional	
Built to boundary	0.0 - 0.2m	0.9m	0.0 - 0.2m	1.0m	0.0 - 0.2m	1.5m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m	0.0 - 0.2m	2.0m
Non built to boundary	0.75m	0.9m	1.0m	1.0m	1.0m	1.5m	1.2m	2.0m	1.5m	2.0m	1.5m	2.0m
Corner lots - secondary road frontage*	1.2m	1.5m	1.5m	1.5m	2.0m	2.0m	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m
Site Cover	162.5m ² -327.5m ² (65%)		180m ² -390m ² (60%)		152.5m ² -385m ² (55%)		440m ² (55%)		247.5m ² -330m ² (55%)		440m ² (55%)	
Open Space	Min area = 50sqm		Min area 70sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm	
Number of Bedrooms	3		min. 3		min. 3		min. 3		min. 3		min. 3	
On site Parking	2		2		3		3		3		3	
Garage door Setback	5.4m		5.4m		5.4m		5.4m		5.4m		5.4m	

*Concession for open structures supporting post/pier can be located 1.0m from secondary road frontage

The Plan of Development is appended to this report at **Attachment 3**.

The front setbacks for *Premium (rear access)* lots have been crossed out as these lots do not have a front setback requirement as they do not have site frontage. The main boundaries of the lot are considered to be side/rear boundaries for the purpose of assessment against QDC requirements.

Referral under SPR Schedule 7 Table 1 Item 20

Applicability:	This applies to building works that comply with all relevant self-assessable criteria of the RPS <u>except</u> for setbacks and site cover. The level of assessment is not escalated but is instead referred to Council for concurrence assessment.
Jurisdiction:	Whether the building complies with the relevant specific outcome of the RPS in regards to setbacks and site cover.
Assessment	<p><u>Front Setbacks</u></p> <p><i>Proposed:</i></p> <ul style="list-style-type: none"> c) 3 – 3.5m d) 2m where adjoining the boulevard road <p><i>QDC:</i></p> <ul style="list-style-type: none"> b) 3 – 6m (3-4m for lots less than 450m² and 6m for all those above 450m²) <p>In relation to a) it should be noted that this applies to 8 lots (proposed lots 1-8). Five of these lots are less than 450m² and the road is an Access Street, therefore 3m is the acceptable solution for these lots and no assessment is required. The verges on this road frontage appear to be between 5m and 6m and are therefore wider than the standard requirement under the Redlands Planning Scheme. This indicates that a reduced setback is unlikely to cause nuisance or safety concerns with adequate visibility to access and exit the lots. The Plan of Development also requires all lots to maintain a minimum 5.4m to the garage, which ensures the lots can accommodate additional off-road car parking. The development forms part of a new growth area in the city and as such the character of the area is still being established. It is considered that this alternative provision achieves Performance Criteria P1 of the QDC.</p> <p>In relation to b) it is considered that a reduced setback to 2m is appropriate in this case given the significant verge widths along the boulevard road. The width varies but is generally 9m wide for the majority of its length. There is a pinch point to the front of proposed lot 49 where the verge is 6m wide, however it is noted that at this point the Plan of Development nominates the driveway location and a setback to the garage of 5.4m. The 2m setback is</p>

likely to be implemented where the verge increases to 7m-8m. Given the character of the area is yet to be established and the significant landscaping along the boulevard road, it is considered that even with a small setback of just 2m the streetscape will be dominated by the landscaping in the street rather than any built development. As mentioned above the lots will still be required to provide a minimum setback of 5.4m to the garage to facilitate off-street parking on driveways. It is considered that this alternative provision achieves Performance Criteria P1 of the QDC.

Side Setback

Proposed:

- d) 0.75m – 1.5m at ground level*
- e) 0.9m – 2m at first floor level*
- f) Built to boundary walls (up to 15m in length)*

QDC:

- e) 1.5m where the building is 4.5m or less*
- f) 2m where the building is between 4.5m and 7.5m in height*
- g) 0.75m – 1.425m for lots less than 15m wide and buildings 4.5m or less*
- h) 1m – 1.9m for lots less than 15m wide and buildings between 4.5m and 7.5m*

The proposal identifies alternative provisions for side setbacks for both ground and first floors. It also nominates potential future built to boundary walls that align with the intended location of the garage. It identifies where built to boundary walls are recommended and where they may be optional.

In relation to a) the rear access lots, traditional, premium villa and villa lot types comply with the QDC acceptable solutions. All the courtyard lots have frontages between 14m and 15.3m, with QDC requiring side setbacks between 1.275m and 1.5m, where the proposed minimum side setback is 1m. The Premium Courtyard lots are proposed to have a minimum 1.2m side setback at ground level where QDC requires 1.5m.

In relation to b) the minimum side setbacks proposed for the premium courtyard, traditional and rear access lots all comply with QDC acceptable solutions. The villa lot type seeks an alternative solution of 0.9m where 1m is identified in QDC. The premium villa lot type seeks a side setback of 1m where QDC identifies 1.4m as an acceptable solution. Finally the courtyard lot type sets a minimum side setback of 1.5m where QDC sets an acceptable solution of 2m.

The side setbacks sought represent a reduction of between 0.1m – 0.5m of those identified as acceptable solutions in the QDC, which is considered a minor deviation and does not prevent future dwelling houses having suitable access to sunlight and ventilation. It is relevant to consider that the Plan of Development also seeks to establish potential and optional built to boundary walls for most proposed lots (the exceptions are lots 1, 8, 41, 42, 49, 50 and 52). Doing so ensures future lot owners know the likely location of built to boundary walls on adjoining lots and can therefore plan the orientation of their house to maximise solar access and ventilation. It is acknowledged that built to boundary walls will generally be located on the high side of retaining structures. Whilst it would be preferred for built to boundary walls to be incorporated with the retaining structure to further improve access to sunlight and ventilation for east-west oriented lots and reduce the visual impact of retaining structures, it is accepted that doing so would result in significant problems during construction. It would require the garages of dwelling houses to be incorporated within the construction of the retaining wall, which would in turn cause problems for maintenance access to these structures.

There is only one instance where a built to boundary wall is proposed on a

wall above 1.5m and it is a significant wall being approximately 2.8m high. It is located on proposed lot 44 and will affect proposed lot 48. It is not considered appropriate as it has the potential to cause adverse impacts to the amenity of the future residents of proposed lot 48. Whilst it is accepted that in some circumstances QDC allows built to boundary walls for class 10a structures (e.g. garages) without the need for concurrence agency referral, in this case the location of the accessway suggests it is unlikely that the structure will be class 10a. Given the topography of the lot it is considered reasonable that any relaxation of setback requirements affecting such a significant retaining structure should be considered on a lot by lot basis with the detailed design and siting of the proposed structure known. It is recommended that this built to boundary wall is refused.

Finally, given the width of proposed lots 17 (20m), especially when compared to the width of the adjoining lot (proposed lot 16 – 14m wide) it is not considered appropriate to approve a built to boundary wall in this case. Lot 17 is of a sufficient size and width to facilitate a positive outcome for the future homeowner. The impact of a retaining structure and built to boundary wall on the adjoining lot is not considered to be justified by the need to maximise useable space as they are for narrower lots. If the future owner of the lot has a design that requires built to boundary construction this can be considered on its merits. The optional built to boundary wall for lot 17 is therefore recommended for refusal.

Site Cover and Open Space

Proposed: 55% – 65%

QDC: 50%

The Plan of Development allows site coverage ranging from 55% to 65%, with site coverage increasing as lot sizes decrease. The larger lots permit a site coverage of 55% and lots with a frontage of 12.5m or less permitting 60-65% site coverage. The Dwelling House code requires development to be appropriately sized and located on site. The Plan of Development requires all lots to provide 2 - 3 parking spaces on site (varying with lot type) and sets minimum requirements in terms of open space. The open space requirements range from 50sqm-80sqm. In context, the Multiple Dwelling code sets a minimum open space requirement for townhouses of 25sqm at ground level. Given the minimum requirements are double that required for a multiple dwelling (for the smallest lots) and considering the proximity of the site to the planned local park and kick about space (which incorporates bbq/picnic facilities) and wider Erapah Creek corridor to be delivered as part of application ROL005950, it is considered that the proposed site cover alterations meet the requirements under specific outcome S2 of the Dwelling House code and will deliver dwellings that are suitably sized and located.

Conclusion

The proposed development is considered to comply with S2 of the Dwelling House code in the Redlands Planning Scheme. The proposed development is considered to ensure future dwellings will be appropriately sized and located on site. It is recommended that the application be approved subject to concurrence agency conditions.

Officer's Recommendation

That Council, in its role as a concurrence agency under Schedule 7 Table 1(20) of the Sustainable Planning Regulation, support the proposed development of dwelling houses on the proposed lots (ROL Plan Drawing No. 1114096_02 rev B – as amended in red, dated 06.07.2016) currently on Lot 6 on SP119615 situated at 399-413 Boundary Road, Thornlands, subject to the conditions contained at the end of this report.

Infrastructure Agreement and Charges

The proposed development is subject to infrastructure charges in accordance with the State Planning Regulatory Provisions (adopted charges). The total charge applicable to this development is:

Charge: \$1,047,514.40

This charge has been calculated as follows in accordance with Council's [Adopted Infrastructure Charges Resolution \(No. 2.3\) August 2016](#).

Redland City Council	Notice #001316
Residential Component	
38 X 3 bedroom residential dwellings X \$28,311.20	\$1,075,825.60
Demand Credit	
1 X 3 bedroom residential dwelling X \$28,311.20	\$28,311.20
Total Charge:	\$1,047,514.40

NB: The above charge is for the 35 lots + 3 balance lots for future stages and has been given 1 lot credit.

Offsets

Offsets are payable for the trunk infrastructure being provided by the development, these are discussed below under the Infrastructure Agreement heading of this report.

Refunds

There are no refunds that apply under Chapter 8 Part 2 of the *Sustainable Planning Act 2009*.

Infrastructure Agreement

As discussed under the stormwater heading of this report there is an Infrastructure Agreement relating to this development and the other two related development applications on the subject site. The Agreement details the infrastructure charges payable under the Adopted Infrastructure Charges Resolution (the amount for this stage is noted above), the offsets applicable for the trunk infrastructure being delivered by the applicants, being a shared use footpath/cycleway and a Local Park (both identified in Council's Priority Infrastructure Plan), the agreed standard of service for that infrastructure (i.e. the park embellishments and construction requirements for the footpath), agreed planned values for the infrastructure, the requirement to deliver stormwater infrastructure (included in the infrastructure agreement for the reasons set out under the relevant heading in this report) and a

clause confirming that the developer will not seek a conversion application in relation to the stormwater infrastructure.

A condition should be applied requiring compliance with the Infrastructure Agreement at all times.

State Referrals

• State Assessment & Referral Agency (SARA)

SARA provided an amended referral agency response on 26 September 2016 in regards to the State controlled road, being Boundary Road, Thornlands. The Department indicated no objection to the proposed development subject to referral agency conditions in regards to access, noise attenuation measures and stormwater. The Department's referral response, including conditions, will be attached to Council's Decision Notice.

Public Consultation

The proposed development is Code assessable and did not require public notification. Notwithstanding this 22 submissions were received in relation to the application. The key issues raised by submitters are included in the table below, along with officer comments.

Issue	Officer comments
<p>Vehicular access to Luke Street:</p> <ul style="list-style-type: none"> • SETSP clearly states no vehicular access to Luke Street • Luke Street is Park Residential because of the semi bushland environment important for fauna. Local Law 2 proposed amendment to include the area as a Koala Area. Even with low volumes of traffic there are already fatalities. The increase will result in more fauna being injured and killed. • Luke Street not designed for the number of cars the proposal would generate (insufficient visibility near intersection with Kodak Close, Thornton Drive and Megan Court). Increased risk to pedestrians – there are no footpaths. • Will create a rat run allowing residents to use Dinwoodie Road via Venn Parade, especially with only a left in/left out access to Boundary Road proposed for the subject site. • Strategic Framework - The direct connection of the higher density development to the east is incompatible with the strategic intent for Conservation land to the west and koala habitat retention due to additional traffic caused by Luke Street connection. • Overall Outcomes of the Reconfiguration code – development does not result in a positive contribution to the existing neighbourhood due to increased danger to wildlife. 	<p>The applicant has removed vehicular access to Luke Street.</p>

Issue	Officer comments
<ul style="list-style-type: none"> • Overall Outcomes of the Park Residential Zone code – impact to environmental values • No need for it – the traffic report stated it is needed to provide access for lots 38-40, but these can take access from Luke Street without needing a connection. <ul style="list-style-type: none"> • Traffic report – insufficient assessment of likely through traffic. 	
<p>Left in / left out access from Boundary Road – insufficient.</p> <ul style="list-style-type: none"> • SETSP clearly shows a signalised intersection. • U-turns at Meadowlands Road at peak times are already ridiculous • Exacerbate the difficulty for residents of Meadowlands area to turn right. 	<p>Boundary Road is a State controlled road. Council has no jurisdiction to require an alternative treatment at the intersection/access of the site. It is nonetheless noted that officers raised this matter with officers at the State Assessment Referral Agency (SARA) to confirm that signalisation of this intersection was not triggered by this application. The concurrence agency response issued by SARA and attached to this report, did not include any requirements for the developer to deliver these works. The ultimate design of the intersection is appended to the Traffic Impact Assessment lodged with the application. RCC officers have considered this design and ensured the proposal does not compromise the ultimate delivery of this intersection at a future date.</p>
<p>Lot size adjoining Park Residential lots:</p> <ul style="list-style-type: none"> • 24 lots adjoin Park Residential homes – none comply with the RPS requirement - A minimum of 1200m² with a 25m frontage. 	<p>This matter is addressed under the Redlands Planning Scheme heading of this report.</p>
<p>Potential increase in anti-social behaviour and crime, caused by high density development.</p>	<p>The proposal has been designed to consider Crime Prevention Through Environmental Design (CPTED) principles and assessed against these requirements.</p>
<p>Decline in property value.</p>	<p>The effect of development on property value is not a relevant planning consideration.</p>
<p>Eprapah Creek / Luke Street Reserve will be placed under huge stress.</p>	<p>The impact to Eprapah Creek and Luke Street Reserve is a matter that was considered prior to the area being zoned for higher density development. Moreover the proposal will secure a 200m buffer to Eprapah Creek through the dedication of 3ha of land zoned for Open Space. The proposal also includes a Stormwater Bio-Retention Basin that will treat stormwater run-off before it drains into the creek.</p>
<p>Preference that the dam left in its natural state but understand that there may be Council regulations preventing this.</p>	<p>This matter is addressed under the relevant heading of ROL005950 report.</p>
<p>Conflict with covenants on existing Park Residential zoned lots, which are required to have fauna friendly fencing along all boundaries.</p>	<p>Given this is a consequence of the different zonings of adjoining land there is not considered to be a risk of compliance action. It is clear that where the Park Residential zoned</p>

Issue	Officer comments
	<p>lots adjoin the Urban Residential zone the requirements of the covenant cannot be achieved.</p> <p>It is important to note however that if the subject development is approved, the covenants on the adjoining Park Residential zoned properties are still able to achieve their intent and their purpose is not negated by any approval on the subject land. The remaining three boundary fences must still comply with the covenant and enable fauna movement within the Park Residential Zone, where lower densities and more vegetation facilitate that movement.</p>

Deemed Approval

The approval of this application has not been issued under Section 331 of the *Sustainable Planning Act 2009*.

STRATEGIC IMPLICATIONS

Legislative Requirements

The application has been assessed in accordance with the *Sustainable Planning Act 2009*. This development application has been assessed against the Redlands Planning Scheme v7 and other relevant planning instruments.

Risk Management

Standard development application risks apply. In accordance with the *Sustainable Planning Act 2009* the applicant may appeal to the Planning and Environment Court against a condition of approval or against a decision to refuse the application.

Financial

If approved, Council will collect infrastructure contributions in accordance with the State Planning Regulatory Provisions (adopted charges) and Council's Adopted Infrastructure Charges Resolution.

If the development is refused, there is potential that an appeal will be lodged and subsequent legal costs may apply.

People

Not applicable. There are no implications for staff.

Environmental

Environmental implications are detailed within the assessment in the "issues" section of this report.

Social

Social implications are detailed within the assessment in the "issues" section of this report.

Alignment with Council's Policy and Plans

The assessment and officer's recommendation with Council's policies and plans as described within the "issues" section of this report.

CONSULTATION

The Planning Assessment Team has consulted with other internal assessment teams, operational teams and asset management teams where appropriate. Advice has been received from relevant officers and forms part of the assessment of the application.

A copy of the original proposal and subsequent amendments were provided to the Divisional Councillor. The Divisional Councillor, Councillor Golle as well as Councillor Hewlett have requested that the application be brought to Council for determination.

OPTIONS

The development application has been assessed against the Redlands Planning Scheme and relevant State planning instruments. The development application is considered to conflict with parts of the Redlands Planning Scheme however in accordance with section 326(1)(b) of the *Sustainable Planning Act 2009*, sufficient grounds to justify the approval despite the conflict have been identified as follows:

- When considered in the context of the development proposed for the whole site as well as over the wider South East Thornlands Structure Plan and surrounding area, the proposal provides a mix of housing densities and building types as required by the Redlands Planning Scheme. In particular a large range of multiple dwelling units are proposed on another part of the subject land as well as elsewhere within the SETSP area.
- The mix of lot sizes proposed is considered to provide housing choice, which will suit a variety of community needs, whilst still using land efficiently and in response to site context and constraints. It is considered that the proposed lots and respective dwellings will present an attractive streetscape in this newly developing area, maintain a high quality lifestyle and meet the requirements of people with different housing needs.
- The proposed subdivision will better ameliorate the amenity impacts associated with retaining structures that are unavoidable on this site considering the topography of the land; ensuring a better quality lifestyle for the inhabitants of this part of the site.

It is therefore recommended that the application be approved subject to conditions. The Concurrence Agency Referral is considered to comply with the Redlands Planning Scheme and Queensland Development Code and it is recommended that a referral approval be granted subject to the approval of ROL005951 and conditions.

Council options are to:

1. That Council resolves to adopt the officer's recommendation to approve the application and concurrence agency referral subject to conditions; or
2. That Council resolves to approve the application, without conditions or subject to different or amended conditions; or
3. That Council resolves to refuse the application.

OFFICER'S RECOMMENDATION

That Council resolves to issue a Development Permit approval subject to conditions for the Reconfiguring a Lot for 1 into 35 lots and 3 balance lots at 399-413 Boundary Road, Thornlands and Concurrence Agency Approval subject to conditions for Dwelling Houses also at 399 – 413 Boundary Road, Thornlands.

SECTION 1 - PERMIT TO WHICH THE FOLLOWING CONDITIONS RELATE:**DEVELOPMENT PERMIT FOR RECONFIGURATION OF LOTS - 1 INTO 35 LOTS AND 3 BALANCE LOTS**

<u>ASSESSMENT MANAGER CONDITIONS</u>		<u>TIMING</u>	
34. Comply with all conditions of this approval, at no cost to Council, at the timing periods specified in the right-hand column. Where the column indicates that the condition is an ongoing condition, that condition must be complied with for the life of the development.			
<u>Approved Plans and Documents</u>			
35. Undertake the development in accordance with the approved plans and documents referred to in Table 1, subject to the conditions of this approval and any notations by Council on the plans.		Prior to Council approval of the Survey Plan.	
Plan/Document Title	Reference Number	Prepared By	Plan/Doc. Date
ROL Plan – as amended in red	1114096_02 Revision B	Place Design Group	06/07/2016
Plan of Development Stage Seven – as amended in red	1114096_05 Revision B	Place Design Group	06/07/2016
Site Based Stormwater Management Plan – Boundary Road Thornlands	3863-01 R01 v04	Water Technology	17/06/2015
Earthworks Layout Plan Sheet 1 of 2	8160-J version 3	Sheehy & Partners	June 2016
Earthworks Layout Plan Sheet 2 of 2	8160-K version 3	Sheehy & Partners	June 2016
Road Hierarchy Layout Plan – as amended in red	8160-A version 3	Sheehy & Partners	June 2016
Services Layout Plan Option 'A' Sheet 1 of 2	8160-C version 3	Sheehy & Partners	June 2016
Services Layout Plan Option 'A' Sheet 2 of 2	8160-D version 3	Sheehy & Partners	June 2016
External Stormwater Catchment and Collection Plan Sheet 1 of 2	8160-AX version 1	Sheehy & Partners	July 2016

External Stormwater Catchment and Collection Plan Sheet 2 of 2	8160-AY	Sheehy & Partners	July 2016
Concept left turn lane to site posted speed – 80km/h, design speed 90km/h	B14576-SK-001	Lambert & Rehbein	14/03/2016
Proposed Residential Development – Esperance Stages 7 and 8 - 399-413 Boundary Road, Thornlands – Assessment and Control of Road Traffic Noise Intrusion	11-268.R12 Copy 2	Acoustics RB Pty Ltd	July 2015
Northern Detention Basins Layout Plan	8160-AH	Sheehy & Partners	June 2016
Tree Retention Plan	S50059_TRP_001 version B	Place Design Group	05/01/2016
Tree Retention Plan	S50059_TRP_002 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_003 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_004 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_005 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_006 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_007 version B	S5 Environmental	17/12/2015
Tree Retention Plan	S50059_TRP_008 version B	S5 Environmental	17/12/2015
Rehabilitation Management Plan	S50139_RMP_001 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_002 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_003 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_004 version A	S5 Environmental	23/12/2015
Rehabilitation Management Plan	S50139_RMP_005 version A	S5 Environmental	23/12/2015

Landscape Master Plan & Design Intent Stage 1 (all plans contained therein)	Revision D	Place Design Group	20/06/2016
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Table 1: Approved Plans and Documents

36. Submit to Council a Survey Plan for Compliance Certificate approval, in accordance with the approved plans, following compliance with all relevant conditions and requirements of this approval. <i>Note: Include the communal open space within Balance Lot 58.</i>	Prior to expiry of the relevant period for the approved development.
37. Comply with the Infrastructure Agreement that relates to this development approval.	Prior to Council approval of the Survey Plan and ongoing
Existing Structures	
38. Demolish or relocate/remove all existing structures on site, including all slabs and footings, in accordance with the approved plan(s) and cap all services prior to demolition commencing.	Prior to Council approval of the Survey Plan.
39. Remove any existing fences and/or incidental works that straddle the new boundaries, or alter to realign with the new property boundaries or to be wholly contained within one of the new properties.	Prior to Council approval of the Survey Plan.
Utility Services	
40. Relocate any services (eg water, sewer, electricity, telecommunications and roofwater) that are not wholly located within the lots that are being serviced.	Prior to Council approval of the Survey Plan.
41. Pay the cost of any alterations to existing public utility mains, services or installations due to building and works in relation to the proposed development, or any works required by conditions of this approval. Any cost incurred by Council must be paid in accordance with the terms of any cost estimate provided to perform the works	At the time the works occur, or prior to Council approval of the Survey Plan, whichever is the sooner.
42. Design and install underground electricity and telecommunication conduits to service all lots in accordance with the requirements of the relevant service providers and the Redlands Planning Scheme Infrastructure Works code and Planning Scheme Policy 9 – Infrastructure Works. Provide Council with written confirmation of the service provider agreements to the supply of electricity and telecommunication services.	Prior to Council approval of the Survey Plan.

<u>Building Envelope</u>	
<p>43. Comply with the building envelopes for Lots 9-20 as depicted on the <i>Plan of Development stage seven (as amended in red) revision B reference 1114096_05</i> dated 06.07.2016 prepared by Place Design Group, ensuring no buildings or structures are located within 10m of the western boundary of each lot, except for fencing and a garden shed.</p> <p>Maintain a 10m setback from the western boundary at all times.</p> <p>Note: For the avoidance of doubt a garden shed is taken to be no larger than 10sqm and requires minor building works only.</p>	Ongoing
<u>Land Dedication and Design</u>	
<p>44. Dedicate land to the State with Council as trustee, in accordance with the approved plan 1114096_02 rev B, for the following purposes:</p> <p>c) Open space (Landscape buffer and stormwater management area)</p> <p>d) Road.</p> <p>Note: This does not include the land situated between balance lots 58 and 59.</p>	Prior to Council approval of the Survey Plan.
<p>45. Grant easements for the following and submit the relevant easement documentation to Council for approval. Once approved by Council, register the easements on the property title.</p> <p>d) Access easement for sewer manholes and rising mains in favour of Redland City Council and its agents where located in private property or open space;</p> <p>e) Reciprocal access easement rights (for rear allotments sharing a driveway) suitable for vehicles, pedestrians and services, where required;</p> <p>f) Temporary turning areas for refuse service vehicle turn-around, where such area is located over private property, in favour of Redland City Council and its agents, where necessary;</p> <p>g) Stormwater drainage purposes, covering the roofwater system (including inlet pits and pipes) and surface channel, all designed for a major 1% AEP, in favour of the upstream property owners where a roofwater line serves more than two lots.</p>	As part of the request for compliance assessment of the Survey Plan.
<p>46. Extinguish existing Easement A on SP150427.</p>	As part of the request for compliance assessment of the Survey Plan.
<u>Split Valuation</u>	
<p>47. Pay a contribution to Council for the purposes of paying the State Government Split Valuation Fees. The current value of the contribution is \$35.25 per allotment (2016/2017 Financial Year). The amount of contribution must be paid at the rate applicable at the time of payment. A Split Valuation Fee is required for each allotment contained on the Plan(s) of Survey, including balance lots.</p>	Prior to Council approval of the Survey Plan.

Access and Roadworks	
48. Design all roads in accordance with the provisions of Complete Streets and the Redlands Planning Scheme: <i>Infrastructure Works Code, Planning Scheme Policy 9 – Infrastructure Works, Schedule 6 – Movement Network and Road Design</i> and the <i>South East Thornlands Structure Plan</i> , unless otherwise stated as part of a specific condition of this approval.	As part of the application for Operational Works.
49. Provide detailed designs of the intersection with Boundary Road, for both the interim scenario (left-in left-out as approved by the State) and the ultimate scenario (four way signalised intersection). The design must be in accordance with <i>Austroads' standards on At-grade Intersections, Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections and Volume 3: Guide to Road Design in the Road Planning and Design Manual (RPDM)</i> . <i>Note: The design of the ultimate alignment should show the location of footpaths and stormwater infrastructure, and any other infrastructure within close proximity of the intersection that could be affected by the ultimate alignment.</i>	As part of the application for Operational Works.
50. Provide traffic calming consistent with the provisions of Complete Streets, the Redlands Planning Scheme Infrastructure Works Code, Planning Scheme Policy 9 – Infrastructure Works and Schedule 6 – Movement Network and Road Design.	Prior to Council approval of the Survey Plan.
51. Construct a minimum 2.5m wide concrete shared use path along Road 1 and Road 5 in accordance with the approved Road Hierarchy Plan (8160-A version 3) prepared by Sheehy & Partners and dated June 2016, and the Redlands Planning Scheme.	Prior to Council approval of the Survey Plan.
52. Construct a minimum 1.5m wide concrete footpath along Road 3 in accordance with Road Hierarchy Plan (8160-A version 3) prepared by Sheehy & Partners and dated June 2016.	Prior to Council approval of the Survey Plan.
53. Construct a minimum 3.0m wide concrete driveway to service proposed rear lots 43, 44, 48 and 50 in accordance with the Redlands Planning Scheme Reconfiguration Code.	Prior to Council approval of the Survey Plan.
54. Submit to Council, <u>and gain approval for</u> , a road naming plan, in accordance with Council's road naming guidelines, detailing specific road names and designations for all existing and proposed new public roads within the site. Use original road names on all new roads to avoid duplication of any existing road names in the City.	Prior to preparing your Survey Plan.
Stormwater Management	
55. Convey roof water and surface water in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management to: <ul style="list-style-type: none"> A lawful point of discharge as identified in the approved Site Based Stormwater Management Plan – Boundary Road Thornlands (Reference 3863-01 R01 v04) prepared by Water Technology. 	Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner. Ongoing condition.
56. Manage stormwater discharge from the site in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management, so as to not cause an actionable nuisance to adjoining properties.	Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner. Ongoing condition.

<p>57. Submit to Council, and receive Operational Works approval for, a detailed stormwater assessment that is generally in accordance with the Site Based Stormwater Management Plan – Boundary Road Thornlands, (reference 3863-01 R01 v04) dated June 2015 and prepared by Water Technology and addresses both quality and quantity in accordance with the Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management, and the following:</p> <ul style="list-style-type: none"> • Design of road and drainage system to a minimum of QUDM Level III standard. • Hydraulic calculations and/or modelling of the overland flow path at critical locations of the road network such as road bends, intersection and sags to demonstrate that the major (1% AEP) overland flow paths can be fully contained within road reserve based on a 50% blockage, in accordance with <i>Redlands Planning Scheme Part 11, Planning Scheme Policy 9, Chapter 6 and relevant sections of the Queensland Urban Drainage Manual 2013</i>. • Overland flow assessment for discharging onto Boundary Road to ensure efficient drainage without causing public nuisance or any adverse impact for all design storm events. This also includes the acceptance of external runoff from the west through development and into the detention system and the provision of a 2m wide easement from lots 9 to 20 and lot 6 in favour of upstream properties and external lots being Lots 29, 26, 25 and 22 on SP150420. • Details of the on-site detention system to ensure no-worsening conditions can be adequately achieved for all range of design storm events. • Detailed design of the bio-retention systems including coarse sediment forebay in accordance with Water by Design guidelines, including but not limited to the following: <ul style="list-style-type: none"> d) Detailed plan and cross sections, showing adequate provisions of maintenance access tracks; e) Submit MUSIC modelling, with sub-catchment plan, that is in accordance with the <i>MUSIC Modelling Guidelines</i> to reflect actual layout; and f) Submit <i>Design checklist and summary</i>. • All computer modelling files employed for the stormwater design and assessment. • A maintenance plan prepared in accordance with <i>Maintaining Vegetated Stormwater Assets (Water by Design 2012)</i>, intended to be implemented during the defect liability period prior to asset transfer. 	<p>As part of the application for Operational Works or prior to Council approval of the Survey Plan, whichever is the sooner.</p>
<p><u>Water and Wastewater</u></p>	
<p>58. Connect all lots to the existing reticulated sewerage and reticulated water systems. Submit to Council for approval an application for Operational Works showing the proposed works are in accordance with the SEQ Water Supply and Sewerage Design and Construction Code and the Redlands Planning Scheme Policy 9 – Infrastructure Works.</p>	<p>Prior to Council approval of the Survey Plan.</p>
<p>59. Remove any redundant sewerage connections within the site or servicing the development and provide documentary evidence to Council or its delegate that this has occurred.</p>	<p>Prior to Council approval of the Survey Plan.</p>

<u>Excavation and Fill</u>	
<p>60. Apply to Council and obtain Operational Works approval for earthworks and retaining structures associated with the reconfiguration. Design and construct all retaining structures in accordance with Australian Standard 4678-2002 (as amended) Earth-retaining Structures, in particular the minimum 60 year design life requirements. Retaining walls, including the footings, are to be fully contained within allotments of the subject site, with drainage discharging to the road drainage system.</p> <p>Where retaining walls exceed 1.5m in height, the retaining walls must be constructed of high quality materials and stepped or terraced 0.75m for every 1.5m in height and the step/terrace must incorporate landscaping. The stepped/terraced area must be located within the property boundary on the low side of the retaining wall to allow for maintenance and of a height that can be easily and safely accessed for this purpose. Permanent fencing must be installed on top of the highest wall and be a minimum height of 1.5m.</p>	Prior to Council approval of the Survey Plan.
<u>Sediment and Erosion Control</u>	
<p>61. Submit to Council and obtain Operational Works approval for details of all erosion and sediment control measures in accordance with the <i>Redlands Planning Scheme Policy 9 – Infrastructure Works, Chapter 4</i> and the Institute of Engineers' Erosion and Sediment Control Guidelines, including but not limited to:</p> <ul style="list-style-type: none"> • The measures must be staged with the works program to reflect the construction sequences; and • Construction sequences the establishment of sediment basins and/or conversion to permanent bio-retention basin, as well as temporary protective measures, in accordance with <i>Construction and Establishment Guidelines for Bioretention Systems (Water by Design 2010)</i>. 	Prior to Council approval of the Survey Plan.
<u>Survey Control Information</u>	
<p>62. Submit Survey Plan(s) that include connections to at least two separate corners from two control marks with a valid Department of Natural Resources and Mines Order or RCC Accuracy. These must be shown on the face of the Survey Plan(s) within the Reference Mark or Permanent Survey Mark tables. List the mark number and coordinate in the cover letter.</p>	As part of the request for compliance assessment of the Survey Plan.
<p>63. Survey and present all asset infrastructure in accordance with the Redlands Planning Scheme Part 11 Policy 9 – Infrastructure Works. The horizontal datum for all work must be Redland City Council Coordinates (RCC) and the vertical datum must be Australian Height Datum (AHD).</p>	As part of the request for compliance assessment of the Survey Plan.
<p>64. Supply a Permanent Survey Mark (PSM) Sketch with the Survey Plan for any new PSMs placed. Include the following on the PSM Sketch:</p> <ul style="list-style-type: none"> • the mark's AHD Reduced Level; • the datum origin mark number; and • the datum RL adopted. <p>Comply with the requirements of the <i>Survey and Mapping Infrastructure Act 2003</i>.</p>	As part of the request for compliance assessment of the Survey Plan.

<u>Environmental Management</u>	
65. Revegetate the site at the rate calculated under the <i>Environmental Offsets Act 2014</i> for all non-juvenile koala habitat trees removed as a result of the development.	Prior to requesting an inspection for on-maintenance of the development.
66. Provide a plan illustrating where replanting of native vegetation will be undertaken in accordance with the proposal described in the Tree Retention and Rehabilitation Management Plan dated 05/01/2016, that is, appropriate rehabilitation to compensate for removal of at least 121 native trees. Include details of the mix of species proposed.	As part of the application for Operational Works.
<u>Landscaping Works</u>	
67. Submit a Landscape Plan, prepared in accordance with the Redlands Planning Scheme Policy 9 – Infrastructure Works Chapters 2, 10 and 11, to Council for Operational Works approval. Include the following items in addition to the requirements of the Policy: <ul style="list-style-type: none"> g) Designs that are generally in accordance with the Landscape Master Plan & Design Intent Stage 1 dated 20 June 2016, prepared by Place Design Group. h) Details of street tree planting in accordance with the Landscape Code with species selected from Schedule 9 of the Redlands Planning Scheme, unless otherwise approved as part of the Operational Works approval. i) Details of bollards provided along all roads that adjoin parkland, plus one metal slide rail in the vicinity of rehabilitation/park/bio-basin areas to allow access for maintenance vehicles. j) A plan showing the tree protection zones (TPZs) around any existing trees identified for retention. The TPZs must be determined in accordance with Australian Standard A.S.4970-2009 – Protection of Trees on Development Sites. 	As part of the application for Operational Works.
68. Submit to Council for Operational Works approval an Arborist report in relation to any proposed retention of trees within areas that will be within public use/accessible prepared by a qualified Arborist who is a member of the Australian Arborist Association or equivalent professional organisation. The Arborist report must address the following: <ul style="list-style-type: none"> • What impact the development proposal will have on the existing trees/vegetation; • Conclusions and recommendations which can be incorporated into the design and construction; • Any pruning to be in accordance with <i>Australian Standard AS4373:2007 “Pruning of Amenity Trees”</i>; • The tree assessment must be considered in accordance with <i>Australian Standard AS4970-2009 “Protection of Trees on Development Sites”</i>. 	Prior to Council approval of the Survey Plan.
69. Obtain Operational Works approval from Council for a maintenance plan for the entire landscaping component of the development.	Prior to Council approval of the Survey Plan.

70. Remove all weed species, as identified in Part B of Council's Pest Management Plan 2012-2016.	Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner.
<u>Acoustic Requirements</u>	
71. Apply to Council and obtain Operational Works approval for the acoustic barrier plans and specifications. The plans and specifications must be certified by a suitably qualified acoustic consultant to confirm the noise barrier achieves the requirements of this approval and complies with Redlands Planning Scheme – Policy 5: Environmental Emissions.	Prior to Council approval of the Survey Plan.
72. Construct 2.0m and 1.8m high acoustic barriers as per Figure 3 in the acoustic report Proposed Residential Development – Esperance Stages 7 and 8 399-413 Boundary Road, Thornlands – Assessment and Control of Road Traffic Noise Intrusion, copy 2. Report No. 11-268.R12 dated July 2015 by Acoustics RP Pty Ltd. The barriers must be a fence/mound combination and constructed in accordance with Diagrams 3/4/5 – of Redlands Planning Scheme Policy 5 - Environmental Emissions.	Prior to on maintenance or Council approval of the Survey Plan, whichever is the sooner.

ADDITIONAL APPROVALS

The following further Development Permits and/or Compliance Permits are necessary to allow the development to be carried out.

- Operational Works approval is required for the following works as detailed in the conditions of this approval:
 - Bulk Earthworks, including retaining structures;
 - Stormwater Management;
 - Roadworks and Drainage;
 - Water reticulation, including water network modelling;
 - Sewer reticulation;
 - Electrical reticulation;
 - Erosion and Sediment Control;
 - Landscaping;
 - Environmental Management (tree planting); and
 - Acoustic fence.
- Building works – demolition:
 - Provide evidence to Council that a Demolition Permit has been issued for structures that are required to be removed and/or demolished from the site in association with this development. Referral Agency Assessment through Redland City Council is required to undertake the removal works.

Further approvals, other than a Development Permit or Compliance Permit, are also required for your development. This includes, but is not limited to, the following:

- Capping of Sewer – for demolition of existing buildings on site.
- Road Opening Permit – for any works proposed within an existing road reserve.

REFERRAL AGENCY CONDITIONS

- Queensland Department of Infrastructure, Local Government and Planning (DILGP) Refer to the attached correspondence from DILGP dated 18 August 2016 (DILGP reference SDA-0715-022423).

ASSESSMENT MANAGER ADVICE

- **Infrastructure Charges**

Infrastructure charges apply to the development in accordance with the State Planning Regulatory Provisions (adopted charges) levied by way of an Infrastructure Charges Notice. The infrastructure charges are contained in the attached Redland City Council Infrastructure Charges Notice.

- **Live Connections**

Redland Water is responsible for all live water and wastewater connections. Contact *must* be made with Redland Water to arrange live works associated with the development.

Further information can be obtained from Redland Water on 07 3829 8999.

- **Coastal Processes and Sea Level Rise**

Please be aware that development approvals issued by Redland City Council are based upon current lawful planning provisions which do not necessarily respond immediately to new and developing information on coastal processes and sea level rise. Independent advice about this issue should be sought.

- **Hours of Construction**

Please be aware that you are required to comply with the *Environmental Protection Act* in regards to noise standards and hours of construction.

- **Performance Bonding**

Security bonds may be required in accordance with the Redlands Planning Scheme Policy 3 Chapter 4 – Security Bonding. Bond amounts are determined as part of an Operational Works approvals and will be required to be paid prior to the pre-start meeting or the development works commencing, whichever is the sooner.

- **Survey and As-constructed Information**

Upon request, the following information can be supplied by Council to assist survey and engineering consultants to meet the survey requirements:

- e) A map detailing coordinated and/or levelled PSMs adjacent to the site.
- f) A listing of Council (RCC) coordinates for some adjacent coordinated PSMs.
- g) An extract from Department of Natural Resources and Mines SCDM database for each PSM.
- h) Permanent Survey Mark sketch plan copies.

This information can be supplied without charge once Council received a signed declaration from the consultant agreeing to Council's terms and conditions in relation to the use of the supplied information.

Where specific areas within a lot are being set aside for a special purpose, such as building sites or environmental areas, these areas should be defined by covenants. Covenants are registered against the title as per Division 4A of the *Land Title Act 1994*.

- **Services Installation**

It is recommended that where the installation of services and infrastructure will impact on the location of existing vegetation identified for retention, an experienced and qualified arborist that is a member of the Australian Arborist Association or equivalent association, be commissioned to provide impact reports and on site supervision for these works.

- **Fire Ants**

Areas within Redland City have been identified as having an infestation of the Red Imported Fire Ant (RIFA). It is recommended that you seek advice from the Department of Agriculture, Fisheries and Forestry (DAFF) RIFA Movement Controls in regards to the movement of extracted or waste soil, retaining soil, turf, pot plants, plant material, baled hay/straw, mulch or green waste/fuel into, within and/or out of the City from a property inside a restricted area. Further information can be obtained from the DAFF website www.daff.qld.gov.au

- **Cultural Heritage**

Should any aboriginal, archaeological or historic sites, items or places be identified, located or exposed during the course or construction or operation of the development, the *Aboriginal and Cultural Heritage Act 2003* requires all activities to cease. For indigenous cultural heritage, contact the Department of Environment and Heritage Protection.

- **Fauna Protection**

It is recommended an accurate inspection of all potential wildlife habitats be undertaken prior to removal of any vegetation on site. Wildlife habitat includes trees (canopies and lower trunk) whether living or dead, other living vegetation, piles of discarded vegetation, boulders, disturbed ground surfaces, etc. It is recommended that you seek advice from the Queensland Parks and Wildlife Service if evidence of wildlife is found.

- **Environment Protection and Biodiversity Conservation Act**

Under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act* (the EPBC Act), a person must not take an action that is likely to have a significant impact on a matter of national environmental significance without Commonwealth approval. Please be aware that the listing of the Koala as vulnerable under this Act may affect your proposal. Penalties for taking such an action without approval are significant. If you think your proposal may have a significant impact on a matter of national environmental significance, or if you are unsure, please contact Environment Australia on 1800 803 772. Further information is available from Environment Australia's website at www.ea.gov.au/epbc

Please note that Commonwealth approval under the EPBC Act is independent of, and will not affect, your application to Council.

- **Release of Water Contaminants**

Please be aware that prescribed water contaminants must not be released to waters, a roadside gutter, stormwater drainage or into another place so that contaminants could reasonably be expected to move into these areas. Refer to the Environmental Protection Act 1994 for further information on the release of prescribed water contaminants.

SECTION 2 - PERMIT TO WHICH THE FOLLOWING CONDITIONS RELATE:**CONCURRENCE AGENCY REFERRAL – DWELLING HOUSES**

<u>CONCURRENCE AGENCY CONDITIONS</u>	<u>TIMING</u>
6. Comply with all conditions of this approval, at no cost to Council, at the timing periods specified in the right-hand column. Where the column indicates that the condition is an ongoing condition, that condition must be complied with for the life of the development.	
<u>Approved Plans and Documents</u>	
7. Undertake the development in accordance with the approved plans and documents referred to in Table 1, subject to the conditions of this approval and any notations by Council on the plans.	Prior to the use commencing and ongoing.

Plan/Document Title	Reference Number	Prepared By	Plan/Doc. Date
Plan of Development Stage Seven (as amended in red)	1114096_05	Place Design Group	06.07.2016

Table 1: Approved Plans and Documents

8. The setback for dwelling houses on the approved lots must comply with the <i>Plan of Development Stage Seven</i> (as amended in red) prepared by Place Design Group and dated 06.07.2016.	Prior to the use commencing and ongoing.
9. The site cover for dwelling houses on the approved lots must comply with the <i>Plan of Development Stage Seven</i> (as amended in red) prepared by Place Design Group and dated 06.07.2016.	Prior to the use commencing and ongoing.
<u>Self-assessable Criteria</u>	
10. Comply with the following acceptable solutions applicable to self-assessable development: <ul style="list-style-type: none"> Section 8.5.4 of the Development Near Underground Infrastructure Code Section 7.4.4 of the Domestic Driveway Crossover Code Section 8.6.4 of the Erosion Prevention and Sediment Control Code Section 7.6.4 of the Excavation and Fill Code Section 5.1.8 of the Acid Sulphate Soils Overlay Code. 	Prior to the use commencing and ongoing.

REASONS FOR CONDITIONS

In accordance with the *Sustainable Planning Act 2009* s289, conditions have been imposed to ensure the development complies with Specific Outcome S2 of the Dwelling House Code in the Redlands Planning Scheme.

CONCURRENCE AGENCY ADVICE

- Other Approvals

Please be aware that other approvals may be required for your development. This may include, but is not limited to, the following:

 - Building works.

- Plumbing and drainage works.
 - Building over or near relevant infrastructure.
-
- **Hours of Construction**
Please be aware that you are required to comply with the *Environmental Protection Act* in regards to noise standards and hours of construction.
-
- **Live Connections**
Redland Water is responsible for all live water and wastewater connections. Contact *must* be made with Redland Water to arrange live works associated with the development.

Further information can be obtained from Redland Water on 07 3829 8999.
-
- **Coastal Processes and Sea Level Rise**
Please be aware that approvals issued by Redland City Council are based upon current lawful planning provisions which do not necessarily respond immediately to new and developing information on coastal processes and sea level rise. Independent advice about this issue should be sought.
-

LEGEND

- SUBJECT SITE
- PARK
- STORMWATER
- LANDSCAPE BUFFER
- BALANCE LOTS
- 10M WIDE LANDSCAPE BUFFER AGAINST RURAL/RESIDENTIAL LOTS

DEVELOPMENT STATISTICS												
TOTAL AREA	Area of Lots		Area of Balance Lots		Area of Park		Area of Stormwater		Area of Buffer		Area of Road	
hectares	hectares	%	hectares	%	hectares	%	hectares	%	hectares	%	hectares	%
9.75	2.071	20	5.625	14	0.083	35	0.207	2	0.127	1	1.6374	19

YIELD AND MIX (STAGE 7)		average width	average depth	average size	TOTAL
	Villa	10m	25-32m	250-350m ²	4 11%
	Premium Villa	12.5m	32-50m	394-624m ²	8 23%
	Courtyard	14m	25-50m	350-700m ²	13 37%
	Premium Courtyard	16m	32m-50m	800m ²	2 6%
	Traditional	18m	25m-32m	450-600m ²	4 11%
	Premium (Rear Access)	24m	25-32m	800+m ²	4 11%
TOTAL LOTS (Excluding Balance Lots)					35
TOTAL LOTS (Including Balance Lots)					38



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NOT FOR CONSTRUCTION



DRAWING TITLE

ROL PLAN
Esperance Stage 7 for Shiacove Pty Ltd

DRAWING NO. 1114096_02

DATE : 06.07.2016

REVISION: B

SCALE: 1:1500@A3



Attachment 2 – Aerial photo of the subject site



LEGEND

- Subject Site
- Park
- Stormwater
- Landscape Buffer
- Recommended Built to Boundary
- Optional Built to Boundary
- Indicative driveway location
- Building Envelope
- Indicative Private Open Space
- Acoustic Fencing

Parking:

- Minimum off street requirements are 2 spaces per dwelling, which may be in tandem, with a minimum of one space in front of a garage or carport.
- Off street parking space to be provided in the form of a carport or garage.
- Parking spaces on driveways do not have to comply with gradients in AS2890.

Site Cover:

- Site cover for each dwelling is specific to the allotment type and shown in the site setback table (Floor area definition as per QDC MP1.1).

Private Open Space:

- Private open space criteria is detailed in the Site Setback Table.
- The space can be made up from areas in two locations providing 30% of the area specified in the table and is to be accessed from the main living area.

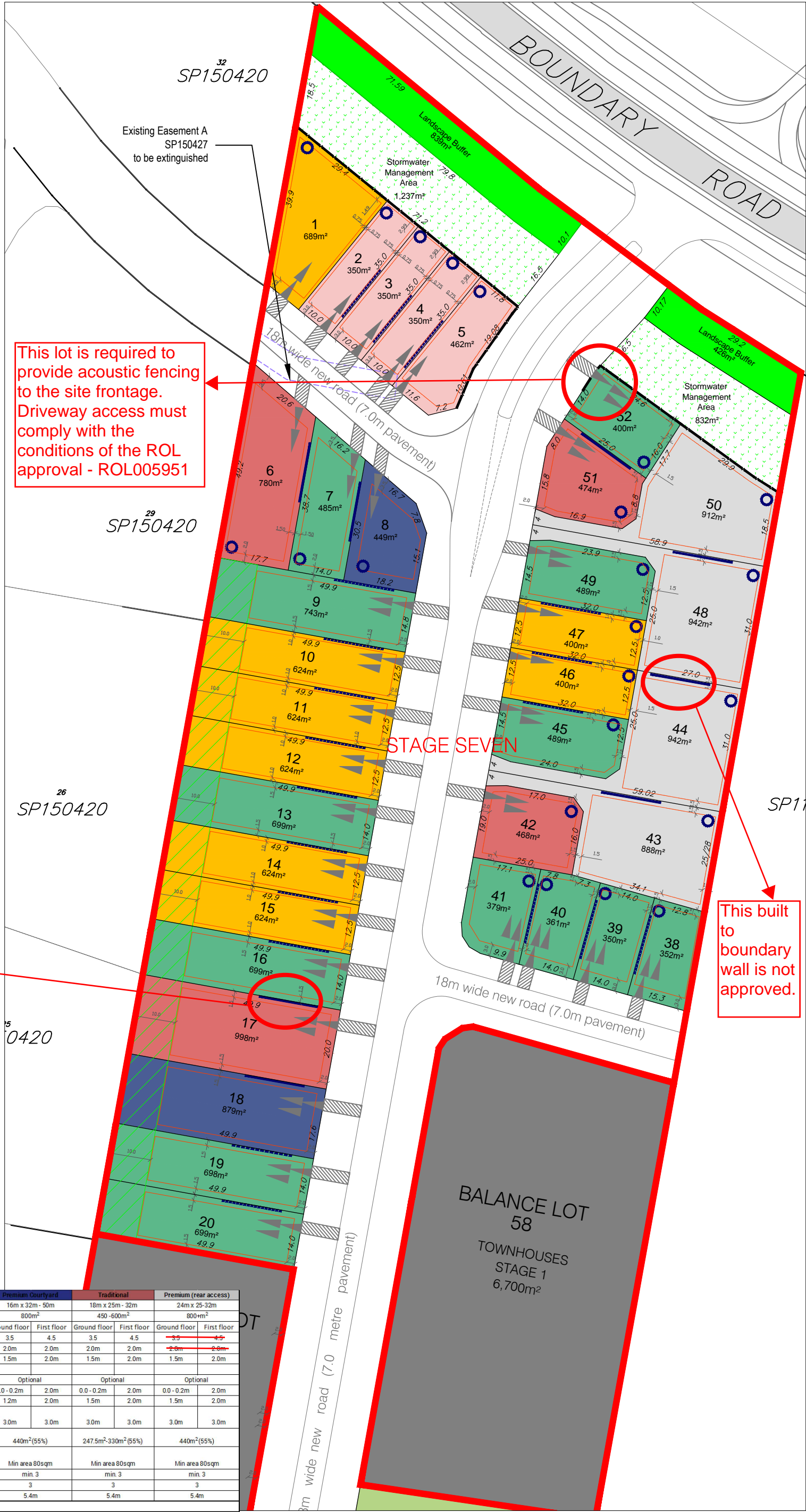
Fencing:

- Fencing on all primary street frontages to be either 50% transparent or not to exceed 1.2m in height.
- Where private open space is provided within the front or secondary setback, the fence can be up to 1.8m in height and 20% transparent for at least 60% of the boundary with the remaining fencing at 1.5m high and 20% transparent.
- Acoustic fencing to be installed as per the Environmental Noise Assessment Report.

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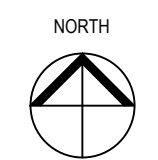


This lot is required to provide acoustic fencing to the site frontage. Driveway access must comply with the conditions of the ROL approval - ROL005951

This built to boundary wall is not approved.

This built to boundary wall is not approved.

Typical Lot dimensions	Villa		Premium Villa		Courtyard		Premium Courtyard		Traditional		Premium (rear access)	
	10m x 25-32m	12.5m x 25-50m	14m x 25-50m	16m x 32m - 50m	18m x 25m - 32m	24m x 25-32m	250-350m ²	300-650m ²	350-700m ²	800m ²	450-600m ²	800m ²
setback location	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor	Ground floor	First floor
front	3.0m	3.0m	3.0m	3.5m	3.0m	3.5m	3.5	4.5	3.5	4.5	3.5	4.5
front (lots on boulevard rd)	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m	2.0m
rear	.75m	1.0m	1.0m	1.5m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m	1.5m	2.0m
side boundary	Recommended		Recommended		Recommended		Optional		Optional		Optional	
Built to boundary	0.0-0.2m	0.9m	0.0-0.2m	1.0m	0.0-0.2m	1.5m	0.0-0.2m	2.0m	0.0-0.2m	2.0m	0.0-0.2m	2.0m
Non built to boundary	0.75m	0.9m	1.0m	1.0m	1.0m	1.5m	1.2m	2.0m	1.5m	2.0m	1.5m	2.0m
Corner lots - secondary road frontage ^a	1.2m	1.5m	1.5m	1.5m	2.0m	2.0m	3.0m	3.0m	3.0m	3.0m	3.0m	3.0m
Site Cover	162.5m ² -327.5m ² (65%)		180m ² -390m ² (60%)		152.5m ² -385m ² (55%)		440m ² (55%)		247.5m ² -330m ² (55%)		440m ² (55%)	
Open Space	Min area - 50sqm		Min area 70sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm		Min area 80sqm	
Number of Bedrooms	3		min. 3		min. 3		min. 3		min. 3		min. 3	
On site Parking	2		3		3		3		3		3	
Garage door Setback	5.4m		5.4m		5.4m		5.4m		5.4m		5.4m	



DRAWING TITLE
PLAN OF DEVELOPMENT_STAGE SEVEN
Esperance Stages 7 & 8 for Shiacove Pty Ltd

DRAWING NO. 1114096_05 DATE : 06.07.2016 REVISION: B SCALE:1:1000@A3



11.3.9 CLEVELAND LIBRARY RESTAURANT – 5 YEAR EXTENSION TO LEASE

Objective Reference: A124442
Reports and Attachments (Archives)

Attachment: [Cleveland Library Restaurant Lease Area](#)

Authorising Officer:



Louise Rusan
General Manager Community and Customer
Services

Responsible Officer:

Gary Photinos
Group Manager Environment and Regulation

Report Author:

Merv Elliott
Principal Property Consultant

PURPOSE

Council are the landlords of the Cleveland Library Restaurant currently leased to Little Bloomfield Pty Ltd. The purpose of this report is to seek Council approval to grant a 5 year option extension to the existing lessee.

BACKGROUND

In 2008 Council offered a 10 year lease of these premises by way of tender. Subsequently a lease was granted for 10 year period which expires on 14th December 2018.

Since originally granting of the lease there have been 5 changes in ownership, the latest of which has been to Little Bloomfield Pty Ltd.

The rental over this period has escalated by CPI movements on a yearly basis. The current rental is considered to be middle to top of market in this area. The present Lessee has dramatically improved take over in the short period of their occupancy due to professional expertise and revamping of the restaurant at their considerable expense and as a consequence has made application for an extension of the lease term.

ISSUES

The Local Government Regulations give Council the authority to enter into a new lease or extension of an existing lease subject to certain guidelines.

STRATEGIC IMPLICATIONS

Granting a new lease or an option to renew has no strategic implications.

Legislative Requirements

The *Local Government Regulation 2012* Section 236(1)(c)(iii) gives Council the authority of renewing a lease to an existing tenant without having to go to tender provided:

- a) Council resolves the exception in s.236(1)(c)(iii) applies to the disposal
- b) The proposed rent will be equal to, or more, than the market rent
- c) You obtain an independent valuation to verify the rent proposed is at least market.

Risk Management

None identified.

Financial

A new lease or option to renew guarantees Council's financial returns are guaranteed for a further 5 years. Existing rental is at market rental and will increase annually by CPI.

People

None identified.

Environmental

None identified.

Social

None identified.

Alignment with Council's Policy and Plans

Alignment with Council's Corporate Plan No. 6 Supportive and Vibrant Economy. Businesses will thrive and jobs will grow from opportunities generated by low impact industries, cultural and outdoor lifestyle activities, eco-tourism and quality educational experiences.

CONSULTATION

Principal Property Consultant has consulted with Group Manager Environment and Regulation and the Lessee.

OPTIONS**Option 1**

That Council resolves to:

1. Grant an option to renew existing lease to Little Bloomfield Ltd Pty for the Cleveland Library Restaurant for a further 5 year period; and
2. Delegate authority to the Chief Executive Officer under section 257(1)(b) of the *Local Government Act 2009* to negotiate, make, vary, assign and to sign all documentation in relation to this matter.

Option 2

That Council resolves not to agree to grant a 5 year option to Little Bloomfield Pty Ltd.

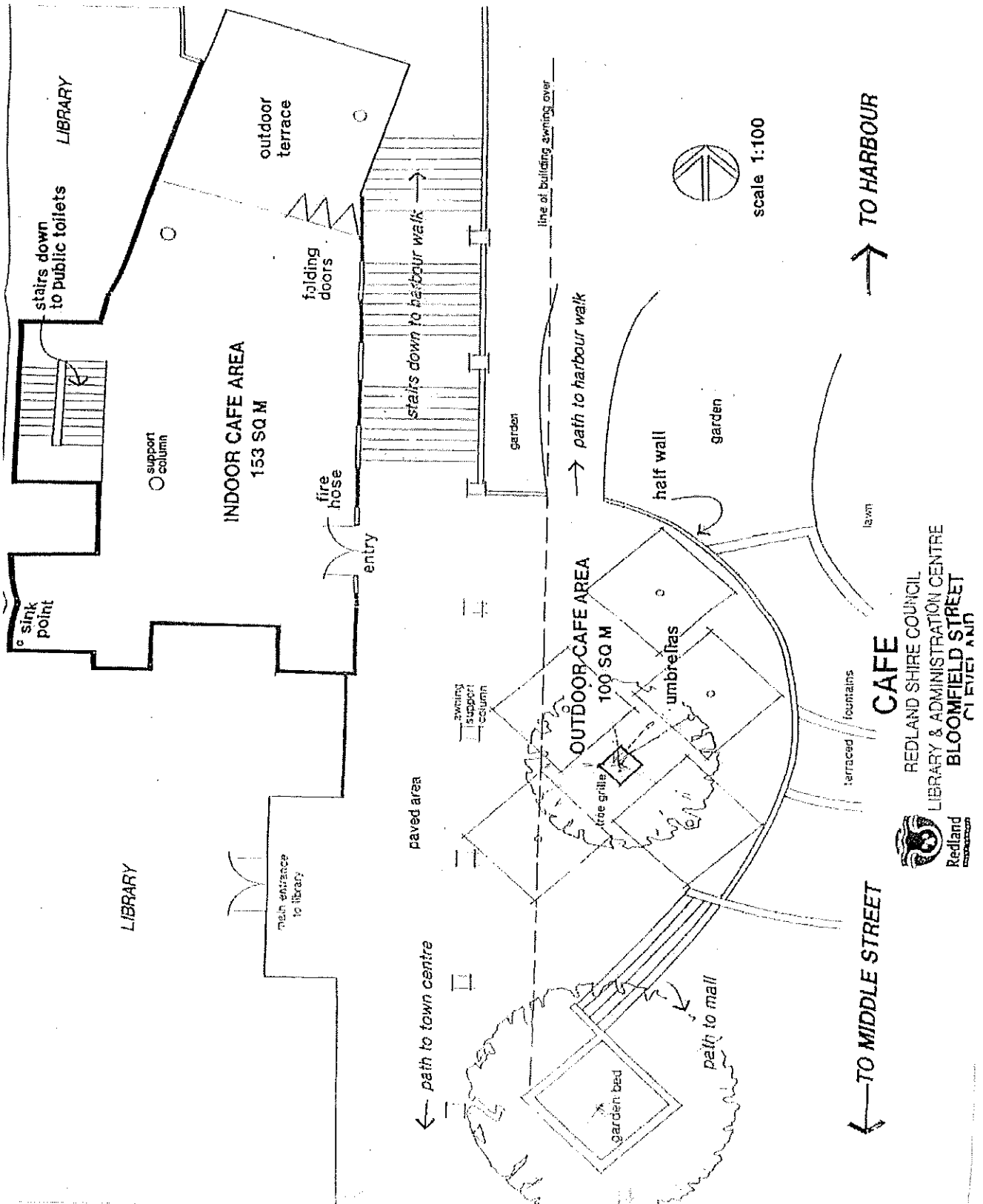
OFFICER'S RECOMMENDATION

That Council resolves to:

- 1. Grant an option to renew existing lease to Little Bloomfield Ltd Pty for the Cleveland Library Restaurant for a further 5 year period; and**
- 2. Delegate authority to the Chief Executive Officer under section 257(1)(b) of the *Local Government Act 2009* to negotiate, make, vary and discharge all documentation in relation to this matter.**

Title Reference: 50207326


APPENDIX 3
[Outdoor Area Sketch]
[Part 18]



11.3.10 REDLAND KOALA CONSERVATION STRATEGY 2016 AND REDLAND KOALA CONSERVATION ACTION PLAN 2016-2021

Objective Reference: A1822662
Reports and Attachments (Archives)

Attachments: [Redland Koala Conservation Strategy 2016](#)
[Redland Koala Conservation Action Plan 2016](#)

Authorising Officer: 
Louise Rusan
General Manager Community and Customer Services

Responsible Officer: Gary Photinos
Group Manager Environment and Regulation

Report Author: Dale Watson
Natural Environment Officer, Environment and Education Unit

PURPOSE

This report seeks Council adoption of the Redland Koala Conservation Strategy 2016 (Strategy 2016) and Redland Koala Conservation Action Plan 2016-2021 (Action Plan 2016-2021) which has ongoing financial implications.

Council has a long standing corporate commitment which has been supported with a significant investment and continues to make a significant investment in koala conservation. As part of the implementation of the new 5 year action plan, the resolution acknowledges that implementation will require an additional budget allocation of \$474 000 for the 2017/2018 financial year and an estimated at \$880 000 per year for the 2018/2019 to 2021/2022 financial years to be drawn from the Environmental Separate Charge reserves. This additional budget will compliment current "business as usual" expenditure and activities regarding koala conservation.

The new Strategy 2016 and Action Plan 2016-2021 will guide management actions to retain a viable koala population, and conserve and manage suitable habitat on the mainland and North Stradbroke Island.

BACKGROUND

Council first adopted a *Koala Policy and Management Strategy in 2002*.

In 2007 Council convened the Redlands Koala Summit, a 2 day intense consultation exercise, which provided Council with recommendations to adopt a revised *Koala Policy and Implementation Strategy 2008-2012*.

In June 2015, Council adopted the Natural Environment Policy, which consolidated six natural environment related policies into a single new policy. As part of this new consolidated Natural Environment Policy, updated strategies and plans are required to align with the Natural Environment Policy.

The new Strategy 2016 *and Action Plan 2016-2021* is the first strategy to be presented to Council under the new Natural Environment Policy.

In July 2016, a Councillor workshop was held to discuss the proposed Strategy and Action Plan.

ISSUES

Decline in Koala Coast Population

The Southeast Queensland Koala Coast includes all of mainland Redland City, an eastern portion of Logan City and a portion of Brisbane City's south-east. The State Government nominated Koala Coast is a high conservation priority area due to a large and genetically distinct koala population living close to a capital city.

The results of the State Government Koala Coast Monitoring Program have shown a decline in koala population estimates:

- 1996-1999 estimated 6000 animals
- 2005-2006 estimated 4600 animals (26% decline)
- 2008 estimated 2300 animals (50% decline in under three years)
- 2010 estimated 2000 animals (not considered a statistically significant decrease from the 2008 survey) (DERM, 2012).

In 2015 the 'SEQ Koala Population Modelling Study' by the University of Queensland (commissioned by the Queensland State Government) concluded that there had been an 80% decline in koala population density in the Koala Coast between 1996 and 2014. The report is based on a model that predicts koala density based on all of the available survey information correlated with habitat characteristics. The report also provided evidence that the rates of decline have increased over time.

Based on the finding of this study the State Government stated that koala numbers in South East Queensland (SEQ) are showing no signs of stabilising despite efforts to address their decline over the past 20 years. To address this issue the State Government have committed a \$12.1 million budget over four years for koala protection and established an expert panel to ensure policy and investment is prioritised accordingly.

Review of Redlands Koala Policy and Implementation Strategy 2008-2012

The goal of the Redlands Koala Policy and Implementation Strategy 2008-2012 was:

"To provide a new vision and to meet community expectations to stop the rapid continuing decline of koalas by 2011 and take immediate action to recover the existing population to more than 5000 koalas in the Koala Coast by 2014."

- A review of the progress of implementation of the 2008 Strategy highlighted the following action areas from the 2008 Strategy have been successfully implemented and have now become business as usual activities for Council:
- Protecting koalas and maintaining koala habitat under Local Laws and other Council policies, programs and activities
- Consolidating, linking and expanding koala habitat areas throughout the City by improved identification of habitat areas, purchase and protection of habitat, acceptance of contributed additions to the reserve network, a program of restoration and management, and improved management of the threats to koalas on Council reserves

- Encouraging and supporting residents who protect koalas in their backyards to plant habitat or individual trees, improve movement through neighbourhoods, to make their fences koala friendly and to attain better dog management
- Increasing community education, awareness and involvement in koala conservation
- Continuing to work collaboratively with government, business and community interests

Specific examples of achievements from the implementation of the Redlands Koala Policy and Implementation Strategy 2008-2012 included:

- Koala Conservation Agreement Program,
- Koala community plantings and food tree giveaways,
- Collaboration with researchers e.g. chlamydia vaccine trials for koalas,
- Environmental land acquisitions,
- Community activities, such as Dogs Day Out events, education campaign with the mascot Pan Da and the Koala Central website, and
- Fauna underpasses at Rickertt-Quarry Road, Birkdale/Thorneside and Colthouse Drive, Thornlands.

The review of the implementation of the 2008-2012 Strategy also identified some barriers to implementation, which included:

- The strategy was broad and a holistic approach was difficult to achieve
- Many actions were beyond the control of Council to implement (they were the responsibility of other organisations)
- More support from State Government was required
- More community based strategies and initiatives were required
- Limited knowledge of local population dynamics
- Limited options to combat disease in koala populations.

The review provided the following key lessons to be applied in the development of the Redland Koala Conservation Strategy and Action Plan 2016:

- Prioritisation of actions to identify critical aspects,
- Actions requiring implementation by external agencies may not be achievable,
- Monitoring of action implementation required,
- Build in capacity for change, and
- Community has a responsibility for koala conservation.

Development of the Redland Koala Conservation Strategy 2016 and Redland Koala Conservation Action Plan 2016-2021

The development of the Strategy 2016 and Action Plan 2016-2021 included:

- A review of the Redlands Koala Policy and Implementation Strategy 2008-2012 including discussions with all Council departments

- Literature review of recent koala monitoring and scientific research,
- Desktop analysis of changes in regulation and actions of other SEQ local governments,
- Consideration of the findings of the SEQ Koala Population Modelling Study,
- Liaison with Logan City Council, Brisbane City Council and City of Gold Coast City Council,
- Liaison with external agencies identified as partners in implementation of the action plan, and
- Early discussions with the State Government department of Environment and Heritage Protection and the Chair of the Expert Panel.

The overall aim of the Strategy 2016 and Action Plan 2016-2021 is to:

“guide management actions to retain a viable koala population, and conserve and manage suitable habitat both on the mainland and North Stradbroke Island”

The Strategy 2016 is a future focussed document that provides the background, strategic framework, head of power and responsibility areas for Council’s action. It also overviews the current scientific understanding of koala conservation issues in the region, and provides an overview of the process employed to formulate the actions within the accompanying Action Plan 2016-2021.

The Action Plan 2016-2021 provides a functional hands-on tool to guide the actions of Council and the community. The Action Plan addresses the five key threats to koalas:

- Habitat loss and fragmentation;
- Road mortality;
- Dog attacks;
- Disease; and
- Changes to climate, temperature and drought.

The Action Plan 2016-2021 articulates actions for koala conservation on both the mainland and North Stradbroke Island that Council can undertake in partnership with its community, State Government, businesses, neighbouring local governments and research bodies.

The actions are formulated around four key objectives:

- Decisions based on science;
- Protect and improve koala habitat;
- Reduce koala deaths; and
- Community making a difference

The Action Plan 2016-2021 has 37 high priority actions. Outcomes of the Action Plan 2016-2021 will be monitored and reviewed to determine the success.

To ensure alignment with regional priorities continued consultation with the State Government Koala Expert Panel and regional collaborations will be undertaken.

A number of actions above ‘*business as usual*’ have been identified as a priority for the first year of implementation of the Action Plan 2016-2021 at a cost of \$474,000 in the 2017/2018 financial year, these include:

- Koala Numbers and Movement Monitoring - long term scientific monitoring program for koalas in the Redlands, in partnership with Queensland Government

Environment Heritage and Protection Department and researchers (Koala Coast Survey, koala radio tracking, koala scat detection dogs)

- Threat Mapping - map threats to koala population and habitat (to guide and prioritise conservation actions)
- Linking Koala Habitat on Council Land – using unused land (road reserves and drainage reserves) for public open space and koala habitat and movement
- Community Survey - online surveys of the communities' understanding of koala issues (principally, habitat, car strike and health) to inform actions of future behaviour change programs
- Koalas on Social Media - use social media to report on koala and human interactions for increased real-time awareness of 'hot spots' and koala mortality risks
- Working with Industry and Business - greater support for koala conservation and management from development, business and industry groups
- Reduce Koala Deaths on Roads – review and implement road treatments as per 'Action Plan to Reduce Koala Hits in Redlands 2007'
- Controlling Dogs at Night - implement Local Law 2 provisions and behaviour change programs regarding appropriate control of animals in designated koala areas
- Koala Research - initiate a Research Partnership Program for collaborative koala research projects in the Redlands through an annual funding budget
- Koala Conservation Agreement Program (KCAP) - expand KCAP extension program activities to improve koala habitat retention and management on private property.

STRATEGIC IMPLICATIONS

Legislative Requirements

Koala protection and conservation involves management action at all levels of government. Within the suite of State and Commonwealth legislation relating to planning and the environment, Council has numerous statutory obligations regarding the conservation of koalas.

Legislation, policy and plans relevant to koala conservation are constantly altering to respond to changes in population, threats and the environment. The following provides a hierarchy of the current legislation, policies, strategy and plans relating to koala protection and management at a Federal and State Government level.

Commonwealth Government:

In 2012, populations of koalas in Queensland, New South Wales and the Australian Capital Territory were listed as vulnerable under the *Environmental Protection and Biodiversity Conservation Act 1999*. The listing means any new development or project deemed to have an unacceptable impact on the listed koala populations will not be approved under national environment law.

The Commonwealth have also produced Conservation Advice for Koala (QLD, NSW & ACT 2012), and the National Koala Conservation and Management Strategy 2009.

Queensland State Government:

In 2004, koalas in South-East Queensland were classified as a 'vulnerable' species under the *Nature Conservation Act 1992*. In 2015, the entire population of koalas in Queensland were listed as vulnerable under the *Nature Conservation Act 1992 (Nature Conservation (Wildlife) Regulation 2006)*. The listing means koalas are a protected species and cannot be taken, used or kept without a permit.

The *Nature Conservation Act 1992, Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016* provide the policy requirements for any koala translocation and releases.

A suite of State Government vegetation protection and planning legislation includes provisions applying to koala habitat protection and management. This suite of legislation includes:

- Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016 (Koala Plan)
- Vegetation Management Act 1999
- Environmental Offsets Act 2014
- Sustainable Planning Act 2009
- South East Queensland Koala Conservation State Planning Regulatory Provisions 2010
- State Planning Policy 2014
- South East Queensland Regional Plan 2009-2031.

Risk Management

The risks of Council not having a Strategy 2016 and Action Plan 2016-2021 include:

- negative community perception of inaction by Council on koala conservation
- ecological impact of koala population decline in the Redlands
- opportunity cost to Redland's economy from diminished koala population

Financial

It is acknowledged that Council has made a significant investment and continues to make a significant investment in koala conservation. Thirteen of the 37 actions within the plan are current business as usual and funded mostly through environment separate charge:

- Approximately \$670,000 per year is currently directly allocated to koala conservation actions
- Approximately \$4,000,000 per year is currently indirectly benefiting koala conservation (bushland and fire management)
- Approximately \$1,500,000 is allocated to finalising the resumption of a high value conservation property
- Approximately \$5.2 million is allocated for the continuation of conservation land acquisitions.

Three action items within the plan are to be advocated for implementation by Queensland Department of Transport and Main Roads or Queensland Rail.

The remaining 21 actions within the plan will require additional budget over the next 5 years to implement, subject to budget consideration. The implementation of first year priority actions will require \$474,000 for the 2017/2018 financial year. Future financial implications are estimated at \$880,000 per year for 2018/2019 to 2021/2022 in addition to current “business as usual” expenditure.

The priority first year actions include commencing new projects or expanding existing work in the areas of:

- Koala Numbers and Movement Monitoring
- Threat Mapping
- Linking Koala Habitat on Council Land
- Community Survey
- Koalas on Social Media
- Working with Industry and Business
- Reduce Koala Deaths on Roads
- Controlling Dogs at Night
- Koala Research
- Koala Conservation Agreement Program (KCAP)

The implementation of the Action Plan 2016-2021 will require a full time equivalent ‘Koala Conservation Project Officer’ to scope, develop and implement on-ground projects and to monitor the outcomes. A part time ‘Koala Education Officer’ will be required to implement the actions under the Community Making a Difference objective within the Action Plan 2016-2021.

This can be funded through a combination of environment levy reserve and external grants (such as the State Government’s recently announced \$12.1 million to assist the protection of koalas).

People

Implementation partners of the Strategy 2016 and Action Plan 2016-2021 include:

- Council officers and teams
- State Government agencies and Koala Expert Panel
- Universities
- Community groups
- Quandamooka Yoolooburrabee Aboriginal Corporation
- Community members
- Neighbouring councils
- Business and industry

Environmental

The implementation of the Action Plan 2016-2021 will conserve and manage suitable koala habitat. This will have significant benefits for a wide range of other native species and ecological communities which also share the koala’s habitat.

Social

Koala conservation actions for residential areas can also have significant social benefits such as improved open space and increased shade.

The koala is a flagship species and can generate public support for broader conservation efforts.

Alignment with Council's Policy and Plans

Local governments develop and implement policy, plans, local planning schemes and local laws that deal with a suite of conservation issues, including koalas.

Redland City Council's current policy context relating specifically to koala conservation includes the following:

- *Redlands 2030 Community Plan*

Protecting, restoring and enhancing the environment – Goal 4:

“Thriving koala population: Koala habitats are protected and new habitat areas established to support the dietary requirements and roaming nature of bushland and urban koalas”.

- *Redlands Corporate Plan 2015-2020*

Key Outcomes:

“1. A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through our awareness, commitment and action in caring for the environment.”

2020 Outcomes:

“1.1 – Redland’s natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored

1.2 - Threatened species are maintained and protected, including the vulnerable koala species”

- *Natural Environment Policy POL-3128*

Council is committed to:

“1. Protect, enhance, restore the natural values of the City that include:

a. Koalas and other native animal and plant populations and habitats”

- *Redland Planning Scheme V7 2006*

Desired Environmental Outcome No. 1 – Natural Environment

“1. Redland City’s environmental values and natural resources are managed in a sustainable manner to maintain biodiversity, ecological processes and community well-being by ensuring development (a) protects and enhances (i) a wide range of natural ecosystems including (e) koala habitat, in order to meet a net gain that will assist in the long term retention of a viable koala population.”

- City Plan 2015 – currently under development.
- Local Law No. 2 (Animal Management) 2015

Division 2 Restraint of animals - 13A Koala conservation requirements

“1. The local government may, by subordinate local law, prescribe requirements for keeping a dog on land that is within a koala area.”

- *Subordinate Local Law No. 2 (Animal Management) 2015*

Schedule 3 Minimum standards for keeping particular animals

Schedule 4a Requirement for keeping dogs a dog in a koala area

Schedule 4b Koala areas (a report to Council on this Schedule is due to presented to Council on the 24th August 2016).

CONSULTATION

The development of the new Strategy 2016 and Action Plan 2016-2021 was reliant on a 'One Team' approach across Redland City Council. This approach included input into the Strategy 2016 and Action Plan 2016-2021 from the following internal stakeholders:

- Environment and Regulation Group
- Environment and Education Unit
- Development Control Unit
- Compliance Services Unit
- City Planning & Assessment Group
- Strategic Planning Unit
- Engineering and Environment Unit
- Economic Sustainability and Major Projects Group
- City Plan Team
- City Infrastructure Group
- Roads, Drainage and Marine Unit
- City Infrastructure Planning Unit
- Traffic and Transport Planning Unit
- City Spaces Group
- Parks and Conservation Services Unit
- Portfolio Management Office
- Project & Program Management Centre of Excellence
- Community and Cultural Services Group
- Communication, Engagement & Tourism Group

To ensure regional consistency in the approach to koala conservation, neighbouring local governments were consulted during the development of the new Strategy 2016 and Action Plan 2016-2021.

Council officers also attend 'Koala Conservation Planning Workshops' with officers from other South East Queensland Local Governments.

Council officers met with Associate Professor Jonathan Rhodes, author of the "South East Queensland Koala population Modelling Study 2015" and current Chair of the State Government Koala Expert Panel in June 2016.

Council officers met with the State Government Expert Panel in November 2016.

On the 26th July 2016 a Councillor workshop was held to present the Strategy 2016 and Action Plan 2016-2021.

A key element of the new strategy and action plan is to ensure an effective communication and engagement plan is developed for our ongoing dialogue with the community.

OPTIONS**Option 1**

That Council resolves to:

1. Adopt the Redland Koala Conservation Strategy 2016 and Redland Koala Conservation Action Plan 2016-2021;
2. Acknowledge that, subject to budget consideration, implementation will require an additional budget allocation of \$474,000 for the 2017/2018 financial year (including the employment of a 'Koala Conservation Project Officer' and a 'Koala Education Officer') and an estimated at \$880,000 per year for the 2018/2019 to 2021/2022 financial years; and
3. Review the implementation of the Redland Koala Conservation Action Plan 2016-2021 after 12 months, taking into account any relevant recommendations from State Government Koala Expert Panel and feedback from the community.

Option 2

That Council resolves to:

1. Defer the adoption of the Strategy 2016 and Action Plan 2016-2021 pending direction from Council about changes to the documents.

OFFICER'S RECOMMENDATION

That Council resolves to:

1. **Adopt the Redland Koala Conservation Strategy 2016 and Redland Koala Conservation Action Plan 2016-2021;**
2. **Acknowledge that, subject to budget consideration, implementation will require an additional budget allocation of \$474,000 for the 2017/2018 financial year (including the employment of a 'Koala Conservation Project Officer' and a 'Koala Education Officer') and an estimated at \$880,000 per year for the 2018/2019 to 2021/2022 financial years; and**
3. **Review the implementation of the Redland Koala Conservation Action Plan 2016-2021 after 12 months, taking into account any relevant recommendations from State Government Koala Expert Panel and feedback from the community.**



REDLAND CITY COUNCIL

Draft Koala Conservation Strategy

2016

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Executive Summary

The koala is the faunal emblem of the Redlands and holds a special place in the hearts of the community. The mainland area of Redlands forms the majority of the Koala Coast and is recognized as one of the most significant natural koala populations in Australia. Since monitoring of the Koala Coast koala populations began in 1996, significant declines have been recorded. The koala population decline is attributed to the key threatening processes of habitat loss and fragmentation, road mortality, dog attacks and disease.

In 2007, to address the issue of koala population decline Council held a Koala Forum with community and other stakeholders. The outcomes of the forum provided the basis of the Koala Policy and Strategy (2008-12). Since adopting this policy and strategy Council increased investment in koala conservation and management initiatives.

In 2015 a review of the 2008-2012 strategy and commitments within Council's 2015-2020 Corporate Plan and Natural Environment Policy, resulted in the development of the Redland Koala Conservation Strategy 2016 and associated Action Plan. This strategy and plan aim to guide management actions to retain a viable koala population and conserve and manage suitable habitat within the City.

The Redland Koala Conservation Strategy 2016 proposes that Council and its community in partnership with relevant state government departments, businesses, neighbouring local governments and research bodies implement appropriate actions for koala conservation on the mainland and on North Stradbroke Island in the areas of:

- Building and sharing knowledge by collaborating with community, government and research bodies to develop a robust understanding of koala population health, ecology and movement on the mainland and North Stradbroke Island to inform and strengthen koala conservation planning
- Enhancing and protecting koala habitat by maintaining an integrated, connected, high quality network of koala habitats across the landscape capable of supporting a viable and sustainable population of koalas for the long term
- Minimising the impact of threatening process on koala population by undertaking on ground works that reduce koala mortality, protects and enhances koala populations and their habitats through a collaborative approach
- Positive community engagement through increasing the understanding, connection to and participation in koala conservation actions and behaviours across all sectors of the community and Council.

The Redland Koala Conservation Action Plan 2016-2021 is a supporting document to this strategy providing a functional hands-on tool for Council and the community to describe and assist in the implementation of the koala conservation actions.

Council actions to implement the plan will be funded through a combination of general revenue, environment separate charge, reserve funds and resources obtained through external funding sources. Annual progress reviews will be undertaken on the success of implementation of the identified actions.

Introduction

The Redland City Council local government area contains two prominent koala (*Phascolarctos cinereus*) populations. One population is located across the mainland area of Redlands, and this population is recognised as forming part of the South East Queensland 'Koala Coast'. The other population is found on North Stradbroke Island (NSI). There are no koalas on the Southern Moreton Bay Islands.

The koala is the faunal emblem of the Redlands and one of the most recognised animals in Australia. They hold a special place in the hearts of much of the community and accordingly koala conservation and welfare is held in high public regard.

Concern about koala conservation in the 1990's led to the State Government recognising part of South East Queensland as a particularly important area for koalas. Named the Koala Coast, this area covers 375 km² and encompasses the entire mainland area of Redland City, the eastern area of Logan City and the south-eastern area of Brisbane City. The Koala Coast was recognised as one of the most significant natural koala populations in Australia, due to the relatively large numbers of koalas living in close proximity to a capital city and the identified genetic distinctiveness of koalas in this population compared with other koalas in South East Queensland (Lee *et al.* 2010).

The Koala Coast has a series of State and Local Government administered conservation reserves, however, the majority of koala habitat occurs on freehold land. Previous mapped boundaries for the Koala Coast assumed that koala populations were mostly in bushland areas.

The State Government first began monitoring the Koala Coast koala populations in 1996. The results of the 2008 Koala Coast koala survey estimated a 64% decline in koala population (from 6246 to 2279 animals since the 1996 monitoring) (DERM 2009). The largest declines occurred in bushland areas, which were found to be a flow on effect from excessive habitat loss and mortality in urban areas. The monitoring showed that the koala populations in bushland areas will continue to decline if a viable urban koala population is not conserved and protected from threatening processes (DERM 2009). In 2015 a trend modelling study of koala density in the Koala Coast revealed an estimated 80% decline in koala population densities between 1996 and 2014 (Rhodes *et al.* 2015). In response to the decline, the State Government announced the establishment of an Expert Panel to explore options to better protect koalas and provide recommendations on the most appropriate actions to address the decline of the state's koala population.

Council's Koala Policy and Strategy Background and Achievements

During the last couple of decades there has been action at all levels of government to protect koala populations and habitats from threats. In 2002 Council adopted the Koala Conservation and Management Strategy and Policy to clearly articulate Council's position and actions in relation to the Shire's koalas. In 2007 Redland City Council held a Koala Summit to coordinate input from all stakeholders and develop a new Koala Policy and Strategy (2008-2012).

The objective of the 2008 Koala Policy was 'to provide a new vision and to meet community expectations to stop the rapid continuing decline of koalas by 2011 and take immediate action to recover the existing population to more than 5000 koalas in the Koala Coast by 2014.' The Policy was inclusive of key stakeholders, including the local community, local business, State Government and other local governments in actions that would address the key identified threats to koalas. These identified threats included; habitat loss, fragmentation, vehicle strikes, train strikes, dog attacks and disease. The strategy contained 150 key actions to be implemented between 2008 and 2012

Council has increased investment in koala conservation and management initiatives since adopting the policy and strategy in January 2008. The activities that have been the most effective within the current approach and resources include:

- Maintaining the protection of koalas and koala habitat under a regulatory and planning framework and other Council policies, programmes and activities
- Consolidating, linking and expanding koala habitat areas throughout the City through:
 - improved identification of habitat areas
 - purchase and protection of habitat
 - acceptance of reserve values
 - restoration and management programs
 - improved management of the threats to koalas on Council reserves
- Encouraging and supporting residents who protect koalas in their backyards to:
 - Plant appropriate koala habitat trees
 - improve movement through neighbourhoods
 - modify their fences to be koala friendly
 - practice dog management
- Increasing community education, awareness and involvement in koala conservation
- Continuing to work collaboratively with government, business and community interests.

In 2015 a review of the implementation of the Koala Policy and Strategy (2008-2012) was undertaken by Council officers. The results of this review were considered in the drafting of this strategy and action plan.

Purpose of the ‘Redland Koala Conservation Strategy 2016’ and ‘Redland Koala Conservation Action Plan 2016-2021’

In 2015 Council reviewed and updated its corporate environmental policies and its overarching corporate plan in 2015. The Natural Environment Policy (POL 3128) and Corporate Plan 2015-2020 identifies the commitment Council has made to:

“protect, enhance and restore the natural values of the City which include koalas and other native animals and plant populations and habitats; core habitat areas as sanctuaries for wildlife and safe wildlife movement across the landscape.”

To address this commitment, the overall aim of the Redland Koala Conservation Strategy 2016 and Redland Koala Conservation Action Plan 2016-2021 is to guide management actions to retain a viable koala population, and conserve and manage suitable habitat both on the mainland and North Stradbroke Island. This overall aim will be achieved by addressing the following objectives:

- Improve our knowledge on koala populations, health ecology and movement
- Improve habitat quality and connectivity
- Provide on ground solutions to reduce threats to koalas
- Collaborate with universities, government agencies, community groups
- Increase understanding of and connection with koalas within Council and the community.

This Strategy will provide the background and process that formulated the actions within the Action Plan. The Redland Koala Conservation Action Plan 2016-2021 is a compendium to this strategy, providing a functional ‘hands-on’ tool for Council and the community. The Action Plan will identify priority actions to assist in consolidating koala habitat and ecology data and information to achieve koala conservation within the City.

Annual progress reviews will be undertaken on the success of implementation of the Action Plan. Implementing the Action Plan will involve working in partnership with state government agencies, universities, community groups, local councils, business and industry, Council officers and teams and most importantly community members. Council actions to implement the plan will be funded through a combination of general revenue, environment separate charge, reserve funds and resources obtained through external funding sources.

The Redland Koala Conservation Strategy 2016 and Redland Koala Conservation Action Plan 2016-2021 do not address State Government controlled issues surrounding koala welfare, including translocation and hospitals.

Legislation, Policy and Plans Relevant to Koala Conservation

Koala protection and conservation involves a hierarchy of management. Within the suite of legislation relating to planning and the environment, Council has numerous statutory obligations regarding the conservation of koalas.

The Commonwealth Government ascribes a national conservation status and provides advice on (research and management actions) for threat abatement actions.

State Government are responsible for animal welfare matters (for example, hospitals and translocation permits), protection of native animal species and vegetation, regulating land use planning and offset requirements.

Local Government develop and implement policy, plans, local planning schemes and local laws that deal with a suite of conservation issues, including koalas.

Legislation, policy and plans relevant to koala conservation are constantly altering due to deal with changes in population, threats and the environment. The table below provides a summary of the current legislation, policy and planning relating to koala conservation at a Federal, State and Local Government level.

Instrument	Acronym	Author	Summary
Federal			
Environmental Protection and Biodiversity Conservation Act 1999	EPBC	Australian Government Department of the Environment	<ul style="list-style-type: none"> Identifies and protects species and ecological communities as 'matters of national environmental significance' (MNES) Koala populations in QLD, NSW and ACT listed as vulnerable under EPBC in 2012
Conservation Advice for Koala (QLD, NSW & ACT) 2012	TSSC	Threatened Species Scientific Committee	<ul style="list-style-type: none"> Provides advice (research and management actions) for threat abatement actions that would support the recovery of the koala
National Koala Conservation and Management Strategy 2009	NRMMC	Natural Resource Management Ministerial Council	<ul style="list-style-type: none"> Provides policy advice to ensure koala habitat is prioritised in land conservation and management initiatives and in statutory planning strategies and applications
State			
Sustainable Planning Act 2009	SPA	Queensland Government	<ul style="list-style-type: none"> Regulates land use planning and development in Queensland, by managing the process development takes place, effects of development on the environment and coordinating and integrating local, regional and state planning Refers to statutory instruments which are relevant to the protection of koala habitat
South East Queensland Koala Conservation State Planning Regulatory Provisions 2010	KSPRP	Queensland Government	<ul style="list-style-type: none"> Includes Redland City in the 'Priority Koala Development Area' (PKADA) Regulates new development in PKADA Applies to development that is made assessable by a local government's planning scheme

State Planning Policy 2014	SPP	Queensland Government Department of State Development, Infrastructure and Planning	<ul style="list-style-type: none"> • Outlines matters of 'State Interest' in land use planning and development including 'biodiversity' • Directs that 'Matters of environmental significance are valued and protected and the health and resilience of biodiversity is maintained or enhanced to support ecological integrity' • Directs that to demonstrate compliance local government to prepare a Koala Strategy demonstrating actions to meet objectives of the SPP
South East Queensland Regional Plan 2009 2031	SEQRP	Queensland Government Department of Infrastructure and Planning	<ul style="list-style-type: none"> • Provides strategic direction to achieve outcomes for the SEQ region by ensuring that state interests are applied in local planning • Aims for a net gain in koala habitat by managing conflict with urban development
Nature Conservation Act 1992 and Nature Conservation (Wildlife) Regulation 2006	NCA	Queensland Government	<ul style="list-style-type: none"> • Identifies and protects threatened species • The koala is currently included in the threatened species list as 'vulnerable' Queensland wide
Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006 2016 (Koala Plan)	NCKP	Queensland Government Environmental Protection Agency	<ul style="list-style-type: none"> • Parts of this plan were superseded by the introduction of the KSPRP • The elements that still apply in Redland City include: <ul style="list-style-type: none"> ▪ requirements to undertake sequential clearing and use of a koala spotter ▪ provisions for rehabilitation of injured and sick koalas and translocation
Vegetation Management Act 1999	VMA	Queensland Government	<ul style="list-style-type: none"> • Regulates the clearing of native vegetation, including koala habitat
Environmental Offsets Act 2014	EOA	Queensland Government	<ul style="list-style-type: none"> • Provides a framework for offsets to be applied • Identifies 'prescribed activities' that may cause 'significant residual impacts' on 'prescribed matters' • Specific requirements for koala related offsets (including rehabilitation, establishment and protection of koala habitat to offset koala habitat loss)
Local			
Redlands 2030 Community Plan	RCP	Redland City Council	<ul style="list-style-type: none"> • Vision Outcome Healthy Natural Environment: <ul style="list-style-type: none"> ▪ A diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems will thrive through our awareness, commitment and action in caring for the environment. • Other relevant goals include: <ul style="list-style-type: none"> ▪ Thriving koala population ▪ Sanctuaries for wildlife ▪ Extensive wildlife linkages and corridors • Includes a target to measure progress of halting the decline in koala numbers then increase to maintain a population of 5,000 koalas by 2014

Redland City Council Corporate Plan 2015 2020	CP	Redland City Council	<ul style="list-style-type: none"> • Renewed Council's commitment to protecting Redland's natural environment by delivering on the outcomes of the Redlands 2030 Community Plan • Specific '2020 Outcomes': <ul style="list-style-type: none"> ▪ <i>Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored;</i> ▪ <i>Threatened species are maintained and protected, including the vulnerable koala species'.</i>
Natural Environment Policy 2015	NEP	Redland City Council	<ul style="list-style-type: none"> • Objective: <ul style="list-style-type: none"> ▪ <i>Our corporate decisions protect, enhance and restore the health and viability of the City's natural values both on public and private lands and waterways for the benefit, use and lifestyle of current and future generations of our community'.</i> • The Policy statement includes koalas specifically, as one of these 'natural values' (along with other native animal and plant populations).
Redland Planning Scheme V7 2006	RCP2006	Redland City Council	<ul style="list-style-type: none"> • Desired Environmental Outcome No. 1 – Natural Environment “1. Redland City's environmental values and natural resources are managed in a sustainable manner to maintain biodiversity, ecological processes and community well being by ensuring development (a) protects and enhances (i) a wide range of natural ecosystems including (e) koala habitat, in order to meet a net gain that will assist in the long term retention of a viable koala population. “
Draft Redland City Plan 2015	DCP	Redland City Council	<ul style="list-style-type: none"> • Koalas identified in strategic framework as a key priority • Provisions within zoning and Environmental Significance overlay codes require development to be designed to provide safe koala movement opportunities, minimise impediments to a koala traversing the landscape, minimises the loss of koala habitat trees and minimises the amount of clearing and fragmentation of koala habitat

Koala Biology and Ecology

Koalas (*Phascolarctos cinereus*) are the sole member of the marsupial family *Phascolarctidae* and their closest living relatives are the wombats. Koalas are widely distributed from northern Queensland to west of Adelaide in South Australia. Differences in physical features of koalas throughout Australia, such as fur colour and body size, are attributed to different environmental conditions rather than subspecies differentiation. Koala populations are currently scattered throughout Queensland, with south-east Queensland having the greatest concentration.

Behavior and Movement

Koalas live for around 15 years in the wild. Koalas are solitary and have specific home ranges. Males mate with a number of females and the home ranges of dominant, breeding males will overlap those of several adult females. In the initial stages of independence, a young female koala usually remains within its mother's home range for about a year, until they establish their own home range, often overlapping with their mother's, or dispersing to other areas. In contrast, a young male is often turned out of the maternal

home range and becomes nomadic. These males may be forced into marginal habitats and become more generalist in their dietary intake and may travel substantial distances.

Home range size also varies according to quality of the habitat. Home ranges can vary from a hectare to hundreds of hectares (Jurskis and Potter 1997). Koala size varies according to sex (males tend to be larger) and carrying capacity of the habitat (Phillips and Callaghan 1995).

Breeding

Healthy females breed from about two years of age and give birth each year, however some produce offspring every 2-3 years (depending on habitat quality and age). The breeding season can range from August to February, with peak mating generally occurring in December. During the breeding season males will bellow frequently to locate females and 'announce' their size and status. They are also more mobile during the breeding season as individuals seek out mates. Females in Queensland can give birth to a joey between August and May, but most births occur in December and January. Young begin to emerge from the pouch at about six months of age and are weaned at about 12 months of age to find their own home range (Australian Koala Foundation 2015). Koalas are dependent for a long period of time compared to most other marsupials.

Habitat Requirements

Koalas are found in communities of eucalypts and some related species. While koalas choose their habitat based on the suitability of food trees, the reasons for choosing these trees are not well understood. There are generally more koalas in forests and woodlands occurring on more fertile soils (EPA 2006). In more arid regions, water regime appears to be important, as koalas are often more abundant along watercourses and on adjacent floodplains (Gordon et al. 1988; Melzer 1995; Munks et al. 1996). Koalas generally attain different population densities in different vegetation communities according to suitability of the habitat.

Factors that may contribute to the suitability of habitat include:

- Availability of seasonal or supplementary food species
- Presence of suitable shelter and shade trees (particularly important in harsh climates)
- Structural diversity of the vegetation
- Tree size (NPWS 2003).

Research has found that koalas tend to prefer larger trees (Hindell and Lee 1987; White 1999).

Within a home range, a few specific trees (home range trees) are used by koalas to mark territories and identify individual koalas. Such trees are recognisable by heavy scratching and collections of scats close to the tree base, and may also have significant forage value (Phillips and Callaghan 1995, Hume 1995). Such trees are very important as they help to maintain social structure by allowing koalas to identify each other and their home ranges (Phillips 1997, Sharp and Phillips 1999).

Diet

Koalas are specialised leaf eaters, feeding primarily on selected species of *Eucalyptus*, and some related genera including *Corymbia*, *Angophora* and *Lophostemon*. However, koalas also feed on a number of other species, including species from the genera *Melaleuca* and *Leptospermum* (EPA, 2006). Some tree species are preferred by koalas, with individuals showing a preference for a small number of food trees in each locality. Food tree preference can vary in different regions, with a tree species preferred in one region sometimes being avoided in another region. A detailed understanding on koala food tree preferences is yet to be reached, however it is thought a range of factors can contribute to preferences, including: leaf moisture content, leaf nitrogen content and level of formylated phloroglucinol (a compound produced by Eucalypts that adversely affects mammals) (Chambers & Schell 2007).

Preferred koala food trees identified within the Redlands by Chambers & Gilbert, 2014, include:

Common Name	Scientific Name
*Blue Gum	<i>Eucalyptus tereticornis</i> *
Tallowwood	<i>Eucalyptus microcorys</i>
*Swamp mahogany	<i>Eucalyptus robusta</i> *
Orange Gum	<i>Eucalyptus bancroftii</i>
*Blackbutt	<i>Eucalyptus pilularis</i> *
Scribbly Gum	<i>Eucalyptus racemosa</i>
Narrow-leafed Red Gum	<i>Eucalyptus seeana</i>
Small-fruited Grey Gum	<i>Eucalyptus propinqua</i>
Flooded / Rose Gum	<i>Eucalyptus grandis</i>
Grey Gum	<i>Eucalyptus major</i>
Gum-topped Box	<i>Eucalyptus mollucana</i>
Needle-barked Stringybark	<i>Eucalyptus planchoniana</i>
Pink Bloodwood	<i>Corymbia intermedia</i>
Spotted Gum	<i>Corymbia citriodora</i>
Red Stringybark	<i>Eucalyptus resinifera</i>
Broad-leafed Mahogany	<i>Eucalyptus carnea</i>
Grey Ironbark	<i>Eucalyptus siderophloia</i>
White Stringybark	<i>Eucalyptus tindaliae</i>
Narrow-leafed Ironbark	<i>Eucalyptus crebra</i>
Red Ironbark	<i>Eucalyptus fibrosa</i>
*Brush Box	<i>Lophostemon confertus</i> *
*Swamp Box	<i>Lophostemon suaveolens</i> *
Broad-leafed Paperbark	<i>Melaleuca quinquenervia</i>

* North Stradbroke Island

Koala Population Estimates

Historically, koalas had a mostly continuous distribution throughout coastal and inland Queensland and New South Wales, throughout most of Victoria and in the south-eastern area of South Australia. Since European settlement koala population have rapidly declined as a result of habitat loss, drought, hunting and disease (NRMMC 2009). Large numbers of koalas were hunted in the late 19th and early 20th centuries for the fur and skin trade. In Queensland, the annual commercial harvest of koalas ranged from approximately 450 000 animals to nearly one million between 1906 and 1927 (Hrdina and Gordon 2004).

Currently, the national koala population distribution has changed little since European settlement, however deriving reliable broad-scale population estimates is very difficult, and so the national population of the koala remains unclear (NRMMC 2009).

In Queensland, koalas occur throughout most of their natural range, although the overall koala population continues to decline (including local extinctions and local declines in abundance) due to extensive clearing and fragmentation of woodland and forest (EPA 2006).

The koala population within the Koala Coast (which includes the entire mainland portion of Redland City, the eastern portion of Logan City and the south-eastern portion of Brisbane City) has been in significant decline since comprehensive monitoring by the Queensland Government began in 1996. Between 1996 and 1999, the Koala Coast koala population was estimated at approximately 6000 animals. A re-survey of the Koala Coast between 2005 and 2006 indicated that the population had declined by 26 per cent to an estimated 4600 animals. In 2008, another round of comprehensive surveys revealed that the population had undergone a steep decline and was estimated at about 2300 animals, more than 50 per cent population loss in less than three years. An analysis of the raw survey data for the 2010 survey led to a population estimate of around 2000, which although a decline from the 2008 surveys, was not shown to be a statistically significant decrease in population (DERM, 2012).

In 2015 the University of Queensland was commissioned by the Queensland Department of Environment and Heritage Protection to analyse all koala survey data for South East Queensland between 1996 and 2015. Using models of trends in koala density for the Koala Coast there was strong evidence for a rapid decline in population densities between 1996 and 2014. The modelling revealed an estimated 80.3% (95% credible interval: 70.8% to 86.2%) decline in koala population density in the Koala Coast monitoring sites (Rhodes et al. 2015).

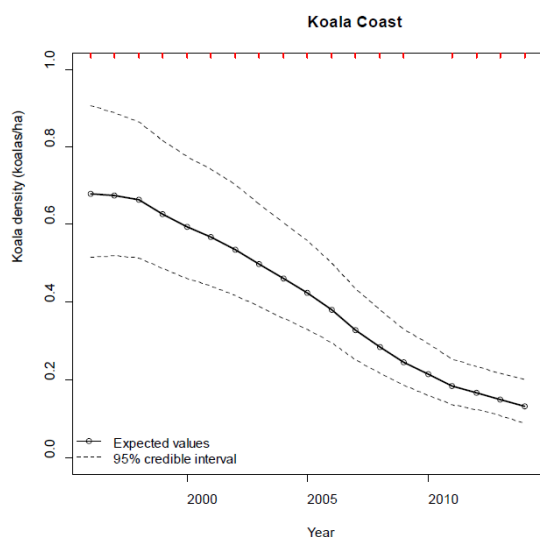


Figure 1. Estimated mean koala densities at the Koala Coast sites between 1996 and 2014. Reprinted from “South East Queensland Koala Population Modelling Study”, by Rhodes, J. R., Beyer, H. L., Preece, H.J. and McAlpine, C.A, 2015, UniQuest.

There was also evidence that the rates of decline have increased over time (see Figure 1). The estimated annual rate of change in density in the Koala Coast in 1996 was -1.93% (95% credible interval: -6.84% to +3.26%), but in 2014 it was -13.26% (95% credible interval: -19.44% to -6.49%). This illustrates a likely acceleration in the rate of decline over time (Rhodes et al. 2015). The report suggests that there are a number of areas in which koalas may become locally extinct or are at such low densities that they are effectively extinct and that it appears that the loss of koalas from many sites in the Koala Coast is imminent (Rhodes et al. 2015). These types of patterns are common across coastal eastern Australia where development and koala habitat coincide (Lunney et al. 2002, Lunney et al. 2007b, Santika et al. 2014).

Key Threats

Habitat Loss and Fragmentation

Habitat loss has been identified as the greatest threat to koala survival. Koala habitat can be lost through clearing for urban development, broad scale clearing in rural and peri-urban areas and fragmentation by development creating physical and behavioural barriers to movement, including the loss of stepping stone trees in the urban landscape. Bushland can also become degraded through poor management, fire, or pest and weed infestations (EPA 2006).

The extent of Eucalypt woodland clearing over the past 200 years has significantly reduced primary and secondary koala habitat availability (Reed *et al.* 1990; Melzer et al. 2000). Almost the entire range of koalas has been impacted by some level of vegetation clearing with less than 50% of pre 1860's koala habitat remaining across their national range (ANRA 2001; Seabrook *et al.* 2003; DSEWPC 2011).

Habitat that is highly suitable for koalas is now considered to consist of large areas of sustainable forests on fertile soils in close proximity to neighbouring habitat patches of similar quality and low proximity to roads (McAlpine *et al.* 2006). The closer an area of koala habitat becomes to this ideal the more effectively the habitat will support high quality breeding and low risk movement (McAlpine *et al.* 2006).

Habitat loss and fragmentation can also affect the genetics of koala populations. Koalas living in and amongst urban environments are most threatened by habitat loss and fragmentation (Dique et al. 2004). It is likely that recent reductions in population size and restricted gene flow through barriers to gene movement and urbanisation have contributed to the genetic differentiation of the koala populations within the Koala Coast region (Lee et al. 2010). There is some evidence to suggest that reduced genetic variation might reduce the fitness of koala populations (Sherwin et al. 2000).

Road Mortality

Vehicle related koala mortality is the second most significant impact on koalas (after habitat loss and fragmentation) affecting about 300 koalas per year in the Koala Coast alone (EPA 2006). Although koalas spend most of their time in trees, they need to come to ground to move between trees within their home range. This on-ground movement mostly occurs at night but koalas can be active at any time. The movement of adult and dispersing koalas in the breeding season (August to February) greatly increases the risk of car strikes and dog attacks (Dique et al. 2003b). Koalas living in or near urban developed areas where traffic volume and speed are greater are more at risk.

Dog Attacks

Domestic dogs have a significant impact on koala populations, particularly in south-east Queensland. Attacks from domestic dogs are the third most significant known cause of death behind car strikes and habitat clearing (EPA 2006). On average, approximately 110 koalas are attacked and killed by dogs each year in South East Queensland (EHP 2013). Dog-related mortality is principally caused by domestic dogs, generally in suburban backyards.

Studies have demonstrated that:

- Although they occur throughout the year, more dog attacks during July to September (the months leading up to koala breeding)
- There is a seasonal peak in dog attacks in September, which particularly affects young males
- If two or more dogs are present at a property there is a higher incidence of attack
- The frequency of dog attacks in a particular urban area strongly correlates with the density of dogs that area
- Attacks on sick animals are no more frequent than for healthy koalas (EPA 2006).

Disease

Several diseases existing within koala populations pose a threat to koala population resilience. Chlamydiosis and koala retrovirus (KoRV) are the two diseases most frequently threatening koala health. Symptoms of Chlamydiosis include reduced fertility rates, blindness and ultimately death (Martin & Handasyde 1999). Koala retrovirus is the agent of Koala Immune Deficiency Syndrome, an immunodeficiency that can be genetically transmitted both between koalas and from parent to offspring (Stoye 2006). Failure to breed for two or more successive years is usually a sign of infertility brought on by a chlamydial infection of the reproductive tract (EPA 2006). High levels of female infertility are present in many koala populations, with levels of more than 50 percent being recorded in Queensland (Gordon et al. 1990a). This results in depression of the reproductive rate and may lead to reduced population growth or population decline. For this reason monitoring of diseases such as Chlamydiosis and KoRV within individual populations is crucial for the survival of all koala populations.

Climate Change

Climate change is predicted to include an increase in drought frequency and high-fire-danger weather in many parts of Australia, owing to reduced rainfall levels, increased evaporation levels and an overall temperature increase between 0.4 to 2.0°C by 2030 (CSIRO 2001).

It has been predicted that increasing atmospheric CO₂ levels will reduce the nutritional quality of Eucalyptus leaves. This may compromise the ability of koalas to meet their nutritional requirements. It is also predicted that increasing frequency and intensity of droughts may force koalas to move more frequently in search of water or new habitats, increasing their vulnerability to predators and motor vehicles (IUCN 2009).

Studies on the implications of climate change for koala distribution in Queensland has predicted that South East Queensland may become increasingly important to the long-term survival of Queensland's koala population as the climate in other parts of Queensland become more hostile to the species' survival (Adams-Hosking et al., 2011).

Strategic Outcomes and Objectives

This plan articulates actions for koala conservation on both the mainland and North Stradbroke Island that Council can undertake in partnership with its community, state government, businesses, neighbouring local governments and research bodies in the following areas:

- **Decisions Based on Science**
 - Objective: Collaborating with research bodies, government agencies and the community to develop a robust understanding of koala population health, ecology and movement on the mainland and North Stradbroke Island to inform and strengthen koala conservation planning.
- **Protect and Improve Koala Habitat**
 - Objective: Maintain an integrated, connected, high quality network of koala habitats across the landscape capable of supporting a viable sustainable population of koalas for the long term.
- **Reduce Koala Deaths**
 - Objective: Minimise the impacts of threatening processes on koala populations by undertaking on ground works that reduce koala mortality.
- **Community Making a Difference**
 - Objective: Increase understanding, connection to and participation in koala conservation actions and behaviours across all sectors of the community and Council.

Action Plan

The 2008 'Redlands Koala Policy and Implementation Strategy' contained 150 key actions to be implemented between 2008 and 2012. 57 of these actions were completed during the life of the plan. The actions contained in the 2008-2012 strategy covered a spectrum from highly aspirational to detailed and practical. This Redland Koala Conservation Strategy 2016 and associated Action Plan have been developed following a review of the status of the 150 actions from the 2008-2102 strategy.

Actions are formed around the Strategic Outcomes and Objectives already outlined. Each action addresses issues identified through the analysis of information gaps and threats to koala populations both on the mainland and North Stradbroke Island. The priority for consolidating meaningful koala habitat and ecology information will allow the Action Plan to be refined in the future with targeted and effective actions. Each action has been assigned a specific outcome to be achieved; this will provide an indication of the success of the action. A review of the outcomes from the action plan will occur after the first 12 months of implementation. The review will align with recommendations from State Government Koala Expert Panel

The Redland Koala Conservation Action Plan 2016-2021 guides immediate on-ground measures that are achievable within Council's sphere of influence. The Action Plan is a supporting document to this strategy providing a functional hands-on tool for Council and the community.

Performance Measures

The implementation of the actions in this plan will be reviewed annually. The review will assess the success of each action based on the associated 'Outcome Achieved'. Information from each of the Council departments and external partners (with assigned actions) will be collated for the annual review.

Funding of the Action Plan is critical to the success and performance of this strategy. A five year budget submission will be developed to provide for the implementation of the Action Plan. Council actions to implement the plan will be funded through a combination of general revenue, environment separate charge, reserve funds and resources obtained through external funding sources.

References

- Adams-Hosking C, Grantham H, Rhodes J, McAlpine C, and Moss P (2011), Modelling climate – change-induced shifts in the distribution of the koala. *Wildlife Research*. 38, 122-13
- Chambers J and Gilbert M (2014) Review and map Koala habitat within Redland City – Version 2. BAAM Ecological Consultants for Redland City Council
- Chambers J & Schell C (2007). Koala Impact Assessment: Proposed Boral Narangba Quarry Extension. Biodiversity Assessment and Management Pty Ltd.
- CSIRO (2001) Climate Change Projections for Australia. CSIRO Atmospheric Research, Aspendale, Victoria [Accessed 04 November 2015: <http://www.cmar.csiro.au/e-print/open/projections2001.pdf>].
- Department of Environment and Heritage Protection (2010) South East Queensland Koala Conservation State Planning Regulatory Provisions. Queensland State Government, DEHP.
- Department of Environment and Heritage Protection (2013) Koalas and dogs - Living with Wildlife – Koalas Fact Sheet. Queensland State Government, Brisbane.
- Department of Environment and Resource Management (2009) Decline of the Koala Coast Population: Population Status in 2008. Department of Environment and Resource Management, Brisbane.
- Department of Environment and Resource Management (2012) Koala Coast Koala Population Report 2010. Koala Policy and Operations, Department of Environment and Resource Management, Brisbane
- Environmental Protection Agency. (2006) Nature Conservation (Koala) Conservation Plan 2006 and Management Program 2006-2016. Queensland Government - Environmental Protection Agency.
- Environmental Protection Agency. (2006) Koalas and cars – Fact Sheet Koala Conservation. Queensland Government - Environmental Protection Agency.
- Gordon, G., Brown, A. S., and Pulsford, T. (1988) 'A koala (*Phascolarctos cinereus* Goldfuss) population crash during drought and heatwave conditions in south western Queensland' *Australian Journal of Ecology* 13: 451–462.

- Gordon, G., McGreevy, D. G., and Lawrie, B. C. (1990a) 'Koala populations in Queensland: major limiting factors' *Biology of the Koala* (editors A. K. Lee, K. A. Handasyde, and G. D. Sanson), Surrey Beatty & Sons, Sydney, pp. 85-95.
- Hindell, M. and A.K. Lee (1987). Habitat use and tree preferences of koalas in a mixed eucalypt forest in *Australian Wildlife Research* 14:349-360.
- Hrdina, F. and G. Gordon (2004). The Koala and Possum Trade in Queensland, 1906-1936 in *Australian Zoologist* 32(4):543-585.
- Hume, I.D. (1995). The mystery of Koala food choice. In: *Proceedings on a Conference on the Status of the Koala in 1995*. pp 55-64. Australian Koala Foundation, Brisbane.
- International Union for Conservation of Nature and Natural Resources (2009) *Koalas and Climate Change Hungry for CO2 cuts*. International Union for Conservation of Nature and Natural Resources – Red List
- Jurskis, V. and Potter, M. (1997). *Koala Surveys, Ecology and Conservation at Eden*. Research Paper No. 34. State Forests, Sydney.
- Lee, K.E., Seddon, J.M., Corley, S., Ellis, W.A.H., Johnston, S.D., de Villiers, D.L., Preece, H.J., and Carrick, F.N. (2010) Genetic variation and structuring in the threatened koala populations of Southeast Queensland reveals a genetically distinct population in the Koala Coast. *Conservation Genetics* 11:2091-2103
- Lunney, D., L. O'Neill, A. Matthews, and W. B. Sherwin. 2002. Modelling mammalian extinction and forecasting recovery: koalas at Iluka (NSW, Australia). *Biological Conservation* 106:101-113.
- Lunney, D., S. Gresser, L. E. O'Neil, A. Matthews, and J. R. Rhodes. 2007b. The impact of fire and dogs on koalas at Port Stephens, New South Wales, using population viability analysis. *Pacific Conservation Biology* 13:189-201.
- Melzer, A., F. Carrick, P. Menkhorst, D. Lunney and B. St John (2000). Overview, Critical Assessment, and Conservation Implications of Koala Distribution and Abundance in *Conservation Biology* 14(3):619-628.
- Melzer, A. (1995) *Aspects of the ecology of the koala, Phascolarctos cinereus (Goldfuss, 1817), in the sub-humid woodlands of central Queensland* PhD Thesis, University of Queensland, Brisbane.
- NPWS (New South Wales National Parks and Wildlife Service) (2003). *Draft Recovery Plan for the Koala (Phascolarctos cinereus)*. New South Wales National Parks and Wildlife Service, Hurstville, NSW.

- Natural Resource Management Ministerial Council (2009). National Koala Conservation and Management Strategy 2009–2014. Department of the Environment, Water, Heritage and the Arts, Canberra.
- Munks, S. A., Corkrey, R. and Foley, W. J. (1996) 'Characteristics of arboreal marsupial habitat in the semi-arid woodlands of northern Queensland' *Wildlife Research* 23: 185–195.
- Phillips, B. (1990) *Koalas: the little Australians we'd all hate to lose* Australian Government Publishing Service, Canberra.
- Phillips, S. (1997). Some issues associated with the translocation of Koalas (*Phascolarctos cinereus*). Paper presented to the Australian Veterinary Association Symposium
- Phillips, S., and Callaghan, J. (1995) The Spot Assessment Technique for determining the significance of habitat utilisation by Koalas. Unreviewed addendum to: Proceedings of a conference on the status of the Koala in 1995. Australian Koala Foundation: Brisbane.
- Rhodes, J. R., Beyer, H. L., Preece, H.J. and McAlpine, C.A. 2015. South East Queensland Koala Population Modelling Study. UniQuest, Brisbane, Australia.
- Santika, T., C. A. McAlpine, D. Lunney, K. A. Wilson, and J. R. Rhodes. 2014. Modelling species distributional shifts across broad spatial extents by linking dynamic occupancy models with public-based surveys. *Diversity and Distributions* 20:786-796.
- Sharp, A. and Phillips, S. (1999). Koalas, Science and Conservation. In: *Saving Our Natural Heritage - The role of science in managing Australia's ecosystems*.
- Sherwin, W.B., P. Timms, J. Wilcken and B. Houlden (2000). Analysis and Conservation Implications of Koala Genetics in *Conservation Biology* 14(3):639-649.
- Stoye, J. P. (2006). Koala retrovirus: a genome invasion in real-time. *Genome Biology* 7(11): 241.
- White, N. A. (1999). Ecology of the koala (*Phascolarctos cinereus*) in rural south-east Queensland, Australia in *Wildlife Research* 26:731-744.



REDLAND CITY COUNCIL

Draft Koala Conservation Action Plan

2016



Redland Koala Conservation Action Plan 2016-2021

This plan documents actions to progress the Strategic Outcomes and Objectives outlined in the Redland Koala Conservation Strategy 2016. The strategy and action plan aim to guide management actions to retain a viable koala population, and conserve and manage suitable habitat both on the mainland and North Stradbroke Island. The Redland Koala Action Plan 2016-2021 identifies immediate on-ground measures that are achievable by Council. Each action addresses issues identified through the analysis of the current understanding of threats and viable mitigating measures to koala populations in the Redland City Council area. Evaluation of actions as they are implemented and ongoing improvements in knowledge including alignment with recommendations from State Government Koala Expert Panel will inform a review of this plan during its implementation. Each action outcome will provide an indicator to assess the successful implementation of each action.

Head of Power

Corporate Plan 2015-2020

The Redland Corporate Plan 2015-2020 sets the strategic direction and priorities for the natural environment by delivering on the outcomes of the Redlands 2030 Community Plan for:

'a diverse and healthy natural environment, with an abundance of native flora and fauna and rich ecosystems, will thrive through our awareness, commitment and action in caring for the environment'.

The Corporate Plan also includes a specific '2020 Outcome' relating to koala conservation:

- *'Redland's natural assets including flora, fauna, habitats, biodiversity, ecosystems and waterways are managed, maintained and monitored;*
- *Threatened species are maintained and protected, including the vulnerable koala species'.*

The corporate plan also includes a performance indicator of 'Participation in fauna monitoring, protection, rescue and recovery programs'.

Natural Environment Policy POL-3128

Redland City Council through the Natural Environment Policy in 2015 (POL-3128) states:

'our corporate decisions protect, enhance and restore the health and viability of the City's natural values both on public and private lands and waterways for the benefit, use and lifestyle of current and future generations of our community'.

The Policy statement includes koalas specifically, as one of these 'natural values' (along with other native animal and plant populations) in statement 1:

Protect, enhance, restore the natural values of the City that include:

- a. Koalas and other native animal and plant populations and habitats;*
- b. Core habitat areas as sanctuaries for wildlife;*

- c. *Safe wildlife movement corridors across the landscape;*
- d. *Maintaining no net loss of non-remnant and remnant regional ecosystems as defined in the Vegetation Management Act 1999.*

The policy provides a commitment to a conservation acquisition program that:

“prioritises acquisition of land for rehabilitation and long term protection to achieve cost effective environmental outcomes that contribute to facilitating biodiversity conservation (e.g. koala survival) and has community benefits”.

Action Plan Objectives

This plan articulates actions for koala conservation on both the mainland and North Stradbroke Island that Council can undertake in partnership with its community, state government, businesses, neighbouring local governments and research bodies in the following areas:

- **Decisions Based on Science**
 - Objective: Collaborating with research bodies, government agencies and the community to develop a robust understanding of koala population health, ecology and movement on the mainland and North Stradbroke Island to inform and strengthen koala conservation planning.
- **Protect and Improve Koala Habitat**
 - Objective: Maintain an integrated, connected, high quality network of koala habitats across the landscape capable of supporting a viable sustainable population of koalas for the long term.
- **Reduce Koala Deaths**
 - Objective: Minimise the impacts of threatening processes on koala populations by undertaking on ground works that reduce koala mortality.
- **Community Making a Difference**
 - Objective: Increase understanding, connection to and participation in koala conservation actions and behaviours across all sectors of the community and Council.

The successful implementation of the actions requires support and contributions from many sections within Council, the general community and State Government. Cooperation and assistance will also be required from government agencies, other councils, universities and industry and community groups.

This plan does not address State Government controlled issues surrounding koala welfare, including translocation and hospitals.

Indicative Costs	
High	Over \$100,000
Medium	\$10,000 - \$100,000
Low	Below \$10,000
Officer time	Within current position description (may require additional resourcing)

Time frames	
Ongoing	These actions will continually be dealt with throughout the Strategy's life
Immediate	The actions will commence in the next 12 months
Short	The actions will be undertaken in the next 2 years
Long	The actions will be undertaken in the next 5 years

Redland City Council departments	
Group	Unit
CPA	City Planning & Assessment Group
	SPU Strategic Planning Unit
	EngEU Engineering & Environment Unit
ESMP	Economic Sustainability & Major Projects
GC	General Counsel Group
CET	Communication, Engagement & Tourism Group
CI	City Infrastructure Group
	RDMU Roads, Drainage & Marine Unit
	CIPU City Infrastructure Planning Unit
	TTPU Traffic & Transport Planning Unit
PDG	Project Delivery Group
	SSU Survey Services Unit
CS	City Spaces Group
	PCU Parks & Conservation Services Unit
ER	Environment & Regulation Group
	EEU Environment & Education Unit
	DCU Development Control Unit
	CSU Compliance Services Unit
CCS	Community and Cultural Services Group

State Government departments	
EHP	Department of Environment and Heritage Protection
TMR	Department of Transport and Main Roads
QR	Queensland Rail

Other non-government organisations	
RSPCA	Royal Society for the Prevention of Cruelty to Animals
QAA	Queensland Arboricultural Association Inc
QYAC	Quandamooka Yoolooburrabee Aboriginal Corporation

Decisions Based on Science

Objective: Collaborating with research bodies, government agencies and the community to develop a robust understanding of koala population health, ecology and movement on the mainland and North Stradbroke Island to inform and strengthen koala conservation planning.

Issue	Action	Outcome Achieved	Timeframe	Responsibility	Partners	Cost
Koala Data Understanding koala population health, ecology and movement	Koala Numbers Develop and implement a long term scientific monitoring program for koala population density in the Redlands, in partnership with EHP & researchers (continuation of Koala Coast Survey)	Koala population density data to monitor success of conservation actions	Immediate	ER (EEU)	EHP, University, other councils	Medium (additional budget required)
	Koala Movement Develop and implement long term monitoring programs for koala movement and habitat usage in the Redlands, in partnership with EHP & researchers (koala radio tracking, koala scat detection dogs)	Koala population distribution data to guide and prioritise conservation actions	Immediate	ER (EEU)	EHP, University, other councils	Medium (additional budget required)
	North Stradbroke Island Koala Monitoring (Citizen Science) Continued participation and funding for annual monitoring of North Stradbroke Island (NSI) Township koala populations and Koala Count a thon	Data is used to measure koala population (density and distribution) in-the NSI townships and mainland urban areas	Ongoing (annually)	ER (EEU)	Environmental community groups	Low (within existing budget)
	Koala Threat Mapping Review and map existing data for koala population, habitat and threats within Redlands	Threat map to guide and prioritise koala conservation actions	Ongoing	ER (EEU)	University	Medium (additional budget required)
Koala Research Prioritising research	What do we know Collate and review existing koala research projects and identify and prioritise knowledge gaps to guide future research projects	Identification and prioritisation of koala research gaps	Immediate	ER (EEU)	State Government, Universities, other councils, community and industry groups	Officer Time (additional budget required)
	What do we need to know Initiate a Research Partnerships Program that attracts, supports and implements collaborative koala research projects in the Redlands through an annual funding budget, and by providing resources to researchers and students*	Increased koala data and knowledge through collaborative scientific research	Immediate	ER (EEU)	Universities, State Government, other councils, community and industry groups	Medium (additional budget required)

*Indicative/potential Koala Research Projects include:- monitoring methodologies (scat detection dogs, drone imagery), disease, koala health, population genetics, habitat loss/gain monitoring, relationships between habitat factors (such as soil type, soil moisture, leaf chemistry, tree species) and koala density, population health, ecology and movement and reproductive status, determine minimum habitat area required to support target koala population, understanding of severe weather (ie. floods, drought), bushfire and invasive species on koala health.

Protect and Improve Koala Habitat

Objective: Maintain an integrated, connected, high quality network of koala habitats across the landscape capable of supporting a viable sustainable population of koalas for the long term.

Issue	Action	Outcome Achieved	Timeframe	Responsibility	Partners	Cost
Regulatory Approach to Protect Existing Koala Habitat	City Plan & Local Laws Review Local Laws to protect koala habitat across Redland, post adoption of City Plan ¹	Improved management and protection of significant native vegetation	Short	CPA (SPU)	ER (EEU), (DCU) , ESMP	Low (within existing budget)
Targeted Land Purchase	Land Acquisitions Continue the purchase of key strategic koala habitat (and habitat corridors) using funds from the Environmental Separate Charge	Improved protection of koala habitat and habitat corridors	Ongoing	ER (EEU)	CS (PCU)	High (within existing budget)
Koala Habitat on Council Land (reserves/parkland)	More Koala Habitat on Council Land Continue to undertake appropriate koala habitat and food tree planting in identified public areas (including One Million Native Plants project, Bushcare Community planting days and corporate plantings)	Increase in koala habitat and feed trees planted	Ongoing	CS (PCU)	ER (EEU)	Medium (within existing budget)
	Healthy Council Bushland Continue to manage reserves/parkland to improve habitat for koalas (reducing weeds, modification of inappropriate fencing, managing fire regime etc.)	Improved koala habitat and safe movement	Ongoing	CS (PCU)	ER (EEU)	Medium (additional budget required)
	Koala Habitat Offsets Investigate opportunities for koala habitat reestablishment using offset and in the Redlands	Strategic areas (including corridors) are re established to contribute to reducing habitat loss	Short	ER (EEU)	CS (PCU)	Low (additional budget required)
Corridors for Koalas	Networks & Corridors Plan Identify and map opportunities to enhance corridor linkages (update Bushland Habitat and Corridor Plan 2004)	Improve habitat within existing corridors and identify new corridors	Immediate	ER (EEU)		Officer Time (within existing budget)
	Improving Koala Movement Investigate identify and implement opportunities for tree plantings and fencing to re direct fauna movements away from barriers and threats	Direct safe movements around impermeable barriers and threats	Immediate	ER (EEU)	CI (RDMU), CS (PCU), CPA (SPU)	Officer Time (additional budget required)
	Linking Koala Habitat on Council Land Undertake strategic assessment of unused road reserves and drainage reserves, with view to use them for public open space, 'foot parks', koala habitat and koala movement purposes (and revegetate where necessary)	Increase in Public Open space and opportunities to increase habitat and safe movement	Short	ER (EEU)	PDG (SSU), CS (PCU)	Officer Time (additional budget required)

¹ At the time of drafting, draft City Plan was awaiting Council consideration following the public consultation phase. The review and any amendment of relevant local laws will be dependent on the provisions in the final version of City Plan.

Reduce Koala Deaths

Objective: Minimise the impacts of threatening processes on koala populations by undertaking on ground works that reduce koala mortality.

Issue	Action	Outcome Achieved	Timeframe	Responsibility	Partners	Cost
Koala Road Deaths	Reduce Koala Deaths on Council Roads Review, update and continue to implement road treatments as per 'Action Plan to Reduce Koala Hits in Redland Shire' and 'Assessment of Local Roads for koala safety'	Recommended road treatments incorporated into 'Roads and Drainage Maintenance Schedule', including fauna crossings construction on new and upgraded Council roads	Ongoing	CI (CIPU)	ER (EEU)	High (additional budget required)
	Reduce Koala Deaths on State Roads Work with TMR to undertake planned and staged retrospective fitting of existing roads to include road treatment devices in appropriate locations (e.g. over passes, underpasses, exclusion fencing, and fauna poles)	Number of new treatment devices installed	Ongoing	CI (TTPU)	ER (EEU), TMR	High (TMR cost)
	Smarter Road Signage Work with other local Councils and TMR on signage and road markings to increase awareness of koala movements and hits on roads	Range of methods created and utilised on roads	Ongoing	CI (TTPU)	ER (EEU), TMR	Medium (TMR cost)
Dog Attacks	Controlling Dogs at Night Implement Local Law 2 provisions regarding appropriate control of animals in koala conservation areas (denning, tethering and control of dogs)	Animal owners in koala conservation areas providing appropriate control of animals	Ongoing	ER (CSU)	ER (EEU)	Medium (additional budget required)
	No Dog Developments Review the success of, and explore new opportunities for, environmental covenants with "no dog zones" and initiatives to incorporate fauna friendly fencing in new developments.	Review of success of covenants and a set of new recommendations for initiatives and improved education	Short	ER (EEU)	ER (CSU)	Officer Time (additional budget required)
Impacts During Tree Work	Wildlife Risk Assessments Develop a "wildlife risk assessment" procedure for all Council vegetation management operations	Koala conservation included in risk assessments, job safety analysis and toolbox talks	Immediate	ER (EEU)	CPA (EngEU), CS (PCU), PDG	Officer Time (within existing budget)
	Educating Tree Contractors Provide education and training to tree contractors on koala issues, legislative obligations and general environmental duty. (e.g. vegetation clearing and removal of any koala habitat vegetation requiring an approved koala spotter)	Change the behaviour of contractors to reduce koala mortality and disturbance during tree removal	Immediate	ER (EEU)	QAA	Low (additional budget required)

Koala Deaths due to Trains	Reduce Koala Deaths by Trains Work with QR to ensure train corridors are effectively managed to provide exit routes, refuges and underpasses for safe koala movement	Safe movement for koalas through QR infrastructure (rail lines, car parks)	Ongoing	ER (EEU)	QR	Officer Time (QR cost)
Koala Welfare	Wildlife Ambulance and Fodder Farm Continue to fund and support the operation of the Wildlife Ambulance and Fodder Farm (including developing management plans where necessary)	Increase survival of injured and orphan koalas	Immediate	ER (EEU)	CS (PCU), EHP	Low to Medium (additional budget required)

Community Making a Difference

Objective: Increase understanding, connection to and participation in koala conservation actions and behaviours across all sectors of the community and Council.


Issue	Action	Outcome Achieved	Timeframe	Responsibility	Partners	Cost
Education of Council Staff	Informed Council Officers Attend forums, seminars, workshops or like events regarding koala conservation	Improved understanding of koala issues and conservation practices	Short	CPA, GC, CET, CI, PDG, CS, ER, CCS	LGQ, Universities, State government	Officer Time (within existing budget)
	Responsible Council Officers Council staff and internal contractors are kept up to date with statutory obligations within the suite of legislation regarding the conservation of koalas	Staff understand and are achieving legislative requirements to minimise harm and reduce threats to koalas	Immediate	CPA, GC, CET, CI, PDG, CS, ER, CCS	ER (EEU), EHP	Officer Time (additional budget required)
Responsible Dog Owners	Behaviour Change for Dog Owners Support Council's behaviour change program focussing on dog management issues (e.g. Dogs Day Out Event, pet shops and veterinarian clinics to promote dog education, koala exclusion fences for security dogs)	Increase community knowledge and behaviour change resulting in reduced dog attacks on koalas	Immediate	ER (CSU)	ER (EEU)	Medium (within existing budget)
	Support from Animal Groups Seek continued support of the RSPCA, Dogs Queensland, vets and dog clubs for animal management initiatives	RSPCA contribute to and support initiatives	Short	ER (CSU)	RSPCA	Officer Time (within existing budget)
Koala friendly backyards	Koala Friendly Fences Promote to residents appropriate backyard and pool fencing styles that improve safe koala movement and contain dogs (including retrofitting existing fences)	Increased safe koala movement	Long	ER (EEU)	CPA, Fencing and Pool companies	Officer Time (additional budget required)

Community Improving Koala Habitat	Koala Conservation Agreement Program Continue and expand extension programs activities that improve koala habitat (particularly the Koala Conservation Agreement Program)	Increased number of properties have access to Council's Habitat Protection extension programs with secure koala habitat	Short	ER (EEU)		High (additional budget required)
	Bushcare Continue the community Bushcare program activities that improve Koala habitat in strategic locations	Improve quality of Public bushland in strategic locations	Ongoing	ER (EEU)		Medium (within existing budget)
Koalas and the Community	What is the Community Thinking Undertake regular online surveys of the communities' understanding of koala issues (principally, habitat, car strike, dog attack and health) to inform actions of behaviour change	Increased understanding of the communities knowledge, awareness and acceptance of koala issues	Ongoing	ER (EEU)	CET	Medium (additional budget required)
	IndigiScapes Continue and enhance the delivery of messages about key koala issues at the IndigiScapes Centre including demonstrations of koala friendly design	Greater community understanding and koala friendly community	Ongoing	ER (EEU)	CPA	Medium (within existing budget)
	The Aboriginal Connection Work with Traditional Owners of Redlands to enhance public understanding of the significance of koalas, their habitat and connections with people and other species	Deeper appreciation of cultural value of koalas and Quandamooka People's culture and heritage	Short	ER (EEU)	CCS, QYAC	Low (within existing budget)
	Kids and Koalas Continue to develop and implement school education programs on koalas	Targeted school education program	Ongoing	ER (EEU)		Medium (within existing budget)
	Koalas on Social Media Use social media to report on koala and human interactions (e.g. road deaths, dog attacks and koalas in urban areas)	Increased real time awareness of 'hot spots' and koala mortality	Ongoing	ER (EEU)		Officer Time (additional budget required)
	Spreading the Word Continue to review existing and develop additional educational material addressing key koala issues	High levels of understanding of koala issues in Redlands community	Ongoing	ER (EEU)	Other councils, Environmental Community Groups	Medium (within existing budget)
	Working with Industry and Business Encourage greater support for koala conservation and management from development, business and industry groups	Increased engagement to promote innovative koala conservation outcomes for development, business and industry groups	Immediate	ER (EEU)	Industry	Medium (additional budget required)

11.4 INFRASTRUCTURE & OPERATIONS**11.4.1 COASTAL ADAPTATION STRATEGY PHASE**

Objective Reference: A124442
Reports and Attachments (Archives)

Attachments: [Attachment 1 – Coastal Adaptation Strategy Phase One: Current Hazards](#)
[Attachment 2A – Map](#)
[Attachment 2B – Map](#)
[Attachment 2C – Map](#)
[Attachment 3 – Hazard Identification Process](#)

Authorising Officer: 
Gary Soutar
General Manager Infrastructure and Operations

Responsible Officer: Murray Erbs
Project Director Infrastructure Policy and Strategy

Report Author: Tim Mitchell
Adviser – Infrastructure Planning

PURPOSE

The purpose of this report is to submit to Council the draft Coastal Adaptation Strategy - Phase One: Current Hazards for endorsement. The next phase of the project, following Council endorsement, is to begin community engagement and initiate Phase Two: Emerging Risks.

The intent of the Coastal Adaptation Strategy is to outline a consistent policy platform to manage coastal hazards and inform future corporate strategies, policies and local planning instruments. The strategy will identify and assess the coastal hazards in Redland City, and identify potential adaptation measures. The recommended management options will be practical responses to coastal hazards, and detailed in an implementation plan that will identify cost estimates, timeframes and also highlight priority actions.

BACKGROUND

The Coastal Adaptation Strategy seeks to identify and address coastal hazards that are currently impacting as well as the long term issues that are projected to impact Redlands foreshore precinct. Coastal hazard planning is an extremely broad and complex issue where there is generally no single solution or quick fix.

To address the complexity of coastal hazards in a clear and concise manner, the Coastal Adaptation Strategy has been separated into two parts: Phase One focusses on 'Current Known Hazards', and Phase Two 'Emerging Risks' (illustrated in figure 1). Phase One is a short to medium term management plan that will assist decision makers in the identification, assessment and management of areas experiencing shoreline erosion.

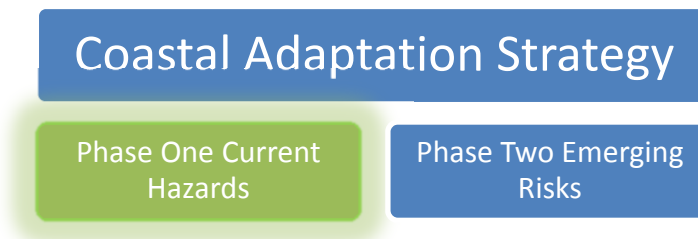


Figure 1: Coastal Adaptation Strategy Project Structure

Following the completion of Phase One the next two critical elements planned to continue the development of the Coastal Adaptation Strategy project are:

1. Initiate community consultation and engagement in partnership with the Communications team. The community consultation program will be a comprehensive city-wide approach and has been planned to enable the engagement completed as part of Phase One to transition into Phase Two of the Coastal Adaptation Strategy. The aim of the consultation is to engage with the community throughout the development of Phase Two: Emerging Risks.
2. Finalise and submit the QCoast2100 funding application, seeking the necessary budget allocation to complete Phase Two: Emerging Risks. The QCoast2100 program is an initiative led by the Local Government Association of Queensland (LGAQ) which provides funding, tools and technical support to coastal local governments across Queensland to progress planning towards a Coastal Hazard Adaptation Strategy. This funding program allows Council to apply for sufficient budget to engage technical experts in coastal hazard management and planning and deliver a holistic Coastal Adaptation Strategy that meets best management practices.

ISSUES

To date Redland City Council does not have a policy or process to manage the identification, assessment and programming of areas affected by shoreline erosion. This policy deficiency results in the assessment and prioritisation of identified hazard areas being inconsistent and subsequently projects are completed in an ad-hoc manner. The development of Phase One of the Coastal Adaptation Strategy aims to address this policy gap and provide a consistent and clear framework for addressing shoreline erosion across the city.

The framework created for Phase One of the Coastal Adaptation Strategy enables the consistent identification and assessment of areas affected by erosion across the city. This framework enables a transparent and consistent decision making process towards implementing appropriate actions to mitigate the level of risk posed by erosion. It has been created to reflect the dynamic coastal environment by establishing a cyclical process to ensure the Coastal Adaptation Strategy is adaptive and flexible.

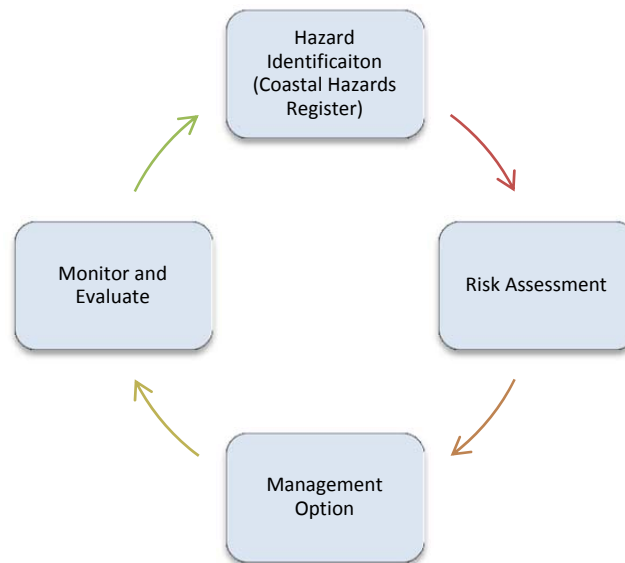


Figure 2: Phase One Assessment Framework

The structure of Phase One has been developed to function as a ‘live’ document in the notion that the processes created at each stage of the project are able to be reviewed and amended on a regular basis. This ensures that the management of coastal hazards in Phase One is flexible and adaptable and able to respond to the dynamic nature of the coastal environment.

The aim of Phase One is to implement a management plan that ensures the minimum level of risk is considered as ‘tolerable’. The definition of a tolerable risk has been informed by the ‘As Low As Reasonably Practicable Principle’ (ALARP). For risks to be considered tolerable subject to ALARP, management options or actions need to be considered and in this instance, long term measures need to be identified and implemented to sufficiently manage or reduce the level of risk (National Emergency Risk Assessment Guideline, 2010, p 39).

The principle of as low as reasonably practical is based on the following risk levels, being:

Broadly acceptable: The risk is sufficiently low to require no new treatments or actions to reduce risk further. The community can freely inhabit the area without the need to implement management actions.

Tolerable: The level of risk is manageable and measures should be implemented to ensure the risk is not increased and becomes unacceptable to the community. The likelihood and consequence allows the exposure to continue but at the same time is high enough to require the implementation of new treatments or actions to reduce risk.

Intolerable: The level of risk is not acceptable to individuals or the community and requires specific measures and actions to reduce or eliminate risk levels. Where the level of vulnerability is deemed to be intolerable then it is recommended that further detailed planning be undertaken to determine what actions need to be implemented to reduce the vulnerability risk to an acceptable level.

The framework outlines the process of managing identified hazards to ensure there are appropriate mechanisms/triggers in place when a hazard reaches an unacceptable level of risk. The implementation of regular monitoring and evaluating will enable Council officers to have a proactive, informed and consistent approach to programming future foreshore protection works.

STRATEGIC IMPLICATIONS

Legislative Requirements

There are a number of legislative acts that are applicable to coastal management comprising the three tiers of government (Federal, State and Local). The development of Phase One of the Coastal Adaptation Strategy provides an overview of these acts and how they are relevant to coastal management. There are no legislative requirements that apply to the document, however the implementation of management options outlined in Phase One Current Hazards will be subject to applicable legislative provisions.

Risk Management

A risk assessment framework has been developed to assess and prioritise each identified hazard location in accordance with the level of risk. The framework determines the level of risk for each identified hazard location in a 4 -step process. The purpose of this assessment framework is to utilise the defined risk rating to inform management options that are most appropriate for each hazard location as well as a priority for implementation.

The risk assessment process has been developed to align with Council's risk assessment handbook as well as the applicable Australian Standards (AS/NZs ISO31000:2009 Risk Management – Principles and Guidelines).

Financial

High level planning cost estimates have been outlined for each management option. The cost estimates are based on the cost for undertaking similar projects throughout the city and are used to provide context around the likely cost for implementing a particular management option. Furthermore, the cost estimates were used as part of the assessment criteria to determine the most suitable management option at each hazard location.

People

The Coastal Adaptation Strategy Phase One: Current Hazards provides an assessment framework which will guide asset managers, network planners and technical officers to identify hazard locations, assess the level of risk and recommend appropriate management actions for identified hazard locations.

Environmental

The Coastal Adaptation Strategy Phase One: Current Hazards considers the environmental impacts of locations that are currently affected by shoreline erosion. In addition to utilising triple bottom line principles (environment, social and economic), the assessment framework considers the quality of flora and fauna, both marine and terrestrial, that is affected by shoreline erosion.

Social

A core element of the Coastal Adaptation Strategy Phase One: Current Hazards incorporates the social value of foreshore areas to the community in relation to the impact of shoreline erosion. The social aspects that are included in the framework of the document include cultural heritage, population affected, visual amenity and recreational value of identified hazard locations.

Alignment with Council's Policy and Plans

Relationship to the Corporate Plan

Embracing the bay – the benefits of the unique ecosystems, visual beauty, spiritual nourishment and coastal lifestyle provided by the islands, beaches, foreshores and water catchments of Moreton Bay will be valued, protected and celebrated.

3.3 Our community is ready for and adapting to changing coastlines, storm tide and severe weather

3.4 Redland City's residents and visitors can easily access the foreshore and use recreation infrastructure for boating and non-boating activities

Wise planning and design – we will carefully manage population pressures and use land sustainably while advocating and taking steps to determine the limits of growth and carrying capacity on a local and national basis, recognising environmental sensitivities and the distinctive character, heritage and atmosphere of local communities. A well-planned network of urban, rural and bushland areas and responsive infrastructure and transport systems will support strong, healthy communities.

5.4 Regional collaboration and targeted advocacy drives external funding for key infrastructure upgrades and enhanced community outcomes.

CONSULTATION

There has been a significant amount of consultation through the development of Phase One of the Coastal Adaptation Strategy. A steering committee has been established for the purpose of providing overarching guidance for the delivery of the Coastal Adaptation Strategy. The Steering Committee is chaired by Mayor Karen Williams and membership includes senior representatives from QYAC, Department of Environment & Heritage Protection, Department of National Parks, Sport & Racing, Department of Fisheries, Engineers Australia, Healthy Waterways & Catchments and internal stakeholders (City Planning & Assessment, Communications and City Infrastructure).

A Technical Working Group has also been established to assist in the development of specific components of the Coastal Adaptation Strategy. The Technical Working Group consisted of internal stakeholders and included representatives from the following departments:

- City Infrastructure;
- Project Delivery Group;
- City Planning & Assessment; and
- Environment & Regulation Group.

A councillor workshop was conducted on Wednesday 26 October, 2016 presenting Phase One: Current Hazards of the Coastal Adaptation Strategy. In addition to this workshop, the following positions have been consulted throughout the development of the project:

- Senior Engineer Marine & Water Assets;
- Adviser Coastal Infrastructure;
- Adviser Waterway & Shoreline Assets;
- Senior Adviser Environment;
- Senior Strategic Planner; and
- Senior Adviser Community Engagement.

OPTIONS

1. That Council resolves to endorse the draft Coastal Adaptation Strategy Phase One: Current Hazards for the document to become publicly available and commence Phase Two: Emerging Risks with community consultation and engagement.
2. That Council resolves to not endorse the draft Coastal Adaptation Strategy Phase One: Current Hazards and not proceed with community engagement and consultation.

OFFICER'S RECOMMENDATION

That Council resolves to endorse the draft Coastal Adaptation Strategy Phase One: Current Hazards for the document to become publicly available and commence Phase Two: Emerging Risks with community consultation and engagement.

REDLAND CITY COUNCIL

Coastal Adaptation Strategy

Phase 1 – Current Hazards



Document Control

PROJECT GOVERNANCE

The development of the Coastal Adaptation Strategy is overseen by the establishment of a steering committee. The steering committee is responsible for guiding the project through the Project Manager/Technical Working Group.



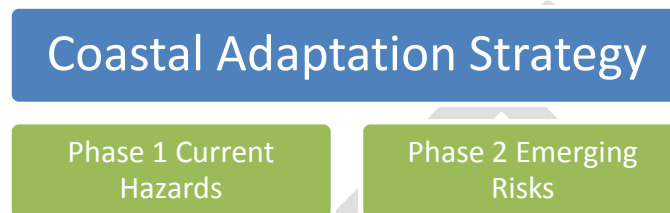
Title - Redland City Council Coastal Adaptation Strategy
Author - Tim Mitchell
<p>Synopsis</p> <p>The Redlands Coastal Adaptation Strategy is a robust strategic plan that addresses coastal hazards by recommending management actions that promote the long term sustainability of Redlands foreshore and coastal precinct.</p>
<p><u>Acknowledgements</u></p> <p>Coastal Adaptation Steering Committee</p> <p>Chair – Mayor Karen Williams</p> <p>Membership – Department of Environment and Heritage Protection, Department of National Parks, Department of Fisheries, Department of Local Government Infrastructure and Planning, Healthy Waterways and Catchments and Engineers Australia</p>

REVISION/CHECKING HISTORY

REVISION NUMBER	DATE OF ISSUE	CHECKED BY	ISSUED BY
1	09/08/2016	Technical Working Group	TM
2	23/08/2016	Technical Working Group	TM
3	24/10/2016	-	TM
4	11/11/2016		TM

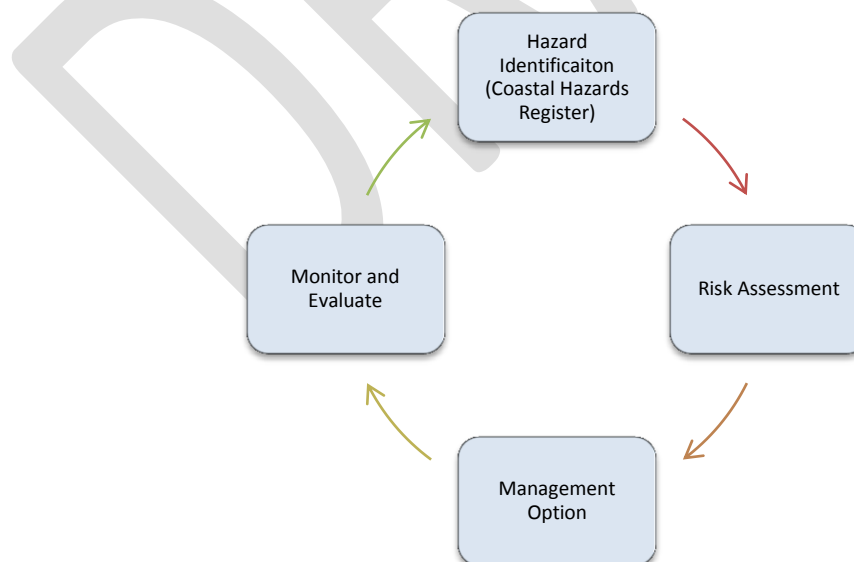
Executive Summary

The Redland City Council Coastal Adaptation Strategy promotes the sustainable management of Redlands coastal and foreshore areas by addressing the current and future coastal hazards. To ensure the Coastal Adaptation Strategy is a robust strategic plan has been separated into two (2) phases; the first phase has been completed and reviews the current hazards and recommends measures to address these hazards. The next phase will address the future risks posed by coastal hazards.



Phase 1 – Current Hazards provides a consistent and transparent approach to assessing the risk of identified hazards and recommending the most appropriate management options. The key feature of Phase 1 is the assessment and implementation framework, which outlines the process for managing identified hazard locations. This framework recognises that the foreshore is a dynamic environment and it is essential for sustainable management of the coastline that regular monitoring, assessment of hazard areas and evaluation of management options is undertaken.

The assessment framework has been created to function as a ‘live’ document and therefore has flexibility and adaptability which are two essential components for effective coastal planning and management.



Phase 1 - Assessment Framework

Coastal Values

Moreton Bay is an internationally recognised wetland under the Ramsar convention and is one of the largest estuarine bays in Australia. Wetlands provide numerous benefits in supporting habitat, species diversity and movability through the landscape. The Redlands portion of the Bay is a diverse ecosystem consisting of sandy beaches, rocky shores, coral reefs, sea grass, mangrove forests, mudflats and sandbanks.

The Redlands community has a strong connection to the islands, foreshore and waters of Moreton Bay. The settlement pattern and utilisation of the foreshore demonstrates the high value the community places on the coast. Moreton Bay Marine Park is the most visited park by domestic tourists in Queensland with 12.4 million annual visits¹.

The Moreton Bay region is the most important commercial fishery in the state and recreational fishing is also one of the most popular leisure activities in the region providing economic and social benefits. The commercial fishery value of Moreton Bay contributes approximately \$24 million to the SEQ economy per annum, from fish production sold domestically. Furthermore it is estimated that recreational fishing contributes approximately \$194.2 million annually, and 98% of this activity is occurring in coastal local government areas².

Coastal Hazards addressed in Phase 1 of the Coastal Adaptation Strategy

Phase 1 of the Coastal Adaptation Strategy specifically addresses the areas in the city that affected by shoreline erosion.

Shoreline erosion (Coastal Erosion)

Shoreline erosion is the wearing away of land or the loss of sediment by wave or wind action, tidal current, wave currents and drainage, resulting in a permanent loss of land. Coastal erosion can be separated into broad categories of short term erosion and long term erosion. Short term erosion can be defined as the natural fluctuations of a beach where long term erosion is the continuous change in the coastal morphology and loss of foreshore.

Hazard Identification & Assessment

Hazard locations are generally identified through the following methods:

- Visual identification from a Council Officer;
- Local community notifies Council of an erosion problem;

¹ SEQC (2016) Managing Natural Assets for a Prosperous South East Queensland, South East Queensland Catchments Ltd., Brisbane

² Growcom, Queensland Conservation Council and SEQ Catchments, (2013). Moreton Bay Priority Catchment Sediment Reduction Scheme - Return on Investment Analysis, Brisbane: Australia

- Declared Erosion Prone Area, in accordance with state legislation; or
- Previously known erosion hot spot and is presently being monitored.

Once a hazard location has been identified it is placed on the Coastal Hazards Register, which has been established as a live database, and each hazard then undergoes the hazard assessment process. The locations that are known to be impacted by erosion are defined as “Current hazards” and there are presently forty-four (44) hazard sites identified across Redland City, highlighted below.

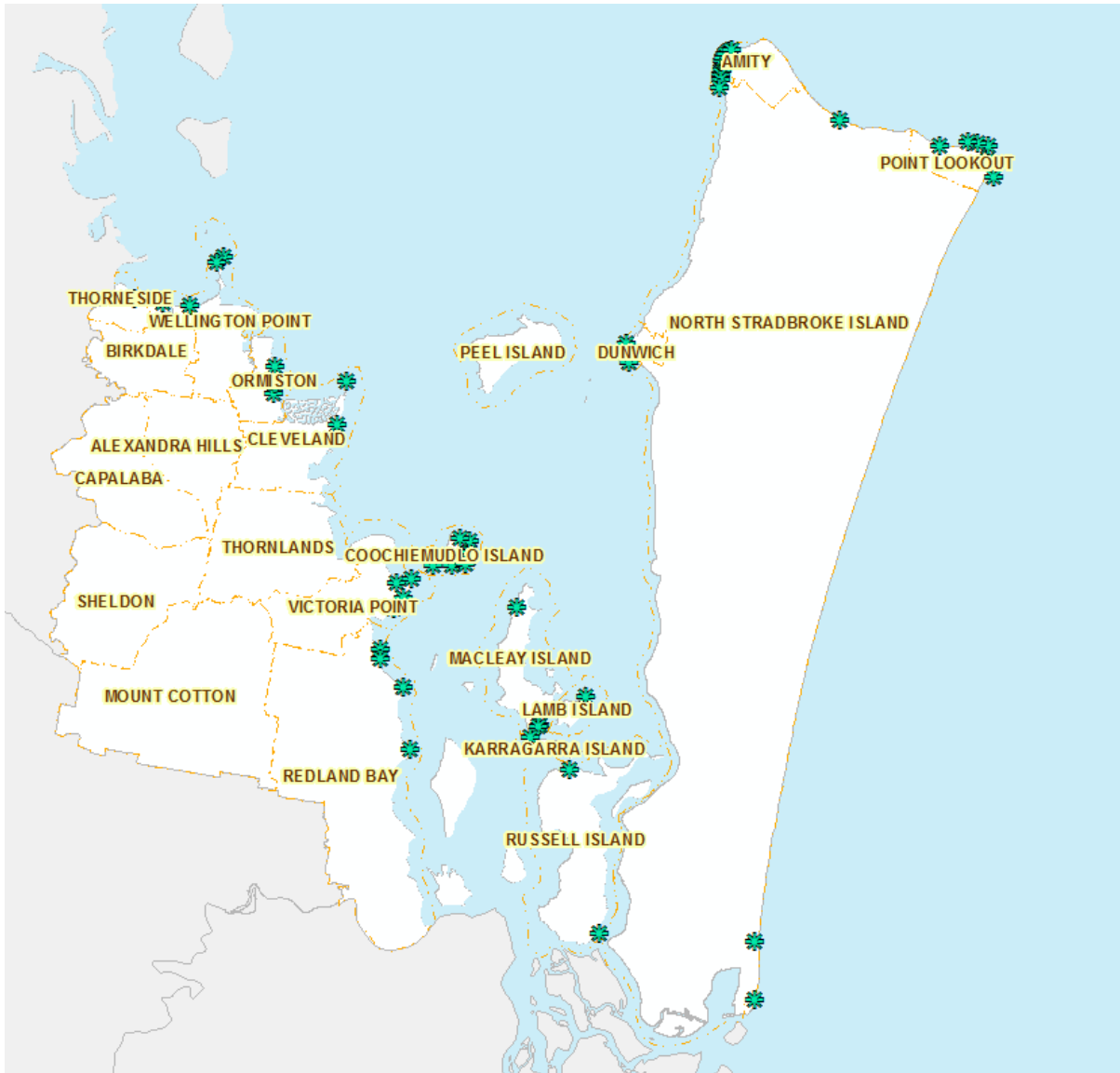


Figure: Identified Current Hazards across Redland City

A risk assessment has been developed to objectively assess a wide range of hazards to be consistently assessed and prioritised according to the level of consequence. The risk assessment conforms to triple bottom line principles (environment, social and economic) to assess and rate each hazard in a holistic and objective manner. The assessment process has created to provide two key outcomes; first a preliminary assessment is completed to determine whether an identified hazard area can be addressed through ‘business as usual’ process; and if required, the second stage is a detailed assessment to determine the level of risk posed by the identified hazard.

Summary of Risk Levels at Identified Hazard Locations

The outcome of the risk assessment for each of the identified hazards shown is summarized in the below table. In total three (3) sites were assessed as having a high risk rating, twenty-three (23) have a medium rating and eighteen (18) locations having a low risk rating based on the current rate of erosion.

Risk Rating	Location
High	Amity Point, North Stradbroke Island; Bay Street, Redland Bay; and Polka Point, Dunwich
Medium	Cleveland Point, Cleveland; Thompsons Beach, Victoria Point; North Boat Ramp, Victoria Point; Junner St, Dunwich; Red Cliff & Golf Links Beach, Coochiemudlo Island; Main Beach, Coochiemudlo Island; Norfolk Beach, Coochiemudlo Island; Queens Esplanade, Thorneside; Bay St, Redland Bay; Esplanade, Karragarra Island; Brighton Road, Macleay Island; GJ Walter Park, Cleveland; Wilson Esplanade, Victoria Point; Aquatic Paradise Park, Birkdale; 3 Paddocks Park, Birkdale; Flinders Beach, North Stradbroke Island; Point Lookout, North Stradbroke Island; Champion Lane, Wellington Point; Main Road (Recreational Reserve), Wellington Point
Low	Russell Terrace, Macleay Island; The Boulevard, Russell Island; Melaleuca Beach, Coochiemudlo Island; Morwong Beach, Coochiemudlo Island; Southeast Beach, Coochiemudlo Island; Northeast Beach, Coochiemudlo Island; Weinam Creek Ferry Terminal, Redland Bay; Torquay Road, Redland Bay; North Street, Redland Bay; Pelican Street, Victoria Point; Eighteen Mile Swamp, North Stradbroke Island; Southern NSI Jumpinpin, North Stradbroke Island; Jock Kennedy Park, Russell Island; Coondoorroopa Drive, Macleay Island; Como St, Ormiston; Sleath Street, Ormiston; Sweetgum Drive, Lamb Island; Empire Vista, Ormiston

Coastal Management Options

Taking into consideration the coastal hazards addressed in Phase 1 of the Coastal Adaptation Strategy, the coastal management options that are available are broadly defined as:

Foreshore Protection (Defend)

Protect portions of the coastal hazard area with either hard or assimilating coastal engineering structures to reduce or remove storm tide inundation or erosion risks. Coastal defence may combine long term strategies for defence and maintenance including regenerative and structural options such as beach nourishment, dune construction, dykes, sea walls, groynes and storm tide barriers.

Monitor and Evaluate

In addition to the five types of management options outlined above, an additional option that is core to sustainable management of the foreshore is 'Monitor and Review'. Monitoring and reviewing of coastal hazards will ensure that the most effective management and adaptation options are identified and implemented and also ensures the coastal adaptation strategy is a responsive and adaptive strategic plan.

The methods for available for Monitor and Review of hazard locations are:

- Annual Inspection Program: When an identified coastal hazard has been assessed and does not pose a level of risk to justify implementing a management option, the proposed method will be to include the hazard area on a regular inspection program. It is anticipated that hazard areas will be reviewed and reassessed on an annual basis with an option to increase the number of inspections on an as-needed basis.
- Surveys: The completion of surveys will generally be recommended on areas where it is necessary to understand the long term movement of the foreshore area, such as open beaches which have been subject to consistent beach erosion. This option can also be used for bathymetric surveys to record the movement of sediment and water depth.
- Desktop monitoring: There are areas of the coastline that are remote and not easily accessible to undertake a visual inspection or survey. In these instances, it is recommended that a feasible alternative to on-site methods is to rely upon aerial photography, through desktop monitoring, to monitor the hazard location.

The management options that have been recommended to manage each identified hazard have been determined via a multi-criteria analysis. This method was undertaken to ensure there was a transparent decision making process and will be used to the future planning and programming of Capital and Operational Works programs.

Recommended Management Options

Location	Management option(s)	Priority
Amity Point, North Stradbroke Island	Shoreline Erosion Management Plan	Very High
Norfolk Beach, Main Beach, Southeast Beach, Northeast Beach, Coochiemudlo Island	Monitor & Evaluate (Monitor - Annual survey)	Ongoing
Melaleuca Beach, Coochiemudlo Island	Foreshore Protection	Low

Location	Management option(s)	Priority
Morwong Beach, Coochiemudlo Island	Upgrade of road and stormwater infrastructure to mitigate the impact upon the foreshore and beach	Low
	Maintain Status Quo (Monitor – Annual Inspection)	Ongoing
Red Cliff & Golf Links Beach, Coochiemudlo Island	Further detailed planning (Geotechnical investigation)	Medium
	Monitor & Evaluate (Annual Inspection)	On going
Coochiemudlo Island	Further detailed planning (Shoreline Erosion Management Plan ³)	Medium
Jumpinpin, Eighteen Mile Swamp, Point Lookout	Monitor & Evaluate (Desktop Monitoring)	Ongoing
Cylinder Beach, South Gorge, Frenchmans Beach, Deadmans Beach, Home Beach and Flinders Beach, North Stradbroke Island	Monitor & Evaluate (Annual Inspection)	Ongoing
Junner Street, Dunwich	Foreshore Protection	Medium
Polka Point, Dunwich	Further detailed planning	High
Queens Esplanade, Thorneside	Foreshore Protection	Medium
3 Paddocks Park, Birkdale	Monitor & Evaluate (Annual Inspection)	Ongoing
Aquatic Paradise, Park Birkdale	Foreshore Protection	Medium
Main Road (Recreational Reserve), Wellington Point	Maintain sea wall	Medium
	Foreshore Protection	
	Monitor & Evaluate (Annual Inspection)	Ongoing
Champion Lane - Wellington Point, Sleath Street - Ormiston, Como Street – Ormiston, Empire Vista - Ormiston, GJ Walter Park - Cleveland, North Boat Ramp - Victoria Point, Pelican Street - Victoria Point, Weinam Creek Ferry Terminal - Redland Bay, Torquay Road - Redland Bay	Monitor & Evaluate (Annual Inspection)	Ongoing
Cleveland Point, Cleveland	Maintain sea wall	Ongoing
	Monitor & Evaluate (Annual Inspection)	
Thompsons Beach, Victoria Point	Foreshore Protection	Medium
Wilson Esplanade, Victoria Point	Foreshore Protection	Medium
Bay Street, Redland Bay	Foreshore Protection	Very High
North Street, Redland Bay	Extend sea wall	Low
Brighton Road, Macleay Island	Maintain sea wall	Ongoing
Coondooroopa Drive, Macleay Island	Foreshore Protection	Low
Russell Terrace, Macleay Island	Monitor & Evaluate (Annual Inspection)	Ongoing
Jock Kennedy Park, Russell Island	Foreshore Protection	Low

³ In 2014 a Shoreline Erosion Study was undertaken for Coochiemudlo which focussed primarily on the eastern beaches with a supplementary extension to the study area to include the northern and southern beaches.

Location	Management option(s)	Priority
Esplanade, Karragarra Island	Foreshore Protection	Medium
	Foreshore Protection	
Sweetgum Drive, Lamb Island	Foreshore Protection	Low

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Preamble

The Redlands Coastal Adaptation Strategy is a robust strategic document that outlines the sustainable management of the foreshore and coastal zone of Redlands. A key component of developing the Coastal Adaptation Strategy is ensuring there is a clear vision and objectives are defined. The establishment of a clear vision and objectives will ensure the Coastal Adaptation Strategy recommends management options that are consistent with Council's policy direction and regulatory responsibilities.

Vision

The lifestyle, heritage and unique ecosystems that exist along the coast of the mainland and island communities is valued, protected and celebrated.

Objectives

The objectives of the Coastal Adaptation Strategy are:

- ***Sustainable management of the foreshore through integrated planning and clear direction for the future.***
- ***The impact of coastal hazards are limited through sustainable land use planning and the creation of resilient communities***
- ***Foreshore and coastal areas are safe for the local community and visitors.***

Relationship to the Corporate Plan

The Redland City Council Corporate Plan is a key strategic document that guides how a council prioritises and delivers services, programs and facilities to its community. The key outcomes reflected in the Corporate Plan that the Coastal Adaptation Strategy addresses are:

Embracing the bay – the benefits of the unique ecosystems, visual beauty, spiritual nourishment and coastal lifestyle provided by the islands, beaches, foreshores and water catchments of Moreton Bay will be valued, protected and celebrated.

Specific 2020 Outcomes that addressed:

3.3 Our community is ready for and adapting to changing coastlines, storm tide and severe weather

3.4 Redland City's residents and visitors can easily access the foreshore and use recreation infrastructure for boating and non-boating activities

Wise planning and design – we will carefully manage population pressures and use land sustainably while advocating and taking steps to determine the limits of growth and carrying capacity on a local and national basis, recognising environmental sensitivities and the distinctive character, heritage and atmosphere of local communities. A well-planned network of urban, rural and bushland areas and responsive infrastructure and transport systems will support strong, healthy communities.

Specific 2020 Outcomes that addressed:

5.4 Regional collaboration and targeted advocacy drives external funding for key infrastructure upgrades and enhanced community outcomes (Steering Group is example of this)

Redlands Snapshot

Redland City Council is made up of 537 sq. km of mainland and coastal communities located on Moreton Bay. In total there are eight (8) mainland suburbs with a foreshore and six (6) populated islands within Moreton Bay. Over a period of five (5) years, from 2006-2011, Redlands population grew approximately 8.6%⁴ and the expected population growth will continue to at least 2041. Based on the projected growth it is likely this will result in an increased demand of recreational and lifestyle opportunities along the coast and foreshore, further illustrating the importance of sustainable management actions.

Table – Redland City Population Projection

Suburb	2011	2016	2021	2026	2031	2036	2041
Alexandra Hills	17,416	17,608	18,095	18,452	18,429	18,385	18,277
Birkdale*	15,009	15,482	16,133	16,855	17,080	17,465	17,780
Capalaba	17,669	17,898	18,470	19,721	20,552	21,260	21,895
Cleveland*	15,129	15,952	17,386	18,734	19,752	20,104	20,398
Ormiston*	5,867	6,207	6,584	6,996	7,199	7,331	7,439
Redland Bay*	14,127	15,510	16,815	18,535	19,538	19,702	19,833
Redland Islands*#	9,012	9,752	10,345	11,236	12,049	12,644	13,149
Sheldon - Mount Cotton	6,760	7,930	8,741	8,925	8,936	8,872	8,794
Thorneside*	3,695	3,950	4,016	4,107	4,111	4,120	4,127
Thornlands*	13,379	14,789	16,873	19,155	20,661	21,774	22,762
Victoria Point*	15,404	16,463	17,317	18,346	19,103	19,763	20,337
Wellington Point*	11,469	12,121	12,646	13,283	13,513	13,574	13,621
Total	144,936	153,662	163,421	174,346	180,924	184,992	188,413
*Coastal suburb							
#The population of the Redlands Islands includes North Stradbroke Island, Coochiemudlo Island, Macleay Island, Karragarra Island, Lamb Island and Russell Islands							

⁴ Australian Bureau of Statistics (ABS) 2011 Census

Coastal Values of Moreton Bay

Ecological value

Moreton Bay is an internationally recognised wetland under the Ramsar convention and is one of the largest estuarine bays in Australia. Wetlands provide numerous benefits in supporting habitat, species diversity and movability through the landscape. The Redlands portion of the Bay is a diverse ecosystem consisting of sandy beaches, rocky shores, coral reefs, sea grass, mangrove forests, mudflats and sandbanks.

Moreton Bay hosts thousands of migratory birds annually and is one of Australia's top 12 shorebird habitats.

Social value

The Redlands community has a strong connection to the islands, foreshore and waters of Moreton Bay. The settlement pattern and utilisation of the foreshore demonstrates the high value the community places on the coast. Moreton Bay Marine Park is the most visited park by domestic tourists in Queensland with 12.4 million annual visits⁵

Recreational fishing is one of the most socially important leisure activities in the SEQ region and Moreton Bay Marine Park hosts a substantial number of fishing competitions each year. In 2013, there were 36,059 registered vessels in Redlands⁶ which illustrates the community's value and connection to the Bay.

Economic value

The Moreton Bay region is the most important commercial fishery in the state and recreational fishing is also one of the most popular leisure activities in the region providing economic and social benefits. The commercial fishery value of Moreton Bay contributes approximately \$24 million to the SEQ economy per annum, from fish production sold domestically. Furthermore it is estimated that recreational fishing contributes approximately \$194.2 million annually, and 98% of this activity is occurring in coastal local government areas⁷.

⁵ SEQC (2016) Managing Natural Assets for a Prosperous South East Queensland, South East Queensland Catchments Ltd., Brisbane

⁶ Vessel registration as of 31 July 2016 - Queensland Department of Transport and Main Roads

⁷ Growcom, Queensland Conservation Council and SEQ Catchments, (2013). Moreton Bay Priority Catchment Sediment Reduction Scheme - Return on Investment Analysis, Brisbane: Australia

Introduction

Redland City Council has approximately 220 kilometres of mainland and island coastline within its boundaries. The shoreline extends from Tingalpa Creek south to the Logan River on the mainland. Offshore, many of the Southern Moreton Bay islands and North Stradbroke Island, including some 50km of ocean beach, are part of the city. The Coastal Adaptation Strategy is a city-wide strategy, encompassing the entire Redland City Council coastline and foreshore.

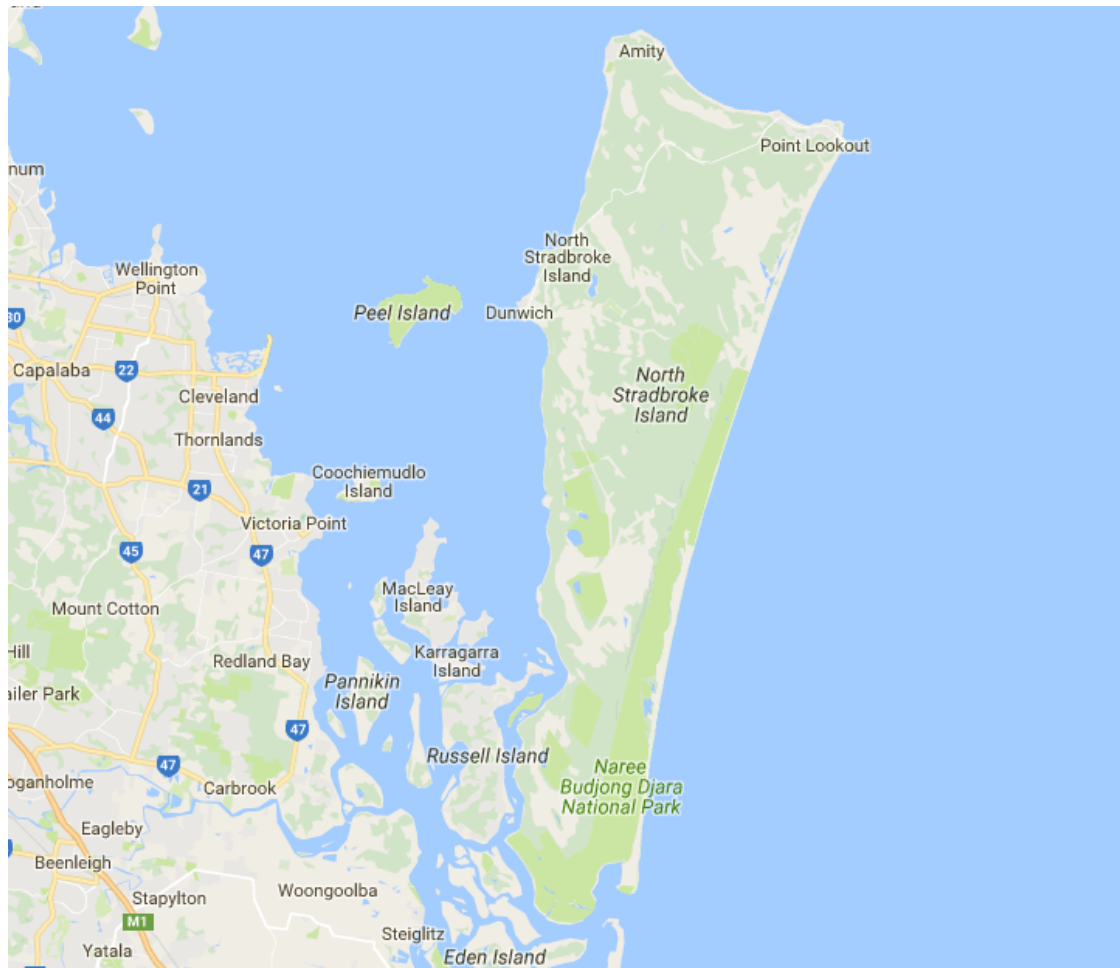
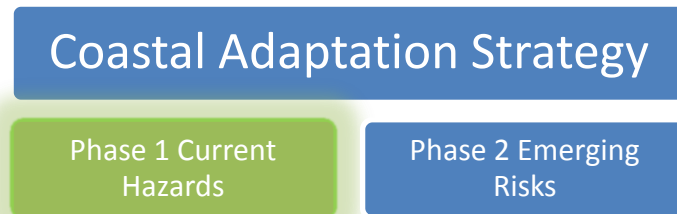


Figure: Redland City Local Government Area Coastline Extent (source: Nearmap 2016)

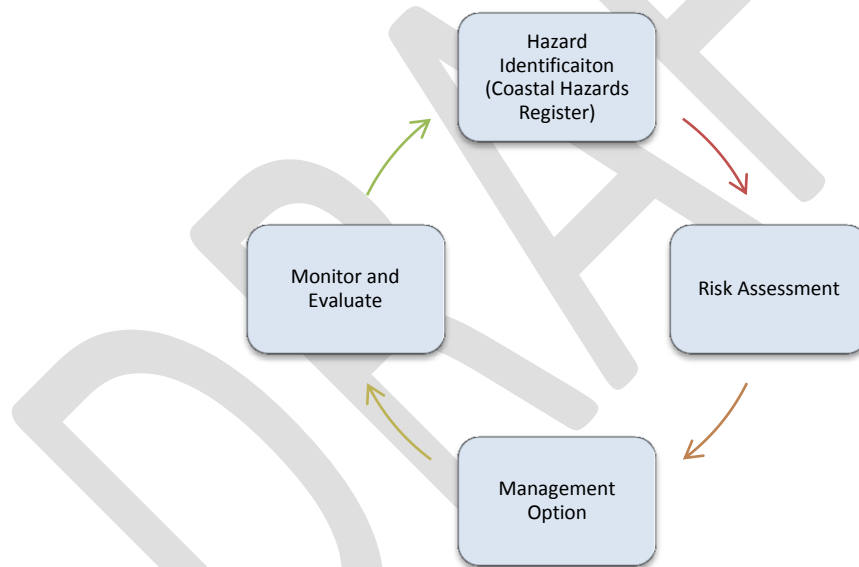
The purpose of the Coastal Adaptation Strategy is to outline a consistent policy platform to manage coastal hazards and inform future corporate strategies, policies and local planning instruments. The strategy will identify and assess the coastal hazards in Redland City, identify potential adaptation measures. The recommended management options will be practical responses to coastal hazards, and detailed in an implementation plan that will identify cost estimates, timeframes and also highlight priority actions.

The Redlands foreshore is a dynamic environment which is constantly evolving and subject to the natural forces of wind, wave and tidal movement. These factors all contribute to shape the foreshore in various matters impacting upon sediment movement and can often result in loss of the foreshore through erosion and scarping. Phase 1 – Current Hazards of the Coastal Adaptation

Strategy (CAS Phase 1) addresses areas within Redlands that are affected by shoreline erosion through short to medium term management actions.



The key feature of CAS Phase 1 is the establishment of the assessment framework that enables the consistent identification and assessment of areas experiencing erosion across the City. This framework enables a transparent and consistent decision making process towards implementing appropriate actions to mitigate the level of risk posed by erosion. The assessment framework has been created to reflect the dynamic coastal environment by establishing a cyclical process to ensure the Coastal Adaptation Strategy is adaptive and flexible.



Phase 1 - Assessment Framework

The structure of Phase 1 has been developed to function as a 'live' document in the notion that the processes created at each stage of the project are able to be reviewed and amended on a regular basis. This ensures that the management of coastal hazards in Phase 1 is flexible and adaptable, able to respond to the dynamic nature of the coastal environment.

The aim of Phase 1 is to implement a management plan that ensures the minimum level of risk is considered as 'tolerable'. The definition of a tolerable risk has been informed by the 'As Low As Reasonably Practicable Principle' (ALARP). For risks to be considered tolerable subject to ALARP,

management options or actions need to be considered and in this instance long term measures need to be identified and implemented to sufficiently manage or reduce the level of risk⁸.

Broadly Acceptable - The risk is sufficiently low to require no new treatments or actions to reduce risk further. The community can freely inhabit the area without the need to implement management actions.

Tolerable - The level of risk is manageable and measures should be implemented to ensure the risk is not increased and becomes unacceptable to the community. The likelihood and consequence allows the exposure to continue but at the same time is high enough to require the implementation of new treatments or actions to reduce risk.

Intolerable – The level of risk is not acceptable to individuals or the community and requires specific measures and actions to reduce or eliminate risk levels. Where the level of vulnerability is deemed to be intolerable than it is recommended that further detailed planning be undertaken to determine what actions need to be implemented to reduce the vulnerability risk to an acceptable level.

What are Coastal Hazards?

Redlands has a diverse coast line ranging from sheltered bays, estuaries to open beaches, which can be impacted by a range of coastal hazards. Phase 1 of the Coastal Adaptation Strategy will focus on shoreline erosion, it is important to note that the other coastal hazards being storm tide inundation and sea level rise.

Shoreline erosion (Coastal Erosion)

Shoreline erosion is the wearing away of land or the loss of sediment by wave or wind action, tidal current, wave currents and drainage, resulting in a permanent loss of land. Coastal erosion can be separated into broad categories, being:

Short term erosion

Short term erosion is generally defined as the natural fluctuations of a beach. This type of erosion can occur in a short period of time (days) as a result of extreme weather events (e.g. tropical cyclones, east coast lows, severe storm).

Long term erosion

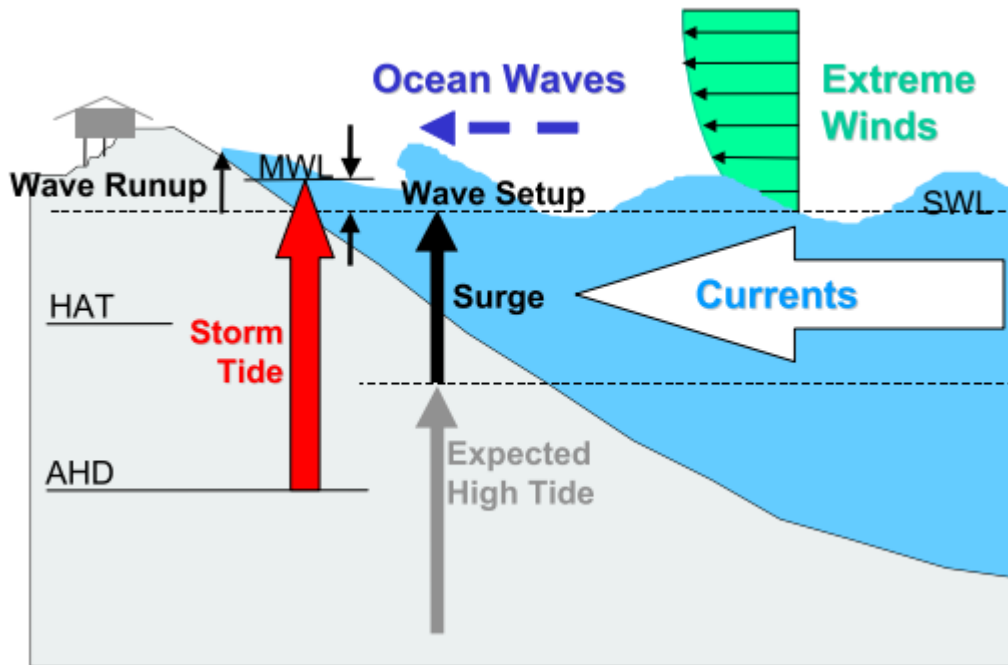
Long term erosion is the continuous loss of foreshore and often caused by a reduction of sand or sediment being transported within a system. Long term changes in coastal morphology are also related to geological processes such as uplift or the reduction in land levels which can change sea levels and alter sediment transport patterns.

Storm tide inundation

Temporary rise in sea level also referred to as a storm surge, usually caused by strong onshore winds exerting stress on the sea surface, which causes water to accumulate against the coast.

⁸ National Emergency Risk Assessment Guideline, 2010, p 39

At storm tide is the combination of a storm surge and the normal astronomical tide. A storm surge is the change in water level (increase or decrease) associated with a significant meteorological event (i.e. tropical cyclone).



Source: Queensland Coastal Processes and Climate Change (Department of Environment and Resource Management, QLD, 2011)

Figure: Components of Storm Tide

Sea level rise

Periodic or permanent tidal inundation of land due to a rise in mean sea level and has the potential to exacerbate existing coastal erosion and storm tide inundation issues.

Global temperature increase causes global sea-level rise because of thermal expansion of the oceans and the loss of land-based ice due to increase melting. There is scientific consensus that global temperatures are rising because of emissions of greenhouse gases, such as carbon dioxide and methane as a result of human activities. The Queensland Government has adopted a sea level rise of 0.8 metres by the year 2100.

The projected sea level rise of 0.8m by 2100 is based on the modeling and scenarios presented by the Fourth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) in 2007 and the subsequent report released in 2014 maintained this projection⁹.

It is also important to note the relationships between a rise in the sea level and changes to hydrodynamic processes and siltation patterns of coast. Changes to siltation patterns and sediment movement ultimately impact the look and functionality of the coastline and foreshore. Changes in sediment movement can result in erosion or accretion occurring in different locations across the

⁹ *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp*

foreshore and subsequent cause significant impacts to management strategies, costs and the sustainable use of these areas.

Hazard Identification

Hazard locations are generally identified through the following methods:

- Visual identification from a Council Officer;
- Local community notifies Council of an erosion problem;
- Declared Erosion Prone Area, in accordance with state legislation; or
- Previously known erosion hot spot and is presently being monitored.

An identified hazard location is recorded on the Coastal Hazards Register, developed as a live database, and will be subject to the assessment process in addition to an annual inspection program. The locations that are currently known to be impacted by erosion are defined as “Current hazards” and there are presently forty-four (44) hazard sites identified across Redland City, highlighted below (refer to Appendix 1 for set of maps).

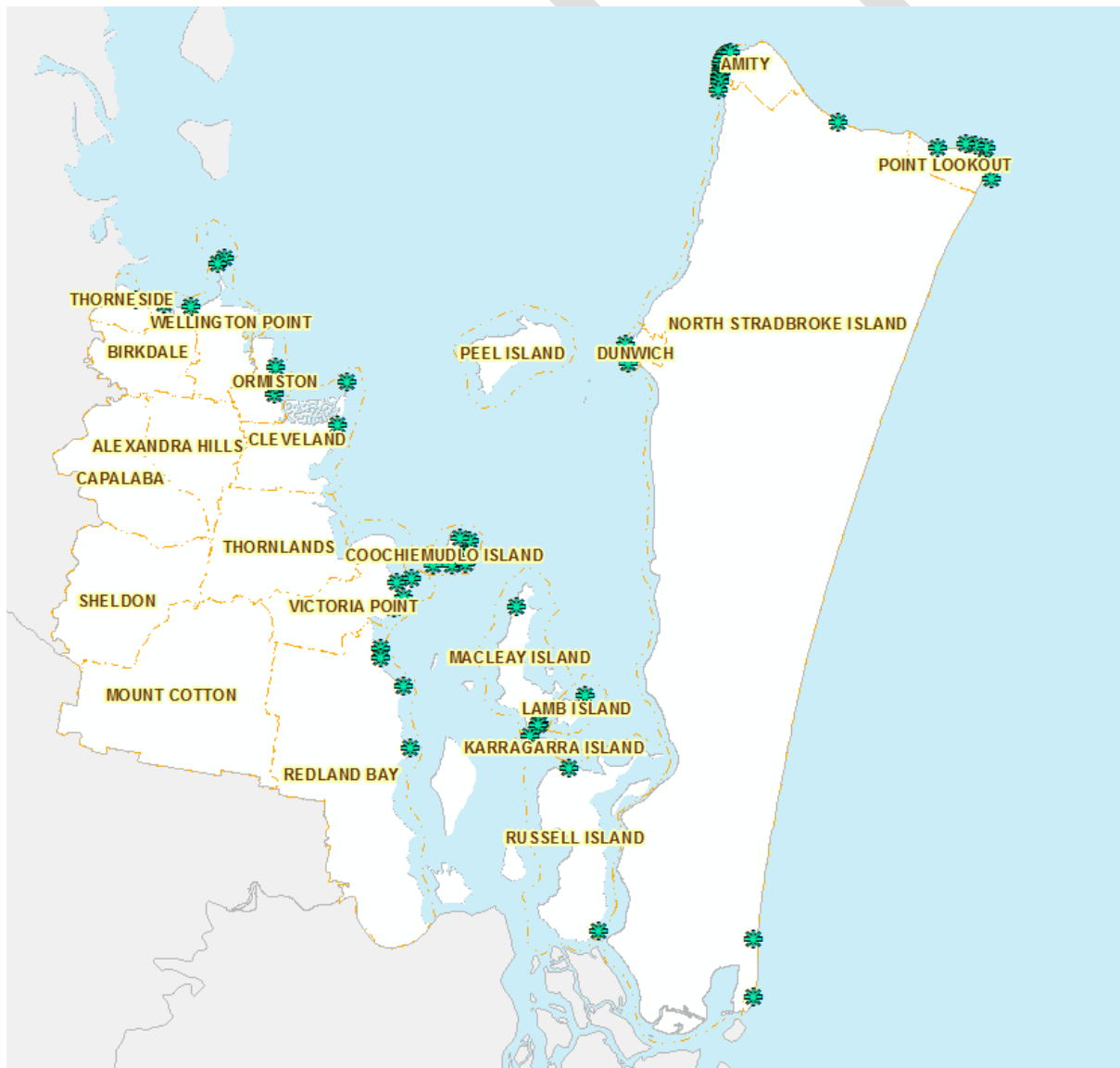


Figure: Identified Current Hazards

TABLE: KNOWN CURRENT HAZARD LOCATIONS

#	Location	Suburb	#	Location	Suburb
1	Amity Point Township	North Stradbroke Island	23	Main Road (Recreational Reserve)	Wellington Point
2	Norfolk Beach	Coochiemudlo Island	24	Champion Lane	Wellington Point
3	Main Beach	Coochiemudlo Island	25	Sleath Street	Ormiston
4	Southeast Beach	Coochiemudlo Island	26	Como St	Ormiston
5	Melaleuca Beach	Coochiemudlo Island	27	Cleveland Point	Cleveland
6	Northeast Beach	Coochiemudlo Island	28	GJ Walter Park	Cleveland
7	Morwong Beach	Coochiemudlo Island	29	North Boat Ramp	Victoria Point
8	Red Cliff & Golf Links Beach	Coochiemudlo Island	30	Thompsons Beach	Victoria Point
9	Southern NSI - Jumpinpin	North Stradbroke Island	31	Pelican Street	Victoria Point
10	Eighteen Mile Swamp	North Stradbroke Island	32	Wilson Esplanade	Victoria Point
11	Point Lookout - South Gorge	North Stradbroke Island	33	Weinam Creek Ferry Terminal	Redland Bay
12	Point Lookout - Frenchmans Bay	North Stradbroke Island	34	Bay St	Redland Bay

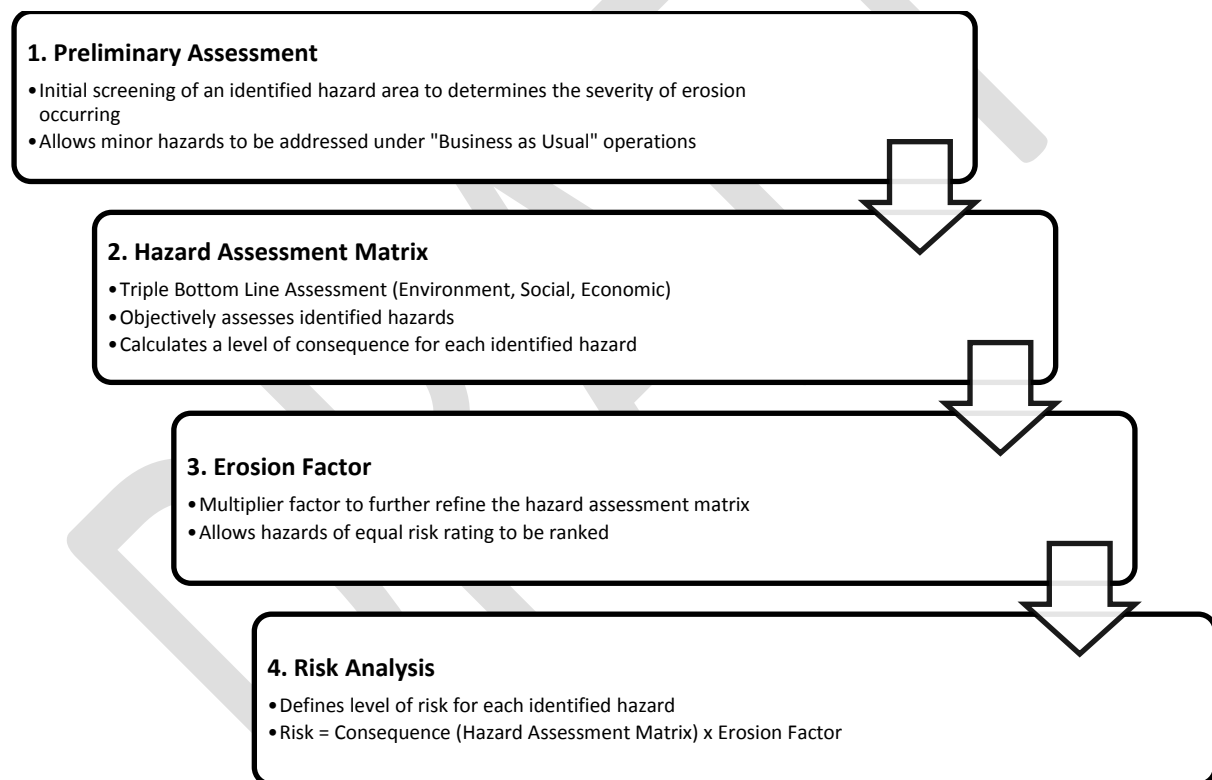
13	Point Lookout - Deadmans Headland	North Stradbroke Island	35	Torquay Road	Redland Bay
14	Point Lookout - Deadmans Beach	North Stradbroke Island	36	North Street	Redland Bay
15	Point Lookout - Cylinder Headland	North Stradbroke Island	37	Brighton Road	Macleay Island
16	Point Lookout - Home Beach	North Stradbroke Island	38	Coondooroop Drive	Macleay Island
17	Flinders Beach	North Stradbroke Island	39	Russell Terrace	Macleay Island
18	Junner St	Dunwich	40	Jock Kennedy Park	Russell Island
19	Polka Point	Dunwich	41	The Boulevard	Russell Island
20	Queens Esplanade	Thorneside	42	Esplanade	Karragarra Island
21	3 Paddocks Park	Birkdale	43	Sweetgum Drive	Lamb Island
22	Aquatic Paradise Park	Birkdale	44	Empire Vista	Ormiston

Risk Assessment

A risk assessment has been developed for the purpose of assessing and prioritising a wide range of identified hazards. The risk assessment aligns with triple bottom line principles (environment, social and economic) to assess and rate each hazard in a holistic and objective manner. The assessment process will be undertaken in four steps, the first assessment determines whether an identified hazard area can be addressed through 'business as usual' process or whether the more detailed second phase of the assessment process is required.

The objectives of this assessment were to develop a framework that is logical, consistent and transparent by:

- Rating the risk to the environmental, social and economic values of identified hazard areas,
- Rating the threats posed by the identified hazard areas, and
- Ranking identified hazard areas, based on level of risk.



Step 1: Preliminary Assessment

The initial assessment of hazard areas ensures a consistent and transparent decision making process, refer to Appendix 2 for the flowchart which outlines the preliminary assessment process. The preliminary assessment is an important initial action because it will function as a first screen of identified hazards and also allow hazards to be resolved through the annual operational program or trigger requirements for further assessment and detailed planning.

Step 2: Hazard Assessment Matrix

The hazard assessment matrix has been created to provide an objective assessment of identified hazards. The matrix has been used for each identified hazard and the process of using the matrix is outlined in the following 3 steps.

1. Attribute a score, as per the scoring method, against each specified criteria;
2. Calculate the average score for each category (environment, social and economic); and
3. Calculate the sum of each category total to determine a total score.

Criteria		Scoring Method					Score
		1	2	3	4	5	
Environment	The loss of the foreshore area from an erosion event (m ²).	<99m ²	100m ² - 999m ²	1,000m ² - 1,999m ²	2,000m ² - 3,999m ²	>4,000m ²	
	Adjoining terrestrial value (BPA 3.5); or Vegetation regulated under the <i>Vegetation Management Act 1999</i>	Minimal ecological value (i.e. cleared land, invasive species, etc.)	Low ecological value / Category X: Vegetation not regulated under the <i>Vegetation Management Act 1999</i>	Near threatened species identified / Category C: High-value regrowth vegetation	Vulnerable species identified / Category B: Remnant vegetation	Endangered or critically endangered species identified / Category A: Declared areas, offset areas or an exchange area	
	Marine Park Zoning	No Marine Park	General Use Zone	Habitat Protection Zone	Conservation Park Zone	Marine National Park Zone	
	Ramsar listed site	Not Ramsar				Ramsar Listed	
	EPBC Listed Endangered ecological community	Not Present				Present	
	Nature Conservation Act Species Present	No species present		Vulnerable species present		Endangered species present	
Environment Score (Total Average)							
Social	Refers to the visual quality and appreciation of the foreshore space by the public	Minimal visual amenity	Low value of visual amenity	Moderate level of visual amenity	Local Important visual amenity	Very high level of visual amenity	
	Recreational value of the foreshore area receives	Minimal recreational value	Low recreational value to local community	Medium recreational value to local community, but low to minimal to broader community	High local recreational value to the local community and medium value to broader community	High recreational value to broader community, can be considered a recreation 'destination'	

	The presence of cultural heritage (Indigenous & European)	No cultural heritage identified	Minor cultural heritage value identified	Locally important cultural heritage value identified	Regionally important cultural heritage value identified	Significant cultural heritage site identified	
	The number of people residing in a location affected by the identified hazard	<10	10 to 19	20 to 49	50 to 99	>100	
Social Score (Total Average)							
Economic	The total value of public infrastructure that is in risk of being impacted by the identified hazard	up to \$49,999	\$50,000 - \$199,999	\$200,000 - \$499,999	\$500,000 - \$999,999	>\$1,000,000	
	Approximate value of property impacted by the identified hazard *Private land is determined by the Unimproved Capital value of the property *Public land is calculated at area of land within the erosion prone area ¹⁰	up to \$49,999	\$50,000 - \$199,999	\$200,000 - \$499,999	\$500,000 - \$999,999	>\$1,000,000	
Economic Score (Total Average)							
Total Score (Environment average + Social average + Economic Average)							

Consequence Rating

The total score calculated using the above assessment matrix will determine a consequence rating, as shown in the below table.

Consequence	Total Score
Severe	12-15
Major	9-11

¹⁰ Public land value is calculated at \$/625m² (utilising the Costanza methodology) in relation to the portion of land affected by the shoreline erosion and to extent that is within the defined erosion prone area

Medium	6-8
Low	4-5
Minimal	3

Step 3: Erosion Factor

The erosion factor has been included to the assessment process to further refine the ranking of the identified hazards and enables hazards with the same consequence rating to be ranked. The 'Severity of Erosion' is considered the most appropriate criteria to use as the additional component of the risk assessment in order to rank or compare each identified hazard consistently and objectively.

Table: Erosion Factor

	Scoring Criteria				
	1	2	3	4	5
Severity of Erosion	Minimal erosion occurring	Low level of erosion occurring (i.e. recession and regeneration or continual fluctuation of shoreline)	Medium level of erosion occurring (i.e. transformation of location - natural process of recession occurring in one location and progression at another)	High level of erosion occurring (i.e. permanent loss of shoreline)	Severe erosion occurring (i.e. significant permanent loss of foreshore, often resulting in sudden and significant events)

Step 4: Risk Analysis

The final step in the risk assessment framework is completing a risk analysis which enables a risk rating to be applied to each identified hazard area. The risk analysis utilised is consistent with existing methodologies¹¹ and allows a transport process to occur when attributing risk and ranking hazards. Typically risk is described as the frequency of a hazard occurring in relation to the consequence of the event (Risk = Likelihood x Consequence), however given the nature of the hazards being addressed (they are all presently occurring) the process to determine risk has been redefined. The method for calculating the level of risk for each identified hazard is expressed in the below equation being:

$$\text{Risk} = \text{Consequence Rating} \times \text{Erosion Factor}$$

¹¹ The Risk Analysis methodology is consistent with the Redland City Council Risk Assessment Handbook and AS/ISO 31000:2009 Risk Management – Principles and Guidelines

Table: Risk Matrix

		Prioritisation Score				
		1	2	3	4	5
Consequence Rating	Severe	M10	H20	H30	E40	E50
	Major	M8	M16	H24	E32	E40
	Medium	L6	M12	M18	H24	E30
	Low	L4	L8	M12	M16	H20
	Insignificant	L2	L4	L6	M8	M10

NB: Aligns with Redland City Council Risk Assessment Handbook

The following descriptions apply to the risk ratings outlined in the above matrix. It is important to note the risk ratings indicate the priority to implement a management action and the process to determine the most appropriate management action is outlined in the Management Options and Implementation Plan.

Table: Risk Rating Description

Risk Rating	Description	Priority
E	Requires action as a priority to reduce the level of risk	Very High
H	Action needs to be undertaken to reduce the level of risk	High
M	Requires action but can be prioritised according to budget and program constraints	Medium
L	Identified hazard can be scheduled as part of regular monitor and evaluation program	Low

Hazard Risk Rating

The below tables provide a summary of the hazard prioritisation assessment, each hazard area presented in the below tables is ranked as per the result of the assessment process. Refer to Appendix 3 for a copy of the completed prioritisation hazard assessment.

Location	Environment Total Score	Social Total Score	Economic Total Score	Consequence Rating	Erosion Factor	Risk Rating	Comments
AMITY POINT Foreshore	3.33	3.25	5.00	Major	5	E40	Significant erosion has occurred along the Amity Point foreshore over a long period of time which has resulted in the loss of public and private property. Amity Point is a declared Erosion Prone Area under Coastal Protection and Management Act 1995.
Bay Street, Redland Bay	2.00	1.75	2.50	Medium	5	E30	Erosion occurring at this location is threatening existing infrastructure assets (including pathways, stormwater & pump station) and is creating a steep escarpment.
Polka Point, Dunwich	2.00	2.75	1.50	Medium	4	H24	The erosion at this location is occurring along a foreshore section that is exposing a midden.
Champion Lane, Wellington Point	2.43	2.00	3.00	Medium	3	M18	There is erosion occurring along the foreshore area, where there is currently a vegetated slope (11m in height) between the foreshore and private property.
Esplanade, Karragarra Island	2.43	1.25	2.50	Medium	3	M18	Erosion is occurring in proximity to the ferry terminal, west of an existing rock wall.
Norfolk Beach, Coochiemudlo Island	2.29	2.25	1.50	Medium	3	M18	Erosion occurring at beach access points, also noted that exposed locations are subject to weather events and fluctuating erosion.
Main Road (Recreational Reserve), Wellington Point	3.14	2.25	4.50	Major	2	M16	This location has a high infrastructure value and is a popular recreational destination for the local community and visitors.
Point Lookout - Cylinder Headland North Stradbroke	3.57	2.00	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register identified erosion prone area under the Coastal Protection and Management Act

Island							1995.
Point Lookout - Deadmans Headland North Stradbroke Island	3.57	2.00	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register identified erosion prone area under the Coastal Protection and Management Act 1995.
Cleveland Point, Cleveland	2.86	2.25	3.50	Medium	2	M12	Cleveland Point has a high recreation value, including culturally significant landmarks. The area also has strip of residential development and a number of locally important business/commercial operations.
Thompsons Beach, Victoria Point	2.00	3.00	3.50	Medium	2	M12	Thompsons Street has a high recreational value to the local community and the erosion occurring is adjacent to an existing revetment wall. NB: Thompson St is subject to proposed works to construct a rock wall, beach nourishment & profiling and improve stormwater drainage to prevent further erosion and impact to foreshore area.
Junner St, Dunwich	1.86	3.00	3.50	Medium	2	M12	Main transport hub between North Stradbroke Island and the mainland, vehicle barge destination point. Also the location of a European heritage site being convict built sea wall.
Jock Kennedy Park, Russell Island	2.00	1.00	2.50	Low	3	M12	Shoreline is subject to consistent erosion, particularly susceptible in high tidal ranges. A temporary barrier has been erected along a portion of the foreshore.
Red Cliff & Golf Links Beach, Coochiemudlo Island	3.14	2.00	3.00	Medium	2	M12	Erosion is occurring along the red cliffs and adjacent beach. A number of key services (i.e. electricity, water, sewer & telecommunication) are connected to the island via this location. It is noted that work has recently been undertaken to rebury an exposed Telstra cable.
Main Beach, Coochiemudlo Island	2.57	2.50	2.50	Medium	2	M12	High social value to local community and visitors. Key transport link/hub as the ferry and barge destination.

Point Lookout - South Gorge North Stradbroke Island	3.71	2.75	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register. Council has allocated \$180,000 (15/16) to undertake works to repair pedestrian access to South Gorge.
Queens Esplanade, Thorneside	2.86	2.00	2.50	Medium	2	M12	Erosion occurring has the potential to impact an existing footpath. There is a section of existing rock wall to the east of this location which is not experiencing erosion.
Brighton Road, Macleay Island	2.00	1.75	3.00	Medium	2	M12	Erosion is occurring in proximity to the ferry terminal
GJ Walter Park, Cleveland	1.86	1.25	3.50	Medium	2	M12	Exposed section of beach is subject to periodic erosion, in close proximity to an existing playground. There is also an existing rock wall to the east of this location that is not experiencing similar erosion. NB: The Toondah Harbour Priority Development Area includes GJ Walter Park.
Point Lookout - Frenchmans Bay North Stradbroke Island	3.57	2.00	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register identified erosion prone area under the Coastal Protection and Management Act 1995.
Point Lookout - Home Beach North Stradbroke Island	3.57	2.00	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register identified erosion prone area under the Coastal Protection and Management Act 1995.
Point Lookout - Deadmans Beach North Stradbroke Island	3.57	2.00	1.00	Medium	2	M12	Point Lookout Foreshore is on the Queensland Heritage Register identified erosion prone area under the Coastal Protection and Management Act 1995.
Wilson Esplanade, Victoria Point	2.00	2.00	2.50	Medium	2	M12	This location is subject to long term erosion being the gradual recession of the shoreline which has the potential to compromise existing footpath and other infrastructure/assets.
Aquatic Paradise Park, Birkdale	2.00	1.00	3.50	Medium	2	M12	Minor erosion occurring along the foreshore, is particularly evident at beach access locations. Noted that erosion is occurring where rock walls are

							currently not constructed.
3 Paddocks Park, Birkdale	2.71	1.00	2.50	Medium	2	M12	Minor scarping of shoreline occurring where the shore is subject to low energy high tides. Rock walls have been constructed to west of this site to manage shoreline recession.
Flinders Beach, North Stradbroke Island	2.86	2.25	1.00	Medium	2	M12	Erosion occurring at exposed beach locations, in large weather events scarping of the beach can occur.
North Boat Ramp, Victoria Point	2.00	2.00	2.00	Medium	2	M12	Minor erosion occurring west of the existing boat ramp, where the foreshore is subject to higher tide events.
Russell Terrace, Macleay Island	2.29	1.25	1.50	Low	3	M12	Erosion occurring at this site is east to the Macleay Island ferry terminal and causing scarping in front of a private property.
The Boulevard, Russell Island	2.00	2.00	1.00	Low	3	M12	This area on the south eastern foreshore of Russell Island has a high recreation value to the local community as a recreational fishing and sailing area.
Southern NSI - Jumpinpin North Stradbroke Island	3.86	1.00	1.00	Low	2	L8	Southern North Stradbroke Island has high ecological value, identified erosion prone area under the Coastal Protection and Management Act 1995.
Melaleuca Beach, Coochiemudlo Island	2.71	2.00	1.00	Low	2	L8	Erosion occurring periodically along foreshore, in particular beach access points and exposed locations.
Weinam Creek Ferry Terminal, Redland Bay	1.57	1.50	2.50	Low	2	L8	Weinam Creek Ferry Terminal is part of the identified Priority Development Area (PDA) for Weinam Creek.

Southeast Beach, Coochiemudlo Island	2.29	2.00	1.00	Low	2	L8	A fluctuating shoreline, where exposed locations are subject to weather events, particularly from a South East direction. Consistent with short term erosion process.
Pelican Street, Victoria Point	2.00	1.75	1.50	Low	2	L8	Minor erosion occurring along foreshore, this area is more exposed to onshore winds. Note there are existing rock walls along sections of the foreshore.
Eighteen Mile Swamp, North Stradbroke Island	3.14	1.00	1.00	Low	2	L8	Southern North Stradbroke Island has high ecological value, identified erosion prone area under the Coastal Protection and Management Act 1995
Coondooroopa Drive, Macleay Island	1.86	1.50	1.50	Low	2	L8	Erosion occurring periodically, in higher tide events particularly during prevailing northerly winds. Note that private defence structures currently exist either side of allotment is suspected to increase the impact of erosion.
Sleath Street, Ormiston	2.57	1.25	1.00	Low	2	L8	Minor erosion occurring adjacent to an existing revetment wall.
Northeast Beach, Coochiemudlo Island	2.29	1.50	1.00	Low	2	L8	Parts of the shoreline are subject to receding at exposed locations during weather events.
Como St, Ormiston	2.86	1.50	1.00	Low	1	L4	Minor erosion is occurring on a small portion of the foreshore. This area features a significant amount of vegetation and mangrove habitat that is not currently at a high level of risk of being lost to erosion.

Morwong Beach, Coochiemudlo Island	2.57	1.75	1.00	Low	1	L4	Periodic erosion occurring at beach access locations associated with weather events and uncontrolled overland flow.
Empire Vista, Ormiston	2.57	1.25	1.00	Low	1	L4	Low level of erosion caused by tidal action is occurring in proximity to existing vegetation.
North Street, Redland Bay	2.00	1.50	1.50	Low	1	L4	Minor erosion is occurring north of an existing rock wall. It is noted that this portion of the foreshore is affected for short periods of time during high tide events.
Torquay Road, Redland Bay	2.14	1.00	1.00	Low	1	L4	Minor erosion occurring at the end of the sealed section of Torquay Road, evidence of this location being utilised as an unofficial access point to Moreton Bay.
Sweetgum Drive, Lamb Island	2.00	1.00	1.00	Low	1	L4	Location of a closed landfill site where it is expected that works will need to be undertaken to cap the site to ensure landfill leachate does not enter Moreton Bay.

NB: Point Lookout Foreshore is on the Queensland Heritage Register

Coastal Management Options

Legislative Context

There are a number of legislative acts, comprising the three tiers of government (Federal, State and Local), that are applicable to coastal management. From a local government perspective, the provisions that guide and regulate coastal development and management are primarily within the local government planning scheme (Redland City Plan).

The Redland City Plan guides land use decisions and accommodates the growth that will occur in a balanced, well-designed way. The aim of the plan is to support the environmental, social and economic needs of the community and help maintain their lifestyle and safety. The Redland City Plan reflects state interests within its provisions to ensure consistency between state and local planning. The plan also contains the following features:

- Identify the strategic outcomes;
- Include measures to facilitate the strategic outcomes; and
- Coordinate and integrate community, state and regional interests.

State Guidelines and Policies

Guidelines for Preparing a Coastal Hazard Adaptation Strategy 2012

The Coastal Hazard Adaptation Strategy Guideline has been developed to assist local governments in preparing and implementing a coastal adaptation strategy. The guideline defines the underlying principles, minimum standards and leading practice required by the Department of Environment and Heritage in preparing a coastal hazards adaptation strategy.

State Planning Policy 2016

The State Planning Policy (SPP) presents a set of principles that guide land use planning and development assessment in Queensland. The SPP outlines the assessment requirements for all State Interests and has been created to replace all other (separate) State Planning Policies. A State Interest is defined under the Sustainable Planning Act 2009 as:

- An interest that the Minister considers affects an economic or environmental interest of the state or a part of the state, including sustainable development, or
- An interest that the Minister considers affects the interest of ensuring there is an efficient, effective and accountable planning and development assessment system.

There are three State Interests under the SPP that is relevant to coastal management.

State Interest	Description
Coastal environment	The coastal environment is protected and enhanced, while supporting opportunities for coastal-dependent development, compatible urban form, and safe public access along the coast.
Natural hazards, risk and resilience (including	State's interest in natural hazards seeks to ensure natural hazards are properly considered in all levels of the planning system, community

coastal erosion)	resilience is increased, and hazards are avoided or the risks are mitigated to an acceptable or tolerable level.
Biodiversity	Matters of environmental significance are valued and protected, and the health and resilience of biodiversity is maintained or enhanced to support ecological integrity.

Legislation (Acts)

The following table provides a summary of current legislation that is relevant to coastal protection and management.

Legislation	Purpose of legislation and relevance to Coastal Management
Environmental Protection and Biodiversity Act 1999 (Commonwealth)	<p>Provides an additional legislative layer for flora and fauna identified as being of national environmental significance.</p> <p>The EPBC Act 1999 is the Australian Government’s central piece of environmental legislation. It provides the legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage as ‘matters of national environmental significance’.</p> <p>The objectives of the EPBC Act are to:</p> <ul style="list-style-type: none"> • Provide for the protection of the environment, especially matters of national environmental significance • Conserve Australian biodiversity • Provide a streamlines national environmental assessment and approvals process • Enhance the protection and management of important natural and cultural places • Control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife • Promote ecologically sustainable development through the conservation and ecologically sustainable use of Australia’s biodiversity
Coastal Protection and Management Act 1995	<p>Management of coastal development by:</p> <ul style="list-style-type: none"> • Coastal Management Districts • Tidal Works <p>Management of coastal resources and activities by:</p>

	<ul style="list-style-type: none"> • Coastal Management Plan • Shoreline Erosion Management Plans • Local Area Management Plans
Sustainable Planning Act 2009	<p>Regulates land-use planning and development decisions Manages Coastal Development by:</p> <ul style="list-style-type: none"> • IDAS, State Planning Policy, State Development Assessment Provisions (SDAP)
Sustainable Planning Regulation 2009	<p>Details referral agencies and triggers (jurisdictional responsibilities) for types of development. Provides additional information that is pertinent to the Sustainable Planning Act 2009 regarding prescribed matters, applicable codes, laws and policies.</p>
Land Act 1994	<p>Manage land, to which the Act applies (all land including land whether permanently or from time to time covered by water subject to tidal influence), for benefit of the people of Queensland by having regard to the following principles:</p> <ul style="list-style-type: none"> • Sustainability • Evaluation • Development • Community purpose • Protection • Consultation • administration
Environmental Protection Act 1994	<p>Regulates environmental relevant activities, including release of emissions on land, air or water and noise</p>
Vegetation Management Act 1999	<p>The purpose of the Vegetation Management Act is to regulate the clearing of vegetation to preserve regional ecosystems and areas of high value conservation, ensure clearing does not cause land degradation, maintain or increase biodiversity and allow for ecologically sustainable land use.</p>
Fisheries Act 1994	<p>Provides for the sustainable use, conservation and enhancement of the community's fisheries resources and fish habitats by applying and balancing the principles of ecologically sustainable development and promote ecologically sustainable development.</p>
Nature Conservation Act 1992	<p>The object of the Nature Conservation Act is the conservation of nature while allowing the involvement of indigenous people in the management of protected areas in which they have an interest under the Aboriginal tradition or Island custom.</p>
Marine Parks Act 2004	<p>The main purpose of this Act is to provide for conservation of the marine environment. This is achieved through</p> <ul style="list-style-type: none"> • Marine park declarations • Establishment of zones, designated areas, zoning plans and management plans • Cooperative involvement of public authorities, other interested groups or persons, including Aboriginal and Torres Strait Islander communities • Coordinated approach with other environment conservation legislation • Recognition of the cultural, economic, environmental and

	<p>social relationships between marine parks and other areas</p> <ul style="list-style-type: none"> • Application of the precaution principle in the decision making process.
Survey and Mapping Infrastructure Act 2003	<p>The purpose of the Survey and Mapping Infrastructure Act 2003 are to provide for the following –</p> <ul style="list-style-type: none"> • Developing, maintaining and improving the State survey and mapping infrastructure; • Maintaining and improving cadastral boundaries throughout the State and information held by the department about the boundaries; • Coordinating and integrating survey and mapping information; • Improving public access to survey and mapping information; • Defining administrative areas, and describing and working out administrative area boundaries. <p>Part 7 Tidal and non-tidal boundaries and associated matters outline the provisions for surveying properties which have a tidal boundary. This piece of legislation has the unintended consequence to Council (responsible for managing foreshore zone), because the tidal boundary of properties may be subject to change and parcels of land that were previously under private ownership have the potential to reverting to unallocated state land and subsequently become Council’s responsibility to manage.</p>
Disaster Management Act 2003	<p>The objective of this Act is to help communities:</p> <ul style="list-style-type: none"> • Mitigate the potential adverse effects of an event; • Prepare for managing the effects of an event; • Effectively respond to, and recover from, a disaster or an emergency situation; and • To provide for effective disaster manager for the State.
Recreation Areas Management Act 2006	Regulates establishment, maintenance and use of recreational areas
Waste Reduction and Recycling Act 2011	Provides regulatory regime for management of litter and illegal dumping
Coastal Management Plan 2014	The Coastal Management Plan is a non-regulatory policy document created to provide guidance for the management of coastal land.

Potential Management Options

There is a broad range of coastal management option available to address coastal hazards. These management options can be broadly defined into the following categories:

- Foreshore Protection (Defend),
- Accommodate,

- Retreat,
- Maintain the status quo and
- Repurpose.

Foreshore Protection

Protect portions of the coastal hazard area with either hard or assimilating coastal engineering structures to reduce or remove storm tide inundation or erosion risks. Coastal defence may combine long term strategies for defence and maintenance including regenerative and structural options such as beach nourishment, dune construction, dykes, sea walls, groynes and storm tide barriers.

Defending private properties

Foreshore property owners are able to undertake private foreshore works, such as constructing a sea wall, in order to defend their property. As a local government authority Redland City Council would be responsible for assessing such proposals in accordance with the provisions of the Sustainable Planning Act 2009.

It is important to note that any shoreline erosion management strategy, including private works, needs to consider the risks, including the effectiveness of proposed and existing works, and ensuring no increase to coastal hazard risk for adjacent areas.

Prescribed tidal works

Tidal works is relevant work undertaken on land that is in, on, or above land under tidal water, or land that will, or may be, under tidal water because of development on or near the land, and work that is an integral part of the relevant work, wherever located. Tidal works include the construction or demolition of a basin, boat ramp, breakwater, bridge, dam, dock, dockyard, embankment, groyne, jetty, pipeline, pontoon, powerline, sea wall, slip, small-craft facility, training wall or wharf, and works in tidal water necessarily associated with the construction or demolition.

Prescribed tidal works are tidal works that are completely or partly within a local government tidal area and includes parts of the structure that extends onto land above the high water mark.

Accommodate

Maintain the current levels of use within the coastal hazard areas and raise the tolerance to periodic storm tide inundation or erosion events by means of innovative designs for buildings and infrastructure (e.g. elevating, strengthening or change in use). This includes actions that will reduce the impacts from coastal hazards to an acceptable level of risk. Works are placed into two categories, being:

- I. Works that will allow the current use to continue; or
- II. Physical works and legislative amendments that provide for more appropriate future use of the land that can tolerate a higher level of risk (i.e. changing zoning of land from residential to open space), or operational works to raise the height of developable land above the height of potential sea level rise.

Retreat

Retreat entails implementing actions to withdraw from the coastal hazard impacts through relocation or abandonment. This option involves removing vulnerable uses from the identified

coastal hazard and this can be achieved by relocating the community (i.e. land swap arrangement) or abandoning the area (e.g. buy back mechanism or rezoning of land to a more suitable use).

Maintain Status Quo

In the process of assessing the suitability of the above management options, “maintaining the status quo” should also be considered. Maintaining the status quo allows for the continuation of the existing use in an area but prevent any further intensification of those areas.

The decision to maintain status quo demonstrates a clear intention that intensification of development will not occur in identified areas, but without creating a community expectation that a particular action (defend, accommodate or retreat) will be undertaken at a future date. If supported by public education on the risks associated with coastal hazards, it enables the community to understand and better prepare.

This option may be appropriate where there is a low level of infrastructure or assets and further intensification is unlikely to occur. Or, in locations where other management options, such as defence or retreat, are not cost effective or technically feasible.

Repurpose

This management option focuses on strategic planning as a mechanism to regulate future land uses. This option evaluates the vulnerability of land impacted by coastal hazards to determine if the land can be reused for an alternative purpose. The decision to repurpose an identified area could be a result of managing community expectations of an already popular destination. Key elements that need to be considered when determining an area for repurpose is:

- The vulnerability to coastal hazards
- Current level of development and population
- Possibility to achieve desired outcomes through land use criteria
- Projected population growth and presence of critical infrastructure and services

Monitor and Evaluate

Monitoring and evaluating coastal hazards will ensure that the most effective management and adaptation options are identified and implemented and also ensures the coastal adaptation strategy is a responsive and adaptive strategic plan.

The methods for available for Monitor and Review of hazard locations are:

- Annual Inspection Program: When an identified coastal hazard has been assessed and does not pose a level of risk to justify implementing a management option, the proposed method will be to include the hazard area on a regular inspection program. It is anticipated that hazard areas will be reviewed and reassessed on an annual basis with an option to increase the number of inspections on an as-needed basis.
- Surveys: The completion of surveys will generally be recommended on areas where it is necessary to understand the long term movement of the foreshore area, such as open beaches which have been subject to consistent beach erosion. This option can also be used for bathymetric surveys to record the movement of sediment and water depth.

- Desktop monitoring: There are areas of the coastline that are remote and not easily accessible to undertake a visual inspection or survey. In these instances, it is recommended that a feasible alternative to on-site methods rely upon aerial photography, through desktop monitoring, to monitor the hazard location.

Monitor and evaluate is an essential component to the assessment framework and is recommended to be implemented as part of the ongoing management of coastal hazards.

Management Options Analysis

To ensure the most appropriate management option is recommended it is important a robust assessment is undertaken for each potential management option. A multi-criteria analysis (MCA) is recognised as an effective assessment technique to determine the suitability of potential management options. It is also a cost effective method of refining a range of identified options which can then be tested further via a Cost Benefit Analysis or other assessment tools. The strength of using a MCA for this project is that it can compare qualitative and quantitative data which is generally quite difficult to assess. Refer to appendix 4 for detailed copy of the management option analysis.

Assessment Criteria

The criteria developed for this assessment is based on triple bottom line principles and ensure a robust and objective assessment process. The methodology for the assessment is based on the implementation of the identified management option.

- **Effectiveness**
Considers how effective a potential management option will be at addressing the identified coastal hazard.
- **Value for money**
The implementation and life-cycle cost of a potential management option in relation to how effective the option will be at addressing the identified hazard.
- **Environmental Impacts**
This assessment category refers to how a potential management option, if implemented, will impact the local environment. The environmental aspects included in this consideration are the diversity and ecological significance of the identified hazard location, including terrestrial and marine flora and fauna that inhabit or known to exist in the local area.
- **Social Impacts**
Takes into consideration how a potential management option impacts the social and recreational impacts, cultural heritage and community values of the specific area.

Scoring scale

The scoring methodology utilised for the multi-criteria is as follows:

- (1) unacceptable to poor outcome,
- (2) poor to neutral,
- (3) neutral to modest, and
- (4) acceptable to excellent

The intent of the scoring scale is that the higher the score the more suitable or appropriate the outcome of the particular option.

Potential Management Options Analysis

The information presented in the below table shows the compares the weighted score with the total average score from the multi-criteria assessment of potential management options. For a complete copy of the multi-criteria analysis refer to Appendix 4.

A key part of the assessment process is determining the cost for each potential management options. The implementation of specific management options will require detailed design to determine the actual construction costs however estimated costs have been used as a guide for this assessment.

Table: Management Option Cost Estimates

Management Option		Estimated costs (2106\$)	Comments
Monitor and Evaluate	Annual Survey (1 st year)	\$7,000	The estimated planning cost to undertake a survey for the first time at a site. This cost includes establishing the survey site, including the placement of control and monitoring points for future work, labour and travel costs.
	Annual Survey (ongoing)	\$3,500	The estimated cost for completing subsequent surveys is reduced because once an initial survey has been completed.
	Inspection Program	Internal cost	<p>An inspection program will be established incorporating all known hazard location based on the coastal hazards register. The coastal hazard register will also be maintained as a live database and subject to updating when new hazard locations are identified. Part of the inspection process will include the re-assessment of each hazard location in accordance with the developed Risk Assessment framework.</p> <p>An annual inspection program will be completed through existing operational capacity of the Infrastructure & Operations department. The estimated cost for completing the inspection program annual is approximately \$26,000, calculated at 0.5</p>

			FTE of a Technical Officers role.
	Desktop Monitoring	Internal Cost	There are portions of the Redlands City coastline that are not easily accessible to be feasibly included as part of an annual inspection program. In instances where an annual inspection or survey is not an appropriate option it is considered that desktop monitoring through aerial surveys is a suitable alternative.
Foreshore Protection	Hard Structure (Rock sea wall, Revetment Wall, Geo-fabric, Seabee Wall or Rock groyne)	Mainland: \$687 – \$2,531/m Island: \$1,378 – \$3,038/m	The planning cost estimate outlined is the range for constructing a sea wall based on the height and location and also includes planning requirements, permits and approvals, project construction on-costs, supply and construction of rock armour and geotextile. The rate for constructing a sea wall is site specific with the main variances being the required height and location in the city.
	Beach nourishment	\$70/m ³	This is a conservative estimate for the sourcing and transporting of sand to a location within the city.
	Re-vegetation	\$17m ²	Cost estimate includes weed control, mulch or matting, supply plants, labour, tree guards, watering and ongoing maintenance.
Further Detailed Planning	Further detailed planning	Site specific	Recognises the need for further detailed planning to determine the most appropriate management option. The type of detailed planning that can be undertaken includes Shoreline Erosion Management Plans (SEMPs) or Coastal Process Studies. A planning cost estimate will be applied to this option dependent on the location and extent of planning required.
Maintain Status Quo	Sea wall (maintain existing structure)	1% of construction cost	Over the design life of a sea wall it is general practice to allocate 1% of its construction cost for annual maintenance.

Table: Summary of Management Option Analysis

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
Amity Point, North Stradbroke Island	Further Detailed Planning	Shoreline Erosion Management Plan	\$150,000	
Norfolk Beach Coochiemudlo Island	Monitor & Evaluate	Annual survey	\$3,500 – 7,000	3.0
	Foreshore Protection	Beach nourishment	\$70m/m ³	2.5
		Hard Structure	\$1,378 – \$3,038/m	2.0
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
Main Beach Coochiemudlo Island	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
	Foreshore Protection	Beach nourishment	\$70m/m ³	3.0
Southeast Beach Coochiemudlo Island	Monitor & Evaluate	Annual survey	\$3,500 – 7,000	3.5
	Foreshore Protection	Dune re-vegetation	\$17/m ²	3.0
		Beach nourishment	\$70m/m ³	3.25
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
Melaleuca Beach Coochiemudlo Island	Foreshore Protection	Beach nourishment	\$70m/m ³	3.0
		Hard Structure	\$1,378 – \$3,038/m	2.25
		Dune re-vegetation	\$17/m ²	3.0
	Monitor & Evaluate	Annual survey	\$3,500 – 7,000	3.25
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
Northeast Beach Coochiemudlo Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
		Hard Structure	\$1,378 – \$3,038/m	2.0
	Monitor & Evaluate	Annual survey	\$3,500 – 7,000	3.0
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
Morwong Beach Coochiemudlo Island	Upgrade stormwater infrastructure	Improve overland flow path to prevent erosion to beach	\$35,000	2.75
	Foreshore Protection	Beach nourishment	\$70m/m ³	2.75
	Further detailed planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.75
Red Cliff & Golf Links Beach, Coochiemudlo Island	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.0
		Beach nourishment	\$70/m ³	2.75
	Further Detailed Planning	Refinement of Shoreline Erosion Study to a Shoreline Erosion Management Plan	\$50,000	3.0
		Geotechnical investigation	\$150,000	3.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Southern NSI - Jumpinpin North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
	Monitor & Evaluate	Desktop Monitoring	Internal Cost	3.5
Eighteen Mile Swamp North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	1.75
	Monitor & Evaluate	Desktop Monitoring	Internal cost	3.5

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
Point Lookout - South Gorge North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	1.75
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Point Lookout - Frenchmans Bay North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	1.75
		Hard Structure	\$1,378 – \$3,038/m	2.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.75
Point Lookout - Deadmans Headland North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
		Hard Structure	\$1,378 – \$3,038/m	1.75
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Point Lookout - Deadmans Beach North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
		Hard Structure	\$1,378 – \$3,038/m	1.75
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Point Lookout - Cylinder Headland North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.75
Point Lookout - Home Beach North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2
		Hard Structure	\$1,378 – \$3,038/m	1.75
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Flinders Beach North Stradbroke Island	Foreshore Protection	Beach nourishment	\$70m/m ³	2.0
		Hard Structure	\$1,378 – \$3,038/m	1.75
		Dune Revegetation	\$17/m ²	3
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Junner St Dunwich	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.0
Polka Point Dunwich	Monitor &	Annual Inspection	Internal	2.75

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
	Evaluate		cost	
	Foreshore Protection	Revegetation	\$17/m ²	2.75
		Hard Structure	\$1,378 – \$3,038/m	3.0
		Beach nourishment	\$70m/m ³	3.0
Further detailed planning	Investigative work	\$30,000	3.5	
Queens Esplanade Thorneside	Foreshore Protection	Beach nourishment	\$70m/m ³	3.0
		Hard Structure	\$1,378 – \$3,038/m	3.25
		Hard Structure	\$1,378 – \$3,038/m	2.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.0
3 Paddocks Park Birkdale	Foreshore Protection	Beach nourishment	\$70m/m ³	2.25
		Foreshore revegetation	\$17/m ²	2.75
		Hard Structure	\$1,378 – \$3,038/m	3.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Aquatic Paradise Park Birkdale	Foreshore Protection	Beach nourishment	\$70m/m ³	3.0
		Bank stabilisation/vegetative work	\$17/m ²	2.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Main Road (Recreational Reserve) Wellington Point	Maintain Status Quo	Maintain sea wall	Subject to detailed design	3.25
	Foreshore Protection	Beach nourishment	\$70m/m ³	3.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Champion Lane Wellington Point	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	2.75
		Beach nourishment	\$70m/m ³	2.75
		Revegetation	\$17/m ²	2.75
	Monitor & Evaluate	Annual Inspection	Internal Cost	3.0
Sleath Street Ormiston	Foreshore	Revegetation	\$17/m ²	3.0

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
	Protection			
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Como Street Ormiston	Foreshore Protection	Revegetation	\$17/m ²	3.0
		Hard Structure	\$1,378 – \$3,038/m	2.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Cleveland Point Cleveland	Maintain Status Quo	Maintain sea wall	Subject to detailed design	3.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
GJ Walter Park Cleveland	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	2.5
	Monitor & Evaluate	Monitor progress of Toondah Harbour PDA	Internal cost	3.75
North Boat Ramp Victoria Point	Foreshore Protection	Revegetate foreshore	\$17/m ²	3.0
		Hard Structure	\$1,378 – \$3,038/m	3.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Thompson St Victoria Point	Foreshore Protection	Sea wall and beach nourishment	\$2M	3.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Pelican Street Victoria Point	Foreshore Protection	Beach nourishment	\$70m/m ³	2.75
		Hard Structure	\$1,378 – \$3,038/m	2.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.25
Wilson Esplanade Victoria Point	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
		Beach nourishment	\$70m/m ³	3.75
Weinam Creek Ferry Terminal Redland Bay	Maintain Status Quo	Maintain sea wall	Subject to detailed design	3.0

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Bay St Redland Bay	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
		Beach nourishment	\$70m/m ³	2.5
	Monitor & Evaluate	Annual Inspection	Internal cost	3.25
Torquay Road Redland Bay	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	2.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
North Street Redland Bay	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
		Beach nourishment	\$70m/m ³	3.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Brighton Road Macleay Island	Maintain Status Quo	Maintain sea wall	Subject to detailed design	3.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Coondooroopa Drive Macleay Island	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
		Beach nourishment	\$70m/m ³	3.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.25
Russell Terrace Macleay Island	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	2.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.5
Jock Kennedy Park Russell Island	Monitor & Evaluate	Annual Inspection	Internal cost	3.0
	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.0
		Revegetate	\$17/m ²	3.5
The Boulevard Russell Island	Monitor & Evaluate	Annual Inspection	Internal Cost	3.0
	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	2.75

LOCATION	MANAGEMENT OPTIONS		PLANNING COST ESTIMATE (2016\$)	MCA Score
	Management Option	Description		
Esplanade Karragarra Island	Foreshore Protection	Hard Structure	\$1,378 – \$3,038/m	3.25
		Beach nourishment	\$70m/m ³	2.75
	Monitor & Evaluate	Annual Inspection	Internal cost	3.0
Sweetgum Drive Lamb Island	Foreshore Protection	Cap closed landfill site	\$15,000	3.25
	Monitor & Evaluate	Annual Inspection	Internal cost	3.0
Empire Vista, Ormiston	Foreshore Protection	Hard structure	\$90,000	2.25
		Revegetate	\$17/m ²	2.0
	Monitor & Evaluate	Annual Inspection	Internal cost	3.0

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Management Plan

The result of the multi-criteria analysis has identified appropriate management option(s) for each hazard. The next step is to develop specific criteria that will prioritise the identified management options and assist in the development of recommended management options program.

The below table has been created to illustrate the link between the risk rating determined in the risk assessment process and appropriate timeframes for recommended management options. The timeframes for each option have been attributed in accordance with the level of risk and reflect the 10 year Capital Works program. Note, management options recommending an inspection or survey are expected to be completed on an annual basis.

Table: Implementation Timeframes

Risk Rating	Priority	Timeframe
E30 – E50	Very High – hazards with the highest priority that require actions	0-3 years (2016-2019)
H20 – H30	High – hazards with a high priority that need to be addressed in the short term	3-5 years (2019-2021)
M8 – M18	Medium – hazards that require an action of the medium term	5- 9 years (2021 – 2026)
L2 – L8	Low – hazards that are considered to be of low consequence and do not require a short term action long term	10+ years (2026+)
Monitor and Evaluate: Where the recommended management action is to monitor and evaluate the identified hazard, indicates that it has not yet triggered the requirement for intervention and will be subject to an annual inspection program		

Recommended Management Options

The recommended management options presented in the below represent the outcome of an economic analysis and multi-criteria assessment. In some instances more than one management is identified, in these instances the management options reflects the diversity of the hazard site and recommends a flexible approach for managing the current hazard. A high level cost estimate and a priority have been included to assist in the planning and delivery of recommend actions.

Location	Consequence rating	Erosion Factor	Risk Rating	Recommended Management Option(s)	Priority	Planning cost estimate* (2016\$)
AMITY POINT	Major	5	E40	Shoreline Erosion Management Plan	Very High	\$150,000
Norfolk Beach Coochiemudlo Island	Medium	3	M18	Monitor - Annual survey	On going	\$3,000
Main Beach Coochiemudlo Island	Medium	2	M12	Monitor - Annual Inspection	On going	Internal Cost
Southeast Beach Coochiemudlo Island	Low	2	L8	Monitor - Annual survey	On going	\$3,000
Melaleuca Beach Coochiemudlo Island	Low	2	L8	Foreshore Protection – Beach Nourishment	Low	\$70m/m ³
Northeast Beach, Coochiemudlo Island	Low	2	L8	Monitor - Annual survey	On going	\$3,000
Morwong Beach Coochiemudlo Island	Low	1	L4	Upgrade of road and stormwater infrastructure to mitigate the impact upon the foreshore and beach	Low	\$35,000
				Monitor – Annual Inspection	On going	Internal cost
Red Cliff & Golf Links Beach Coochiemudlo	Medium	2	M12	Geotechnical investigation	Medium	\$150,000

Location	Consequence rating	Erosion Factor	Risk Rating	Recommended Management Option(s)	Priority	Planning cost estimate* (2016\$)
Island				Monitor - Annual Inspection	On going	Internal cost
Coochiemudlo Island				Further detailed planning – To refine the existing Shoreline Erosion Study to a Shoreline Erosion Management Plan ¹² .	Medium	\$50,000 – SEMP
Southern NSI - Jumpinpin North Stradbroke Island	Low	2	L8	Monitor – Desktop Monitoring	On going	Internal cost
Eighteen Mile Swamp North Stradbroke Island	Low	2	L8	Monitor- Desktop Monitoring	On going	Internal cost
Point Lookout - South Gorge North Stradbroke Island	Medium	2	M12	Monitor - Annual Inspection	Medium	Internal cost
Point Lookout - Frenchmans Bay North Stradbroke Island	Medium	2	M12	Monitor - Annual Inspection	Medium	Internal cost
Point Lookout - Deadmans Headland North Stradbroke Island	Medium	2	M18	Monitor - Annual Inspection	Medium	Internal cost
Point Lookout - Deadmans Beach North Stradbroke Island	Medium	2	M12	Monitor - Annual Inspection	Medium	Internal cost
Point Lookout - Cylinder Headland North Stradbroke Island	Medium	2	M18	Monitor - Annual Inspection	Medium	Internal cost
Point Lookout - Home Beach North Stradbroke Island	Medium	2	M12	Monitor - Annual Inspection	Medium	Internal cost

¹² In 2014 a Shoreline Erosion Study was undertaken for Coochiemudlo which focussed primarily on the eastern beaches with a supplementary extension to the study area to include the northern and southern beaches. With a number of hazard locations identified on Coochiemudlo Island, it is reasonable to create a SEMP, based on existing work, to manage the identified hazards.

Location	Consequence rating	Erosion Factor	Risk Rating	Recommended Management Option(s)	Priority	Planning cost estimate* (2016\$)
Flinders Beach North Stradbroke Island	Medium	2	M12	Monitor - Annual Inspection	On going	Internal cost
Junner St Dunwich	Medium	2	M12	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
Polka Point Dunwich	Medium	4	H24	Further detailed planning	High	\$30,000
Queens Esplanade Thorneside	Medium	2	M12	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
3 Paddocks Park Birkdale	Medium	2	M12	Monitor - Annual Inspection	On going	Internal cost
Aquatic Paradise Park Birkdale	Medium	2	M12	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
Main Road (Recreational Reserve) Wellington Point	Major	2	M16	Maintain sea wall	Medium	Subject to detailed design
				Foreshore Protection – Beach Nourishment		\$70m/m ³
				Monitor - Annual Inspection	On going	Internal cost
Champion Lane, Wellington Point	Medium	2	M18	Monitor – Annual Inspection	On going	Internal cost
Sleath Street, Ormiston	Low	2	L8	Monitor - Annual Inspection	On going	Internal cost
Como Street, Ormiston	Low	1	L4	Monitor – Annual Inspection	On going	Internal cost

Location	Consequence rating	Erosion Factor	Risk Rating	Recommended Management Option(s)	Priority	Planning cost estimate* (2016\$)
Cleveland Point Cleveland	Medium	2	M12	Maintain sea wall	Medium	Subject to detailed design
				Monitor - Annual Inspection	On going	Internal cost
GJ Walter Park Cleveland	Medium	2	M12	Monitor progress of Toondah Harbour PDA	On going	Internal cost
North Boat Ramp Victoria Point	Medium	2	M12	Monitor - Annual Inspection	On going	Internal cost
Thompsons Beach Victoria Point	Medium	2	M12	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
Pelican Street Victoria Point	Low	2	L8	Monitor - Annual Inspection	Low	Internal cost
Wilson Esplanade Victoria Point	Medium	2	M12	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
Weinam Creek Ferry Terminal Redland Bay	Low	2	L8	Monitor - Annual Inspection	Low	Internal cost
Bay Street, Redland Bay	Medium	5	E30	Foreshore Protection – Hard Structure	Very High	\$1,378 – \$3,038/m
Torquay Road, Redland Bay	Low	1	L4	Monitor - Annual Inspection	On going	Internal cost
North Street, Redland Bay	Low	1	L4	Foreshore Protection – Hard Structure	Low	\$1,378 – \$3,038/m
Brighton Road, Macleay Island	Medium	2	M12	Maintain sea wall	Medium	Subject to detailed design

Location	Consequence rating	Erosion Factor	Risk Rating	Recommended Management Option(s)	Priority	Planning cost estimate* (2016\$)
Coondooropa Drive, Macleay Island	Low	2	L8	Foreshore Protection – Hard Structure	Low	\$1,378 – \$3,038/m
Russell Terrace, Macleay Island	Low	3	M12	Monitor - Annual Inspection	On going	Internal cost
Jock Kennedy Park, Russell Island	Low	3	M12	Foreshore Protection - Revegetate foreshore	Medium	\$17/m ²
The Boulevard, Russell Island	Low	3	M12	Monitor – Annual Inspection	On going	Internal cost
Esplanade, Karragarra Island	Medium	3	M18	Foreshore Protection – Hard Structure	Medium	\$1,378 – \$3,038/m
Sweetgum Drive, Lamb Island	Low	1	L4	Cap closed landfill site	Low	\$15,000
Empire Vista	Low	1	L4	Monitor – Annual Inspection	Low	Internal cost

Phase 2 – Emerging Risks: Overview

The next key deliverable of the Coastal Adaptation Strategy is Phase 2 – Emerging Risks. Phase 2 – Emerging Risks will address the coastal hazards that pose a ‘future risks’ to Redlands coast and foreshore over a longer planning period. The coastal hazards that will be addressed are sea level rise, storm tide inundation and erosion prone areas with a focus on the level of risk towards existing local communities and the relationship between land use planning and projected growth across the city.

The aim of this phase is to understand the level of risk and vulnerability of critical assets, property and the community from long term coastal hazards and recommend actions that manage the risk to an acceptable level. Similar to Phase 1, the methodology to complete Phase 2 will be a risk based approach and a suite of potential management options will be assessed to determine the most suitable actions.

In addition to the key deliverables of this project, a critical element to successfully deliver the project is community consultation and engagement. The aim of the planned consultation process is to engage the community through a conversation that recognises local knowledge, identified local values and includes science based scenario planning. The consultation process is a staged approach that will build upon the good faith and trust generated from these conversations. The desired outcome of the consultation and engagement will be to prepare an approach to coastal management that is effectively planned on a continuous process of adaptation to climate change and that preserve options for future generations.

Conclusion

The Coastal Adaptation Strategy: Phase 1 Current Hazard outlines an adaptive and flexible framework for the assessment and management of locations affected by shoreline erosion throughout the City. The assessment framework has been established to be a consistent and repeatable process to determine the level of risk for each identified hazard. The framework also guides the requirement for further assessment against to determine the level of risk of an identified hazard location. This was a particularly important aspect due to the dynamic nature of coastal hazards and the wide range of coastal environment that exists within Redland City.

The completion of Phase 1 encourages sustainable management of the foreshore and coastal precinct by providing a consistent and transparent methodology for assessing and prioritising identified hazard areas. The assessment methodology will assist network planners and asset managers in the planning and programming of works program and also developing specific business cases to undertake management actions.

In addition to the recommended management options in the Management Plan it is proposed that review and re-assessment of all identified coastal hazards be undertaken as part of the annual inspection program (monitor and evaluate). Constant monitoring of locations will assist in defining trigger points for when direct intervention is required through management actions to lower the risk level. The inspection program to monitor and evaluate known hazards is a critical element of the Coastal Adaptation Strategy Phase 1: Current Hazards and is inherent for an adaptive and flexible strategy.

APPENDIX 1 - CURRENT HAZARD MAPS

APPENDIX 2 - HAZARD IDENTIFICATION PROCESS

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APPENDIX 3 – PRIORITY ASSESSMENT MATRIX

Hazard Assessment Matrix

#	Location	Suburb	ENVIRONMENT							SOCIAL					ECONOMIC			Total average score	Consequence Rating	Erosion Factor	Risk Rating	
			Foreshore	Ecological Value					Nature Conservation Act	Visual Amenity	Recreation	Cultural heritage	Population	Infrastructure value (\$)	Property value (\$)							
				Amount of land at direct risk of erosion (at current rate)	Adjoining terrestrial value (BPA 3.5) & VMA regulated vegetation	Marine Park Zoning	Ramsar	Fish Habitat Area								EPBC listed endangered ecological community	Nature Conservation Act Species Present					Total (average)
1	AMITY POINT		5	1	4	5	1	1	5	3.14	4	3	3	3	3.25	5	5	5.00	11.39	Major	5	E40
2	Norfolk Beach	Coochiemudlo Island	2	1	3	5	1	1	3	2.29	3	2	3	1	2.25	2	1	1.50	6.04	Medium	3	M18
3	Main Beach	Coochiemudlo Island	4	1	3	5	1	1	3	2.57	3	3	3	1	2.50	4	1	2.50	7.57	Medium	2	M12
4	Southeast Beach	Coochiemudlo Island	2	1	3	5	1	1	3	2.29	2	2	3	1	2.00	1	1	1.00	5.29	Low	2	L8
5	Melaleuca Beach	Coochiemudlo Island	2	4	3	5	1	1	3	2.71	3	2	2	1	2.00	1	1	1.00	5.71	Low	2	L8
6	Northeast Beach	Coochiemudlo Island	2	1	3	5	1	1	3	2.29	2	2	1	1	1.50	1	1	1.00	4.79	Low	2	L8
7	Morwong Beach	Coochiemudlo Island	2	1	3	5	1	3	3	2.57	2	2	2	1	1.75	1	1	1.00	5.32	Low	1	L4
8	Red Cliff & Golf Links Beach	Coochiemudlo Island	3	4	3	5	1	3	3	3.14	3	1	3	1	2.00	5	1	3.00	8.14	Medium	2	M12
9	Southern NSI - Jumpinpin	North Stradbroke Island	5	2	4	5	1	5	5	3.86	1	1	1	1	1.00	1	1	1.00	5.86	Low	2	L8
10	Eighteen Mile Swamp	North Stradbroke Island	5	2	3	5	1	1	5	3.14	1	1	1	1	1.00	1	1	1.00	5.14	Low	2	L8
11	Point Lookout - South Gorge	North Stradbroke Island	3	3	4	5	1	5	5	3.71	3	4	3	1	2.75	1	1	1.00	7.46	Medium	2	M12
12	Point Lookout - Frenchmans Bay	North Stradbroke Island	3	2	4	5	1	5	5	3.57	2	2	3	1	2.00	1	1	1.00	6.57	Medium	2	M12
13	Point Lookout - Deadmans Headland	North Stradbroke Island	2	3	4	5	1	5	5	3.57	2	2	3	1	2.00	1	1	1.00	6.57	Medium	2	M12
14	Point Lookout - Deadmans Beach	North Stradbroke Island	3	2	4	5	1	5	5	3.57	2	2	3	1	2.00	1	1	1.00	6.57	Medium	2	M12
15	Point Lookout - Cylinder Headland	North Stradbroke Island	2	3	4	5	1	5	5	3.57	2	2	3	1	2.00	1	1	1.00	6.57	Medium	2	M12
16	Point Lookout - Home Beach	North Stradbroke Island	4	2	3	5	1	5	5	3.57	2	2	3	1	2.00	1	1	1.00	6.57	Medium	2	M12
17	Flinders Beach	North Stradbroke Island	5	4	3	5	1	1	1	2.86	3	4	1	1	2.25	1	1	1.00	6.11	Medium	2	M12
18	Junner St	Dunwich	2	1	2	1	1	3	3	1.86	4	2	5	1	3.00	5	2	3.50	8.36	Medium	2	M12

19	Polka Point	Dunwich	2	1	3	1	1	3	3	2.00	4	1	5	1	2.75	1	2	1.50	6.25	Medium	4	H24
20	Queens Esplanade	Thorneside	2	2	3	5	1	5	2	2.86	3	3	1	1	2.00	2	3	2.50	7.36	Medium	2	M12
21	3 Paddocks Park	Birkdale	2	2	3	5	1	5	1	2.71	1	1	1	1	1.00	2	3	2.50	6.21	Medium	2	M12
22	Aquatic Paradise Park	Birkdale	1	2	3	5	1	1	1	2.00	1	1	1	1	1.00	2	5	3.50	6.50	Medium	2	M12
23	Main Road	Wellington Point	2	5	3	5	1	5	1	3.14	3	3	2	1	2.25	4	5	4.50	9.89	Major	2	M16
24	Champion Lane	Wellington Point	2	4	3	5	1	1	1	2.43	4	2	1	1	2.00	1	5	3.00	7.43	Medium	2	M18
25	Sleath Street	Ormiston	1	2	3	5	1	3	3	2.57	1	1	2	1	1.25	1	1	1.00	4.82	Low	2	L8
26	Como St	Ormiston	1	4	3	5	1	3	3	2.86	2	1	2	1	1.50	1	1	1.00	5.36	Low	1	L4
27	Cleveland Point	Cleveland	2	1	3	5	1	5	3	2.86	3	3	2	1	2.25	3	4	3.50	8.61	Medium	1	L5
28	GJ Walter Park	Cleveland	1	1	3	5	1	1	1	1.86	1	1	2	1	1.25	2	5	3.50	6.61	Medium	1	L6
29	North Boat Ramp	Victoria Point	2	1	3	5	1	1	1	2.00	3	1	3	1	2.00	3	1	2.00	6.00	Medium	1	L7
30	Thompsons Beach	Victoria Point	2	1	3	5	1	1	1	2.00	4	4	3	1	3.00	3	4	3.50	8.50	Medium	1	L8
31	Pelican Street	Victoria Point	2	1	3	5	1	1	1	2.00	2	1	3	1	1.75	2	1	1.50	5.25	Low	1	L9
32	Wilson Esplanade	Victoria Point	2	1	3	5	1	1	1	2.00	2	2	3	1	2.00	2	3	2.50	6.50	Medium	1	L10
33	Weinam Creek Ferry Terminal	Redland Bay	2	1	2	1	1	1	3	1.57	2	2	1	1	1.50	4	1	2.50	5.57	Low	1	L11
34	Bay St	Redland Bay	2	1	3	5	1	1	1	2.00	2	3	1	1	1.75	3	2	2.50	6.25	Medium	1	L12
35	Torquay Road	Redland Bay	2	2	3	5	1	1	1	2.14	1	1	1	1	1.00	1	1	1.00	4.14	Low	1	L13
36	North Street	Redland Bay	1	2	3	5	1	1	1	2.00	2	2	1	1	1.50	2	1	1.50	5.00	Low	1	L14
37	Brighton Road	Macleay Island	2	1	3	5	1	1	1	2.00	2	3	1	1	1.75	5	1	3.00	6.75	Medium	1	L15
38	Coondoorroopa Drive	Macleay Island	1	1	3	5	1	1	1	1.86	2	2	1	1	1.50	2	1	1.50	4.86	Low	1	L16
39	Russell Terrace	Macleay Island	1	4	3	5	1	1	1	2.29	2	1	1	1	1.25	1	2	1.50	5.04	Low	1	L17
40	Jock Kennedy Park	Russell Island	2	1	3	5	1	1	1	2.00	1	1	1	1	1.00	2	3	2.50	5.50	Low	1	L18
41	The Boulevard	Russell Island	2	1	3	5	1	1	1	2.00	2	3	2	1	2.00	1	1	1.00	5.00	Low	1	L19
42	Esplanade	Karragarra Island	2	4	3	5	1	1	1	2.43	2	1	1	1	1.25	4	1	2.50	6.18	Medium	1	L20
43	Sweetgum Drive	Lamb Island	1	2	3	5	1	1	1	2.00	1	1	1	1	1.00	1	1	1.00	4.00	Low	1	L21
44	Empire Vista	Ormiston	1	2	3	5	1	3	3	2.57	1	1	2	1	1.25	1	1	1	4.82	Low	1	L4

APPENDIX 4 – MANAGEMENT OPTION ANALYSIS

MANAGEMENT OPTIONS ANALYSIS

LOCATION	RATING	Erosion Factor	MANAGEMENT OPTIONS	COST ESTIMATE (\$)	Effectiveness	Value for money	Environmental Impacts	Social Impacts	Total	Weighted Score	Preferred Option
AMITY POINT	E40	5	SEMP (underway)	\$150,000							
Norfolk Beach Coochiemudlo Island	M18	3	Monitor - Annual survey	3500 - 7000	2	4	4	2	3	3	Y
			Beach nourishment	\$70m/m ³	3	2	3	2	2.5	2.5	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	Y
			Hard Structure	\$669,343	3	1	2	2	2	2	
Main Beach Coochiemudlo Island	M12	2	Beach nourishment	\$70m/m ³	3	3	3	3	3	3	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	
			Monitor - Annual Inspection	3500 - 7000	3	4	4	3	3.5	3.5	Y
Southeast Beach Coochiemudlo Island	L8	2	Monitor - Annual survey	3500 - 7000	3	4	4	3	3.5	3.5	Y
			Dune re-vegetation	\$17/m ²	2	4	3	3	3	3	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	
			Beach nourishment	\$70m/m ³	4	3	3	3	3.25	3.3	
Melaleuca Beach Coochiemudlo Island	L8	2	Beach nourishment	\$70m/m ³	3	3	3	3	3	3	
			Hard Structure	\$869,883	4	1	2	2	2.25	2.3	
			Dune re-vegetation	\$17/m ²	3	3	3	3	3	3	

			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	
			Monitor - Annual survey	3500 - 7000	2	4	4	3	3.25	3.2	Y
Northeast Beach Coochiemudlo Island	L8	2	Rock groyne to extend 'control point'	\$801,193	4	1	1	2	2	2.1	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	Y
			Beach nourishment	\$70m/m ³	2	2	3	2	2.25	2.2	
			Monitor - Annual survey	3500 - 7000	1	4	4	3	3	2.9	
			Hard Structure	\$1,070,423	4	1	1	2	2	2.1	
Morwong Beach Coochiemudlo Island	L4	1	Upgrade stormwater infrastructure - Improve overland flow path to prevent erosion to beach	\$35,000	3	3	2	3	2.75	2.8	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	
			Beach nourishment	\$70m/m ³	2	3	3	3	2.75	2.7	
			Monitor - Annual Inspection	Internal cost	3	4	4	4	3.75	3.7	Y
Red Cliff & Golf Links Beach Coochiemudlo Island	M12	2	Hard Structure	\$670,216	4	3	2	3	3	3.1	
			Beach nourishment	\$70/m ³	3	2	3	3	2.75	2.7	
			Further detailed planning - refinement of SES to a SEMP	\$50,000	3	3	3	3	3	3	
			Geotechnical investigation	\$150,000	3	3	3	3	3	3	

			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Southern NSI - Jumpinpin North Stradbroke Island	L8	2	Beach nourishment	\$70m/m ³	1	1	3	4	2.25	2	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Eighteen Mile Swamp North Stradbroke Island	L8	2	Beach nourishment	\$70m/m ³	1	1	3	2	1.75	1.6	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Point Lookout - South Gorge North Stradbroke Island	M12	2	Beach nourishment	\$70m/m ³	1	1	3	2	1.75	1.6	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Point Lookout - Frenchmans Bay North Stradbroke Island	M12	2	Beach nourishment	\$70m/m ³	1	1	3	2	1.75	1.6	
			Hard Structure	\$1,535,262	4	1	2	2	2.25	2.3	
			Monitor - Annual Inspection	Internal cost	3	4	4	4	3.75	3.7	Y
Point Lookout - Deadmans Headland North Stradbroke Island	M18	2	Beach nourishment	\$70m/m ³	1	1	3	4	2.25	2	
			Hard Structure	\$1,419,732	3	1	2	1	1.75	1.8	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Point Lookout - Deadmans Beach North Stradbroke Island	M12	2	Beach nourishment	\$70m/m ³	3	1	3	2	2.25	2.2	
			Hard Structure	\$1,535,262	3	1	2	1	1.75	1.8	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y

Point Lookout - Cylinder Headland North Stradbroke Island	M18	2	Beach nourishment	\$70m/m ³	3	1	3	2	2.25	2.2	
			Monitor - Annual Inspection	Internal cost	3	4	4	4	3.75	3.7	Y
Point Lookout - Home Beach North Stradbroke Island	M12	2	Beach nourishment	\$70m/m ³	1	1	3	3	2	1.8	
			Hard Structure	\$5,063,605	3	1	2	1	1.75	1.8	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Flinders Beach North Stradbroke Island	M12	2	Beach nourishment	\$70m/m ³	1	1	3	3	2	1.8	
			Hard Structure	\$18,802,284	3	1	2	1	1.75	1.8	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
			Dune Revegetation	\$17/m ²	3	3	3	3	3	3	
Junner St Dunwich	M12	2	Hard Structure	\$469,384	4	4	2	3	3.25	3.4	Y
			Monitor - Annual Inspection	Internal cost	1	4	4	3	3	2.9	
Polka Point Dunwich	H24	4	Bank stabilisation (vegetative works)	\$17/m ²	3	2	3	3	2.75	2.7	
			Monitor - Annual Inspection	Internal cost	3	4	3	1	2.75	2.9	Y
			Hard Structure	\$379,964	4	3	2	3	3	3.1	
			Further detailed planning	\$50,000	3	4	4	3	3.5	3.5	
			Beach nourishment	\$70m/m ³	4	2	3	3	3	3	
Queens Esplanade Thorneside	M12	2	Beach nourishment	\$70m/m ³	3	3	3	3	3	3	
			Hard Structure	\$700,000	4	4	2	3	3.25	3.4	Y
			Monitor - Annual Inspection	Internal cost	2	4	3	3	3	3	

3 Paddocks Park Birkdale	M12	2	Hard Structure	\$336,035	4	2	2	2	2.5	2.6	
			Beach nourishment	\$70m/m ³	2	2	2	3	2.25	2.2	
			Foreshore revegetation	\$17/m ²	2	3	3	3	2.75	2.7	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Aquatic Paradise Park Birkdale	M12	2	Hard Structure	\$100,000	4	4	2	3	3.25	3.4	Y
			Beach nourishment	\$70m/m ³	3	3	3	3	3	3	
			Bank stabilisation/vegetative work	\$17/m ²	2	2	3	3	2.5	2.4	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
Main Road Wellington Point	M16	2	Maintain sea wall	1% construction cost	4	3	3	3	3.25	3.3	
			Beach nourishment	\$70m/m ³	4	3	3	3	3.25	3.3	Y
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
Champion Lane Wellington Point	M18	2	Hard Structure	\$622,152	4	1	3	3	2.75	2.7	
			Beach nourishment	\$70m/m ³	2	3	3	3	2.75	2.7	
			Revegetation	\$17/m ²	2	3	3	3	2.75	2.7	
			Monitor - Annual Inspection	Internal cost	1	4	4	3	3	2.9	Y
Sleath Street Ormiston	L8	2	Revegetation	\$17/m ²	2	3	4	3	3	2.9	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Como St Ormiston	L4	1	Revegetation	\$17/m ²	2	3	4	3	3	2.9	

			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
			Hard Structure	\$70,000	4	1	3	2	2.5	2.5	
Cleveland Point Cleveland	M12	2	Maintain sea wall	1% construction cost	4	4	3	3	3.5	3.6	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
GJ Walter Park Cleveland	M12	2	Hard Structure	\$126,079	4	1	2	3	2.5	2.5	
			Monitor progress of Toondah Harbour PDA	Internal cost	3	4	4	4	3.75	3.7	Y
North Boat Ramp Victoria Point	M12	2	Revegetate foreshore	\$17/m ²	2	3	4	3	3	2.9	
			Hard Structure	\$148,297	4	4	2	2	3	3.2	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
Thompson St Victoria Point	M12	2	Project - sea wall and beach nourishment	\$2M	4	4	3	3	3.5	3.6	Y
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
Pelican Street Victoria Point	L8	2	Beach nourishment and profiling	\$70m/m ³	3	2	3	3	2.75	2.7	
			Hard Structure	\$390,000	4	1	2	3	2.5	2.5	
			Monitor - Annual Inspection	Internal cost	3	3	4	3	3.25	3.2	Y
Wilson Esplanade Victoria Point	M12	2	Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
			Hard Structure	\$450,000	4	4	2	3	3.25	3.4	Y
			Beach nourishment	\$70m/m ³	4	4	3	4	3.75	3.8	

Weinam Creek Ferry Terminal Redland Bay	L8	2	Maintain sea wall	1% construction cost	4	3	2	3	3	3.1	
			Monitor - Annual Inspection	Internal cost	3	4	3	4	3.5	3.5	Y
Bay St Redland Bay	E30	5	Hard Structure	\$293,875	4	4	2	3	3.25	3.4	Y
			Beach nourishment	\$70m/m ³	2	2	3	3	2.5	2.4	
			Monitor - Annual Inspection	Internal cost	3	4	4	2	3.25	3.3	
Torquay Road Redland Bay	L4	1	Hard Structure	\$81,644	4	1	2	2	2.25	2.3	
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	Y
North Street Redland Bay	L4	1	Hard Structure	\$122,570	4	3	2	4	3.25	3.3	Y
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
			Beach nourishment	\$70m/m ³	2	3	3	4	3	2.9	
Brighton Road Macleay Island	M12	2	Maintain sea wall	1% construction cost	4	4	2	3	3.25	3.4	Y
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	
Coondooroopa Drive Macleay Island	L8	2	Hard Structure	\$100,000	4	4	2	3	3.25	3.4	Y
			Beach nourishment	\$70m/m ³	3	3	3	3	3	3	
			Monitor - Annual Inspection	Internal cost	3	4	4	2	3.25	3.3	
Russell Terrace Macleay Island	M12	3	Hard Structure	\$165,970	4	1	2	2	2.25	2.3	Y
			Monitor - Annual Inspection	Internal cost	3	4	4	3	3.5	3.5	

Jock Kennedy Park Russell Island	L3	3	Revegetate foreshore	\$17/m ²	3	4	4	3	3.5	3.5	
			Monitor - Annual Inspection	Internal cost	3	4	3	2	3	3.1	
			Hard Structure	\$422,000	4	3	2	3	3	3.1	Y
The Boulevard Russell Island	M12	3	Monitor - Annual Inspection	Internal cost	3	4	3	2	3	3.1	
			Hard Structure	\$220,000	4	2	2	3	2.75	2.8	
Esplanade Karragarra Island	M18	3	Hard Structure	\$192,619	4	4	2	3	3.25	3.4	Y
			Beach nourishment	\$70m/m ³	3	3	2	3	2.75	2.8	
			Monitor - Annual Inspection	Internal cost	3	2	4	3	3	2.9	
Sweetgum Drive Lamb Island	L4	1	Cap closed landfill site	\$15,000	4	3	3	3	3.25	3.3	Y
			Monitor - Annual Inspection	Internal cost	3	4	2	3	3	3.1	
Empire Vista, Ormiston	L4	1	Hard Structure	\$90,000	4	1	2	2	2.25	2.3	
			Foreshore Protection	\$17/m ²	3	1	2	2	2	2	
			Monitor - Annual Inspection	Internal cost	2	4	3	3	3	3	Y

DRAFT

**Coastal Adaptation
Strategy
Coastal Hazards
Overview**

Northern Mainland








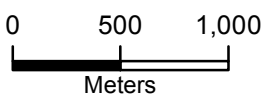
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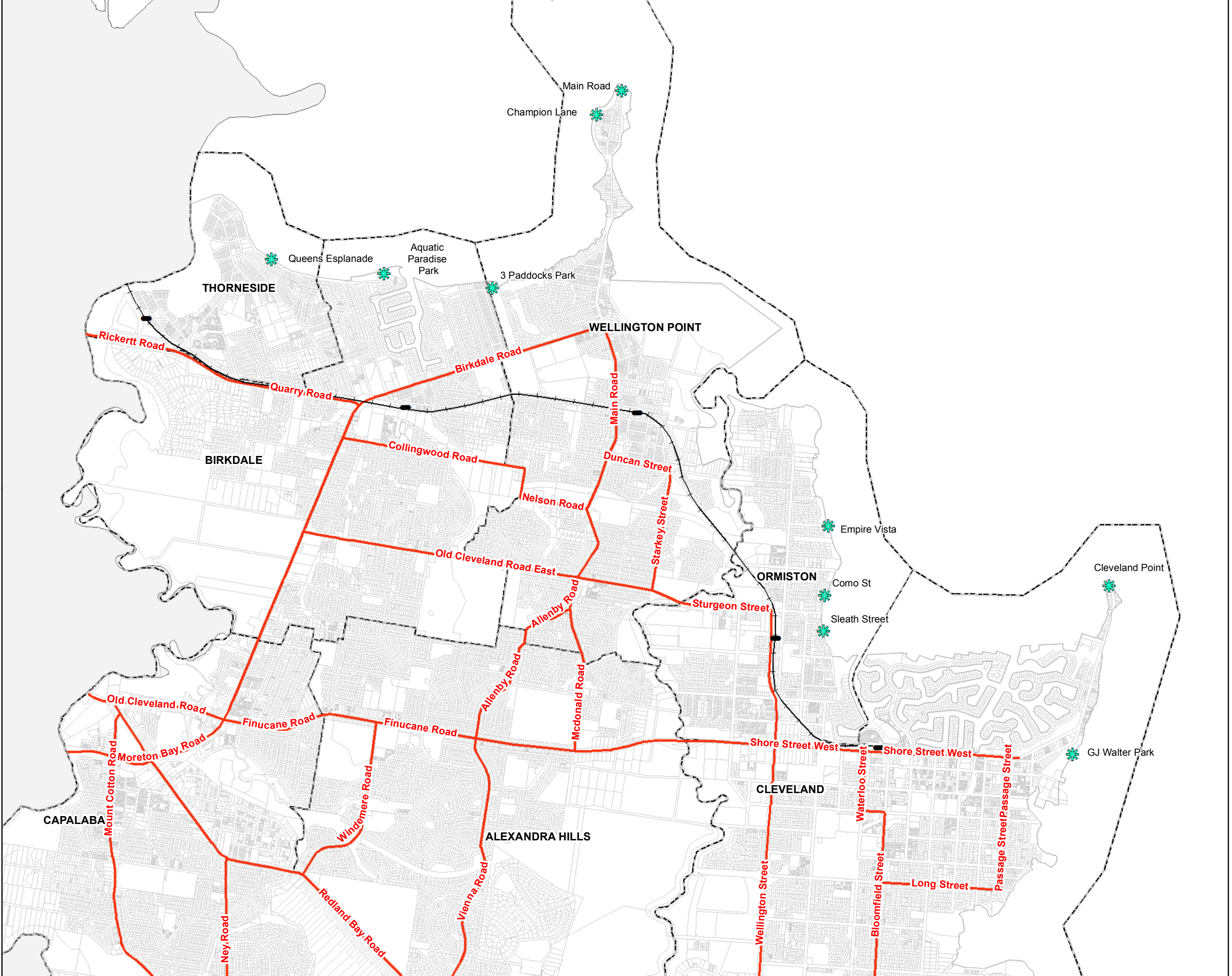
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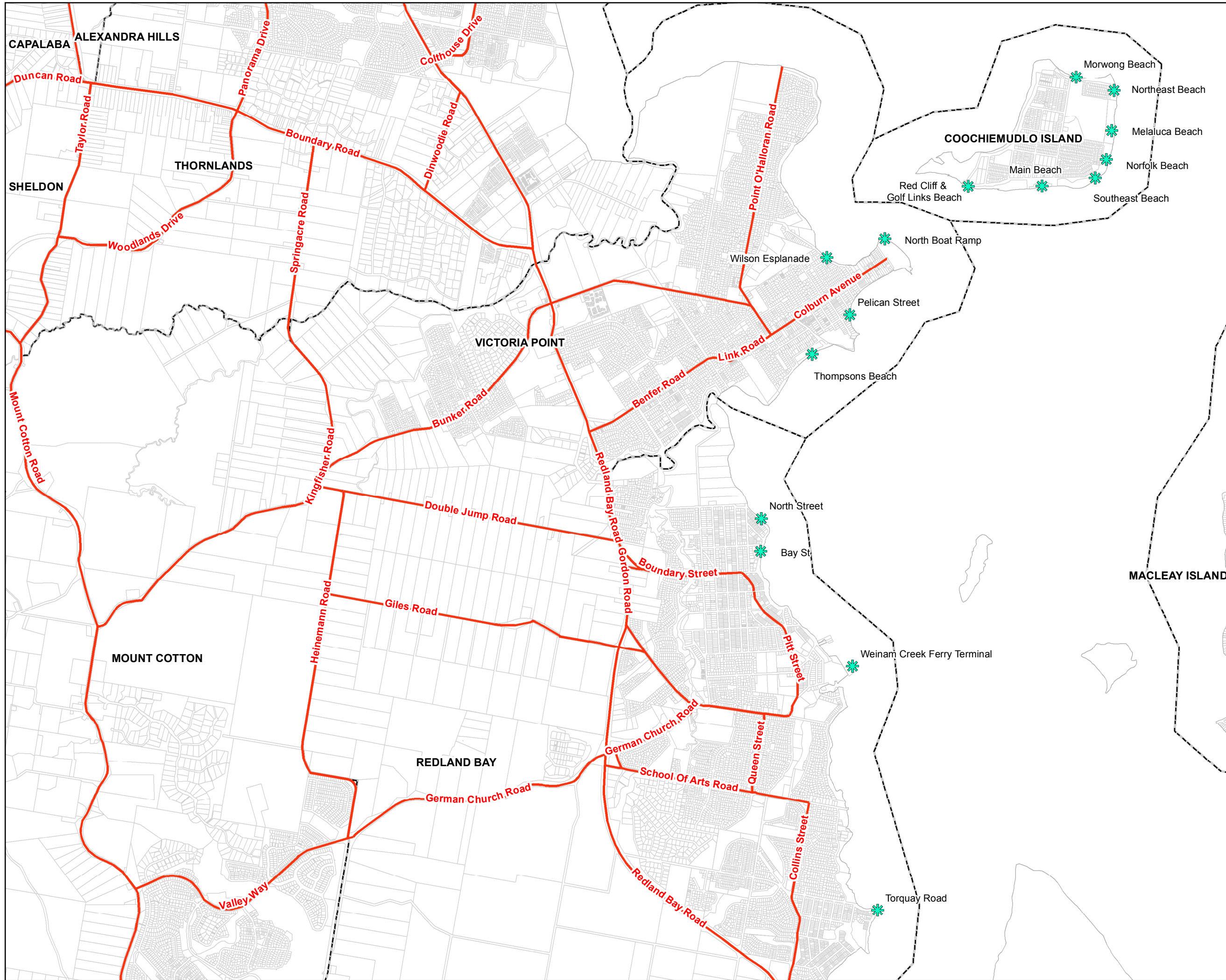
Legend

-  Coastal Hazards Register
-  Major or Significant Roads
-  Property Boundaries
-  Suburbs
-  Adjacent LGA



Scale: 1:35,000 (at A3)
Date: November 2016





**Coastal Adaptation
Strategy
Coastal Hazards
Overview**

Southern Mainland








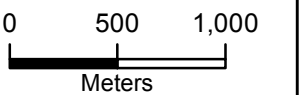
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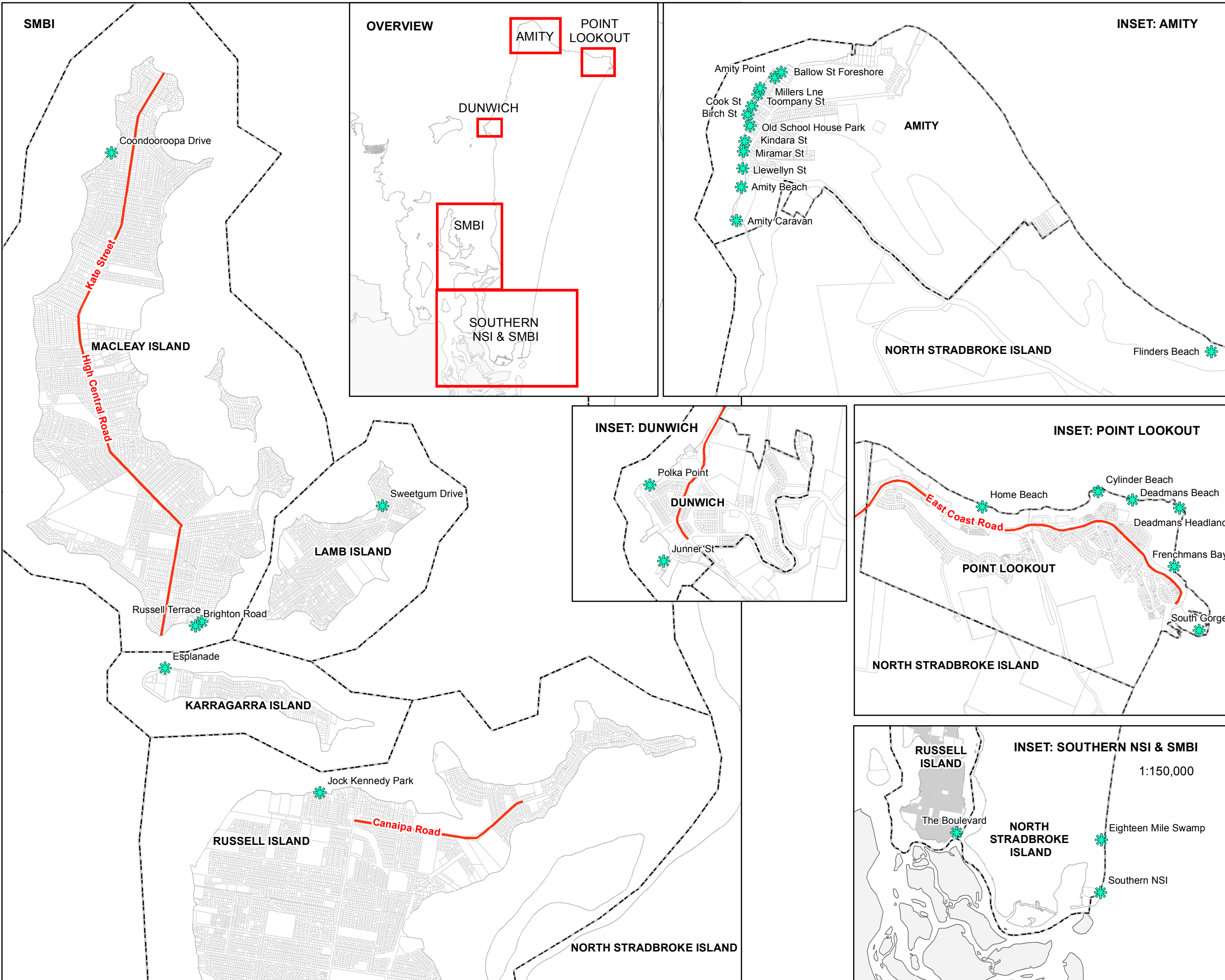
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Legend

-  Coastal Hazards Register
-  Major or Significant Roads
-  Property Boundaries
-  Suburbs
-  Adjacent LGA



Scale: 1:35,000 (at A3)
Date: August 2016



**Coastal Adaptation Strategy
Coastal Hazards Overview**

SMBI and North Stradbroke Island








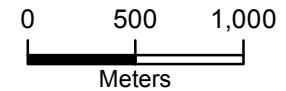
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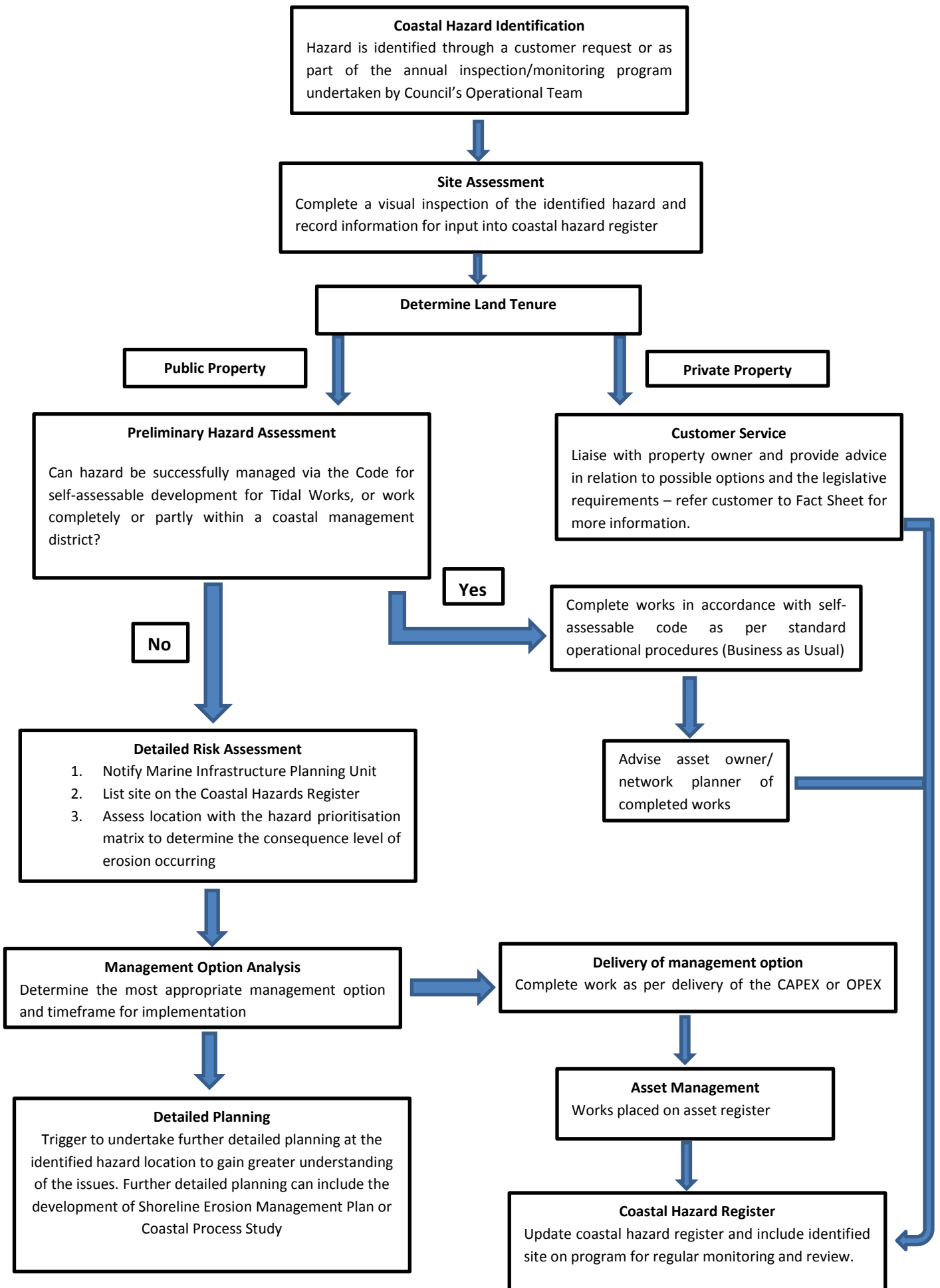
Legend

-  Coastal Hazards Register
-  Major or Significant Roads
-  Property Boundaries
-  Suburbs
-  Adjacent LGA



Scale: 1:35,000 (at A3)
Date: August 2016

Coastal Hazard Identification & Assessment Process



11.4.2 WILLARD'S FARM CONSERVATION MANAGEMENT PLAN

Objective Reference: A124442
Reports and Attachments (Archives)

Attachment: [Willard's Farm Conservation Management Plan October 2016](#)



Authorising Officer:
Gary Soutar
General Manager Infrastructure & Operations

Responsible Officer: Lex Smith
Group Manager City Spaces

Report Author: Sven Ljungberg
Program Manager Aquatic & Emergency Precinct

PURPOSE

The purpose of this report is to seek Council endorsement of the Willard's Farm conservation management plan (CMP) and provide an update on progress with the resolution dated 16 December 2015 for 302 Cleveland Road East, Birkdale, otherwise known as Willard's Farm.

BACKGROUND

On 16 December, 2015 Council resolved as follows:

1. That the Chief Executive Officer be delegated authority under s.257(1)(b) of the *Local Government Act 2009*, to enact options C and E of the confidential report including the discharge of any associated documentation; and
2. That this report remains confidential and details of individual acquisition will become publicly available when it has been successfully completed.

This report seeks to update Council on actions taken to date on options C and E.

- Option C: Purchase the entire site & restore homestead & associated structures
- Option E: Prepare historic archival records

Redland City Council (RCC) purchased Willard's Farm (also known as 'The Pines') for the benefit of the Redland's community for \$1.45 million on 9 March 2016. The decision was made following considerable community concern regarding the future of the property. At the time of purchase Council, the property was unoccupied and in a general state of disrepair.

City Spaces has been nominated as the asset manager to undertake the programming and project management activities to restore the buildings and bring the site up to an operational capacity.

A Council media release dated 12 February, 2016 stated that 'Council had resolved to investigate options to develop the property and keep the existing farm house which has historical value to the local community'.

Council voted to purchase the entire 8,164 square metre property, including the farmhouse and its outbuildings, with the assistance of Council's subsidiary company Redland Investment Corporation (RIC). Temporary fencing was then established around the complex for safety and security purposes. Heritage and other assessments were undertaken to determine what would be required to conserve and manage the place.

Council engaged Converge Heritage + Community (Converge) to prepare a CMP for the whole site (Attachment 1) to assist Council with the ongoing heritage management of the historic complex. The final report was received in October 2016.

Converge consists of highly qualified heritage specialists providing assessment, reporting, consultation and facilitation across a full spectrum of cultural heritage projects for over 30 years. Converge are on the panel of preferred consultants of the Department of Defence, Department of Environment & Heritage (Commonwealth), Department of Environment & Heritage Protection (DEHP), Powerlink (Queensland) and the Local Buy panel (Queensland).

Additional actions undertaken by City Spaces in the intervening period include:

- boundary survey of the property for the purpose of tendering on security fencing to the site;
- site shed established in the form of a shipping container to secure loose items that are at risk of vandalism and theft;
- windows and doors of the main residence building have been boarded up to deter further vandalism.

The CMP sets out a comprehensive plan to restore the Homestead and associated structures, including consideration of archaeological potential, policy responses to restoration and undiscovered items and historical linkages with adjacent sites.

Historical context and chronology

James Willard, the original owner of the property, arrived at Moreton Bay from Plymouth on the ship *Ascendant* in June 1858, aged 22 years. When Queensland became a self-governing colony in 1859, it had a population of about 25,000, no financial support and no money in its treasury. Among the first actions of the inaugural Queensland parliament when it met in May 1860 was the creation of four land acts to regulate the leasing and purchase of Crown land. The *Alienation of Crown Lands Acts 1860* governed the sale of Crown lands, establishing the means of selling town, suburban and country land, and of land in agricultural reserves.

In the 1860s, the concept of yeoman farmers (farmers who owned and operated small farms), became entrenched in Queensland Government policy through legislation to promote closer settlement of the land by suitable migrants.

The land on which Willard's Farm is sited was 'selected' by James Willard and Mark Blundell of Brisbane, who purchased it as tenants-in-common on 17 August 1863. This land, Portion 46, comprised 45 acres (18.2ha) bounded by Tingalpa Creek on the west and by the Cleveland road on the east.

The Deed of Grant (Land Purchase Certificate) was dated 31 December 1863. Family history reports that Willard built a hut near the creek and lived there until he built a house, the latter most likely being the current core of the original house using timber removed from the block.

Willard's house was constructed in stages and some of the techniques employed are a variant of conventional vernacular methods. Willard is likely to have built some of his growing family's new house himself, with assistance from his neighbour, Davison, possibly as early as the late 1860s.

The milking shed and garage were also constructed using materials and techniques consistent with vernacular construction techniques and Willard's bush carpentry skills. The milking shed shows evidence of evolving dairying practices. The overall form of the building has remained relatively consistent since at least the early 20th century.

The addition of the gable-roofed cream shed to the complex in the early 20th century also reflects the upgrade of farm infrastructure to adapt to evolving farming practice. In 1904, the *Dairy Produce Act* was introduced, which regulated premises where dairy produce was manufactured and prepared. In accordance with this legislation, the cream shed was constructed away from the milking shed and had a washable concrete floor.

James Willard died on 2 October 1914 and his property was transferred to his wife, Margaret. With her death on 15 June 1916, the property was transferred to the Willards' eldest son, William, and unmarried daughter, Margaret. It is considered that, with the exception of the northwest and western verandahs, the general layout and appearance of the residential complex and outbuildings present today was established by the time of James' death.

After William's death in 1923, his estate was transferred to his brother, James Willard, Jr. Willard's Farm was offered for lease and its furniture and stock were offered at auction on 8 February 1924. From 1927 to 1937 Margaret and James Willard leased Willard's Farm to several share farmers. In November 1938 Willard's Farm (Portions 46, 42 and 41) was transferred to Herbert Clive Daniel. He is attributed with replacing the shingle roof with metal sheet. In April 1940, all of his dairy herd, pigs and farm machinery were sold as part of a 'genuine dispersal sale'. Daniel subsequently sold the property to Rosemary Innes Cotton in June 1941.

World War II brought dramatic change to Willard's Farm. During this period much of the land surrounding the homestead was requisitioned in 1943 by the United States army for a communications centre, 'an important link in the global communications system operated by the US Army during World War II.' (EHP)

The Cotton family sold the remaining property in 1980. The property was sold again in 1985. The land was subdivided in 2004 and the southern section, without farm buildings, sold. The remaining property was purchased by the former owner in March 2015.

Description and analysis

The CMP provides a detailed description and analysis of the surviving property and features, articulating the likely stages of development and isolating diagrammatically the chronology of additions and improvements of both the main residence and outbuildings. Photographic records detail external and internal features of the built structures and significant landscape plantings for the purpose of assisting with the future conservation works.

History suggests that there were several additional buildings and structures on the property and adjacent properties that are no longer extant. A policy for unforeseen discoveries is included in Section 5 to manage the potential for archaeology.

Potential archaeological material could include:

- dumps and artefact material;
- graves;
- former building footings and structural evidence;
- early landscape features;
- indigenous cultural heritage.

A structural inspection report (Morgan Consulting Engineers, August 2015) was prepared as part of the former owners' submission to the Queensland Heritage Council (QHC) against the proposed nomination for heritage listing. This document has been used in the CMP to support the conservation policies, action plan and emergency conservation work recommendations.

A comparative analysis of similar properties was conducted on the Queensland Heritage Register (QHR). The search of the register for comparative examples was limited by place type (agriculture/farm) and 25 results were returned. Of these 25 places, nine were historic farm complexes, including a homestead with outbuildings. These are:

- Mayes Cottage is located in Kingston in the Logan City Council area. It is listed on the QHR (ID600662) and comparable to Willard's Farm for being a surviving example of a dairy complex with timber slab buildings. The house contains original furniture owned by the Mayes family from the 1880s to the 1930s;
- Argyle Homestead (c.1870s) is located near Toowoomba at Geham and is listed on the QHR (ID600436). It was renovated in the 1980s, is owned privately, is now used as guesthouse accommodation and is a tourist attraction;
- Castleholme Homestead is located at Bryden (near Wivenhoe) and is listed on the QHR (ID600491). Originally a dairy farm, it has several timber outbuildings still extant, including slab sheds;
- The Schmidt Farmhouse and Outbuildings is located at Worongary and is listed on the QHR (ID601889). Like Willard's Farm, the Schmidt Farmhouse and Outbuildings includes a house, barn and creamery and was a dairy farm;
- Colonsay Farm is located in the Wide Bay district, near Hervey Bay. It is listed on the QHR (ID602771) for being an intact example of a small, early 20th century dairy farm;
- Ormiston House Estate is listed on the QHR (ID600775) for being closely related to the establishment of the sugar industry in Queensland.

Most of the above examples are now tourist attractions – Mayes Cottage, Schmidt Farmhouse, Bankfoot House and Ormiston House Estate are all operated as museum/heritage centres and Argyle Homestead is run as a guesthouse. Colonsay is a unique example in that it is still being used for agricultural purposes.

The key points to note from the analysis are that, while there are several comparative farm complexes on the QHR, they are no longer common, particularly in areas of high development such as Capalaba/Birkdale.

Cultural heritage significance

The heritage significance of a place is determined through the application of heritage criteria. The best-practice framework for the conservation of tangible cultural

heritage in Australia is the *Burra Charter 2013*, which guides cultural heritage management in Australia.

A place is considered significant if it possesses aesthetic, historic, scientific, social or spiritual value for past, present or future generations (Article 1.2).

The statement of significance is adapted from the recommendation prepared by EHP (2015). Converge reviewed the assessment and concurred with its findings.

Briefly, these are as follows:

- Willard's Farm (established 1863) provides rare, early evidence of government-promoted agricultural settlement in Queensland, particularly given its proximity to dense urban settlement;
- as one of the oldest surviving farms and residences within the Redlands, Willard's Farm demonstrates rare, uncommon and endangered aspects of Queensland's cultural heritage;
- examples of such an early, intact dairy farm and residential complex are considered to be extremely rare within the Brisbane region;
- the farmhouse and outbuildings retain important surviving evidence of early timber construction techniques no longer in general use;
- Willard's Farm is a rare, early example of a farm complex developed from the mid-19th century;
- Willard's Farm contributes to the streetscape of Old Cleveland Road East and is a landmark in the local area;
- Willard's Farm is also significant for its association with the WWII receiving station (on adjacent block) which was an 'important link in the global communications system operated by the US Army during World War II' (EHP).

The buildings and features at the complex possess varying degrees of significance. A hierarchy of significance was prepared to assist the restoration and ongoing conservation of the place. The various gradings entail different management requirements, and provide a framework for ongoing conservation works.

Conservation management

The following issues have been identified as priorities for the management of the heritage significance of the complex:

1. existing factors currently impacting on overall condition and preservation of significant elements of the site such as drainage, damage from pests and issues with substructure should be rectified as soon as possible;
2. significant elements should be managed according to their identified significance ranking;
3. intrusive elements should be removed where opportunity arises;
4. the historic complex should be maintained and conserved within its original rural (undeveloped) setting, with a particular focus on elements of exceptional and high significance. This process should incorporate the development of a management strategy for the grounds, which includes a full assessment and consideration of the significance of individual plantings, particularly mature trees that are a prominent feature of the broader historic landscape;

5. the site, particularly built elements, need to be restored to allow regular use as soon as possible in order to assist both with ongoing maintenance and to deter theft and vandalism. The scale, form, materials and setting of the complex should be respected and any proposed management or use options should be sympathetic to its significance;
6. broader development at the site should be avoided, or if necessary, carefully managed and undertaken only with full consideration of the cultural heritage significance of the site;
7. the archaeological potential of the site itself and the surrounding landscape should be considered and, where relevant, suitable management strategies developed prior to any ground disturbing works;
8. while outside the scope of the CMP, it is noted that adjacent Commonwealth land originally comprised part of Willard's Farm prior to the 1940s. Ideally, further research and field investigations should be undertaken to identify any features of significance that may add to an overall understanding of the significance of Willard's Farm in its entirety, including the elements relating to the role played during World War 2.

A set of policies have been recommended by Converge to assist in directing short and long term actions, work packages and future management of Willard's Farm.

Policy 1: conservation best practice

- 1.1 Willard's Farm should be carefully managed in accordance with the principles of the *Burra Charter* (2013).
- 1.2 People skilled and experienced in the conservation of historic places should assist with the planning, design and implementation of master planning, maintenance and development and interpretive programs for Willard's Farm.
- 1.3 Significant fabric at Willard's Farm will require specific care depending on the assigned heritage value hierarchy as follows: exceptional, high, moderate, low, none, intrusive.

Policy 2: managing change

- 2.1 Council should establish a document file for both hard copy and digital material relating to the property in order to keep comprehensive records of all changes, alterations, and modifications to heritage features and the place more generally.
- 2.2 Works should be managed so that the conservation of the place is of a high standard, while still endeavouring to preserve key elements of the 'patina' of the place.
- 2.3 Changes at Willard's Farm should be carried out while conserving its heritage values wherever possible.
- 2.4 The demolition of all or part of any feature intrinsic to the significance of the place (refer to Section 4.3) should not occur except where all 'prudent and feasible' measures are examined first.
- 2.5 There is to be no upgrading that involves changes to any significant fabric without prior consultation with Council and, where applicable, a suitably experienced heritage consultant.

- 2.6 New work is to be clearly identifiable, e.g. by use of clearly modern/different materials, date stamping and/or through photographic recording and/or clearly defined architectural drawings.
- 2.7 Any proposed changes to the site, particularly those involving ground disturbance in previously undisturbed areas, will need to occur in compliance with an approved strategy that accounts for the potential for archaeological discoveries – refer to Policy 3.2.
- 2.8 Future works and maintenance projects should consider the option of reconstructing and/or reinstating removed significant elements and landscape features in forms more representative of the original (i.e. like for like).

Policy 3: unforeseen discoveries

- 3.1 Prepare a policy for the management of unforeseen discoveries, inclusive of archaeological finds.
- 3.2 Commission an archaeologist to assist them in the preparation of an archaeological plan for Willard's Farm.

Policy 4: use and setting

- 4.1 Prepare a landscape plan to manage the health and longevity of significant plantings, and to provide guidance for the removal of intrusive plantings and a strategy for new/replacement plantings and the preservation/development of associated landscaping elements such as pathways at the historic farm complex.
- 4.2 Undertake community consultation to determine options for the future use/s of the site that also allow for the practical preservation of its heritage significance.
- 4.3 Prepare a masterplan for Willard's Farm to enable a co-ordinated approach to the management of the site.

Policy 5: conserving Willard's Farm – general

- 5.1 Develop and deploy a program of urgent conservation works to arrest the immediate condition issues for the place (see Section 3.8 CMP).
- 5.2 Engage skilled and qualified tradespeople to conduct works at Willard's Farm, preferably with demonstrated experience working on heritage buildings.
- 5.3 Engage a heritage architect to prepare current (as-is) measured drawings and elevations of the residential complex and outbuildings.
- 5.4 Engage a structural engineer to provide detailed structural assessment of all built structures to assist in the planning for conservation works at the complex during the master-planning phase.
- 5.5 Engage a heritage paint specialist to provide detailed advice regarding painting materials, methodology and colour schemes for the interior and exterior of the residential complex and cream shed along with other painted elements such as the garage, dairy shed and front fence.

Policy 6: short-term conservation works (immediate – urgent and emergency works)

- 6.1 Clear roofing, gutters and flashing of all buildings from debris, vegetation and leaves.

- 6.2 Ensure stormwater is draining away from the buildings to prevent water from pooling underneath structures, especially around stumps.
- 6.3 Clear excess mulch and soil away from the substructures of all buildings, particularly the milking shed and garage as they are set on the ground; and from the garden at the front of the house where excess soil has built up over time.
- 6.4 Stabilise and level the sub-structure of each building under advisement from a suitably qualified and experienced heritage engineer.
- 6.5 Ensure top plate is tied down to the roof structure for each building and that the structures are generally sound.
- 6.6 Assess site for presence of asbestos (currently identified in both the dairy shed and cream shed and potentially on the exterior walls of the kitchen) and other contaminants and chemicals that may be present on site.
- 6.7 Develop and implement a pest and termite inspection and management regime for all built elements of the site.
- 6.8 Replace rotten and termite-damaged timbers of all buildings on a like-for-like basis where necessary and under advisement from a heritage engineer.
- 6.9 Erect security fence or alternative to provide a short term safety solution for the brick cistern.
- 6.10 Carefully clear weeds and excessive vegetation away from the base of buildings and other features such as fences.
- 6.11 Trim/prune and otherwise manage significant trees as necessary (including the Norfolk pines) to remove dead wood and maintain health of trees.
- 6.12 Clear the milking shed of excess (non-significant) items to enable proper examination of the building prior to conservation works and to allow for future interpretation of the space.
- 6.13 Remove carpet from the original house and vinyl flooring from kitchen to allow inspection of the timber floors underneath.
- 6.14 Heritage engineer to undertake structural assessment of residential complex substructure to determine best approach to stabilise buildings.
- 6.15 Repair/replace bargeboard and lattice at southern end of verandah of original house.
- 6.16 Replace missing timber slabs from milking shed and garage. Reinstate existing slabs wherever possible (i.e. some have fallen from the wall due to leaning building – these should be re-inserted if possible).
- 6.17 Construct internal frame to prevent collapse of garage building.

Policy 7: longer-term conservation works (as soon as practicable)

- 7.1 Removal of intrusive elements including the recent west and north-west verandahs on the extension and kitchen to return the building to its former design intention.
- 7.2 Remove bench seat balustrade and return the original decorative iron balustrade to the front verandah, using balustrade from verandah at north side of extension.

- 7.3 Repair/replace windows at cream shed, milking shed and garage on a like-for-like basis.
- 7.4 Remove lattice at skillion extension at south of garage. Also consider removal of skillion extension once structural rectification has occurred.
- 7.5 Remove the treated pine arbour in the yard to the east of the garage.
- 7.6 Repair existing post and rail fence along the driveway to the garage, retaining and strengthening original material wherever possible.
- 7.7 Repair and repaint front fence and gate – retain as much original fabric as possible.
- 7.8 Repair/replace broken lattice under verandah following removal of excess soil.
- 7.9 Clean mould off all external and internal painted surfaces (including the roof) of all residential buildings and the cream shed and otherwise prepare and repaint with appropriate colour schemes. Undertake further research to determine appropriate paint materials and colours (if any) for garage and dairy shed.
- 7.10 Replace missing gable doors from garage and milking shed.
- 7.11 Replace missing timber planks at the mezzanine floor of the garage.
- 7.12 Remove poly septic tank and connect sewerage to the property if possible.
- 7.13 Remove broken brick stairs/retaining wall at south side of residence and clean up the area.
- 7.14 Reinstate natural/pre 1980s landscape in and around residential complex where possible.

Policy 8: Maintenance

- 8.1 A maintenance and repair program should be developed and implemented for the place.

Emergency works

The CMP includes a program of initial 'emergency works' for the complex (refer to Appendix 4 CMP).

Short-term actions

- Engage a heritage architect to prepare current as-is drawings, including engagement of sub-consultant team including archaeologist and heritage engineer and, landscape architect.
- Initiate a program of emergency conservation works to prevent further deterioration of the building due to the ingress of water and address matters of site safety including temporary safety fencing to prevent access to features that required engineering, archaeological or WHS issues to be resolved.

Long-term actions

- Formulate a governance structure and stakeholder working group to manage and coordinate, under the guidance of a heritage architect, ongoing restoration works.
- Conduct community consultation on future use and options for site once site is deemed safe.

- Prepare a master plan in consultation with stakeholders and the community for the future operation of Willard's Farm as a heritage destination for arts, tourism, cultural and educational purposes.
- Review the CMP at the conclusion of conservation works or in 5 years as required.

Redland Museum Management Committee may be interested in co-ordinating and managing the ongoing conservation of Willard's Farm under their existing organisational structure, with commensurate expansion of RCC operational contributions. A similar arrangement exists with the SMBI Heritage Group under an auspice arrangement.

Following community consultation, it is envisaged that interested stakeholders and a volunteer resource base will be established, allowing for the formation of a governance structure such as Friends of Willard's Farm (FWF). The FWF Board should be advised by the aforementioned heritage conservation architect to manage and co-ordinate the CMP actions in collaboration with community groups and other organisations.

ISSUES

Most issues having been articulated in the body of this report and are summarised here for convenience:

- site security;
- pest management;
- building deterioration;
- site, building, workplace health and safety;
- archaeological significance.

STRATEGIC IMPLICATIONS

Legislative Requirements

Willard's Farm was recently listed on the Redland Heritage Register but is not listed on any other statutory register at this time. Given that the place was rejected for entry to the QHR, under the provisions of the *Queensland Heritage Act 1992*, it cannot be renominated for entry to the QHR for five years from the time it was last nominated (26 August 2015).

The local planning scheme is used to provide a legislative baseline for the management of the heritage significance of the site. Local heritage places are managed under the 'Heritage Places and Character Precinct Overlay' (Part 5, Division 8).

It is important to note that, regardless of the level of heritage listing, archaeological potential is protected under the *Queensland Heritage Act 1992* (QHA). Relevant clauses of the QHA state:

Section 89: Requirement to give notice about discovery.

A person who discovers a thing the person knows or ought reasonably to know is an archaeological artefact or underwater cultural heritage artefact that is an important source of information about an aspect of Queensland's history must give the chief executive a notice under this section.

The notice must:

- be in the approved form; and
- be given to the chief executive as soon as practicable after the person discovers the thing; and
- state where the thing was discovered; and
- include a description or photographs of the thing.

Section 90: Offence about interfering with archaeological artefact.

This section applies to an archaeological artefact for which a person has, under section 89, given the chief executive a notice regarding the presence of an archaeological artefact.

A person who knows that the notice has been given must not, without the chief executive's written consent or unless the person has a reasonable excuse, interfere with the archaeological artefact until at least 20 business days after the giving of the notice.

Risk Management

A comprehensive risk management plan should be developed as part of the program management documentation, building on the earlier business plans prepared by RIC and issues identified in the CMP by Converge. Site access should be limited to Council officers and contracted suppliers, and immediate actions taken to erect safety fencing to address WHS issues.

Further to arrest any further vandalism on site, steps have been taken to increase surveillance through additional night patrols, and works commenced to reduce the perception of an inactive and derelict site.

Financial

Capital funds in the 16/17 FY have been allocated to the sum of \$108,000.

Operational funds in the 16/17 FY have been allocated to the sum of \$100,000.

This should be sufficient to undertake emergency works as recommended by the CMP in this financial year.

Development of the program budget for subsequent years including 10-year CAPEX will be the focus of City Spaces' work going forward.

People

The program will be managed within existing Council resources, and outsourced to consultancies where specific expertise is required such as consultants and contractor labour.

It is envisaged that a Heritage Architect be engaged as the principal consultant to manage and coordinate engineering, archaeological and landscape architects, and to provide guidance to the governing body responsible for restoration and operations, including the development of a masterplan and subsequent asset management plans.

The long term success of the restoration and conservation of Willard's Farm will be highly contingent on support from the community, community-based organisations and volunteers.

Environmental

Potential chemical contamination may exist in soil and structures associated with the cattle dip and outbuildings. Potential for discovery and policy for decontamination will need to be considered in any project planning and works packages. Known asbestos will also need to be addressed in a management plan.

The site is relatively devoid of indigenous vegetation, however mature planting of heritage significance exist and will need to be addressed through a landscape management plan.

Social

Significant community interest exists in the future of Willard's Farm, and thus will need to be supported by a communication strategy and community consultation plan.

The property represents a significant cultural heritage site of social, cultural interest to the local community. There are strong reasons for restoring and preserving this resource for educational, tourism, arts and cultural purposes, and thus need to be funded and managed appropriately.

Alignment with Council's Policy and Plans

This report supports Council's policy and plans.

CONSULTATION

- Internal consultation has occurred with Division 10 Councillor on site addressing the educational, tourism, cultural and arts possibilities, looking to maximise opportunities for community involvement to create a viable and vibrant precinct.
- Facility Services have been consulted on immediate site safety, security and vandalism issues which have, or are currently being addressed.
- Strengthening Communities has been consulted with advice given on community organisations, governance structures and likely stakeholders.
- RIC has provided advice in regard to negotiations for adjacent Federal government lands and highlighted the need for ongoing collaboration and consultation.
- The Manager Creative Arts has been consulted regarding opportunities and synergies with the upcoming (early 2017) Redland Cultural Policy review.
- Communications Engagement & Tourism have been advised and provided advance copy of this report for the purpose of a media release.
- Alexandra Hills Men's Shed has expressed an interest in assisting with restoration.
- Consultation has been held with Redland Museum to better understand models for governance including local volunteers experience and capacity.

OPTIONS

Option1

That Council resolves to:

1. Endorse the Willard's Farm Conservation Management Plan dated October 2016 prepared by Converge Heritage and Community;

2. Endorse officers to undertake short term emergency actions to prevent deterioration of the buildings and structures and make the site and buildings safe;
3. Undertake to seek partnerships with community organisations to secure long term actions to implement the Conservation Management Plan; and
4. Investigate terms for a future operational lease over the precinct.

Option 2

To not endorse the management plan and leave the site fenced as it currently is.

OFFICER'S RECOMMENDATION

That Council resolves to:

- 1. Endorse the Willard's Farm Conservation Management Plan dated October 2016 prepared by Converge Heritage and Community;**
- 2. Endorse officers to undertake short term emergency actions to prevent deterioration of the buildings and structures and make the site and buildings safe;**
- 3. Undertake to seek partnerships with community organisations to secure long term actions to implement the Conservation Management Plan; and**
- 4. Investigate terms for a future operational lease over the precinct.**

Willard's Farm

Conservation Management Plan

Redland City Council

October 2016



Converge Heritage + Community

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Abbreviations

Abbreviation	Definition
CMP	Conservation Management Plan
EHP	Department of Environment and Heritage Protection
QHC	Queensland Heritage Council
QHR	Queensland Heritage Register
QNT	Queensland National Trust

1 Introduction

1.1 Background

Redland City Council (Council) purchased Willard's Farm (also known as 'The Pines') for the benefit of the Redland's community in early 2016. The decision was made following considerable community concern regarding the future of the property. At the time of purchase by Council, the property was unoccupied and in a general state of disrepair.

A Council media release dated February 12, 2016 stated that 'Council had resolved to investigate options to develop the property and keep the existing farm house which has historical value to the local community'. Council voted to purchase the entire 8,164 square metre property, including the farmhouse and its outbuildings, with the assistance of Council's subsidiary company Redland Investment Corporation. Temporary fencing was then established around the complex for safety and security purposes while heritage and other assessments were undertaken to determine what would be required to conserve and manage the place.

Council engaged Converge Heritage + Community (Converge) to prepare this Conservation Management Plan (CMP) to assist Council with the ongoing heritage management of the historic complex. This CMP includes a program of initial 'emergency works' for the complex (refer to Appendix 4).

1.2 Location

Willard's Farm is located at 302 Old Cleveland Road East, Birkdale, approximately 22 km from Brisbane CBD.

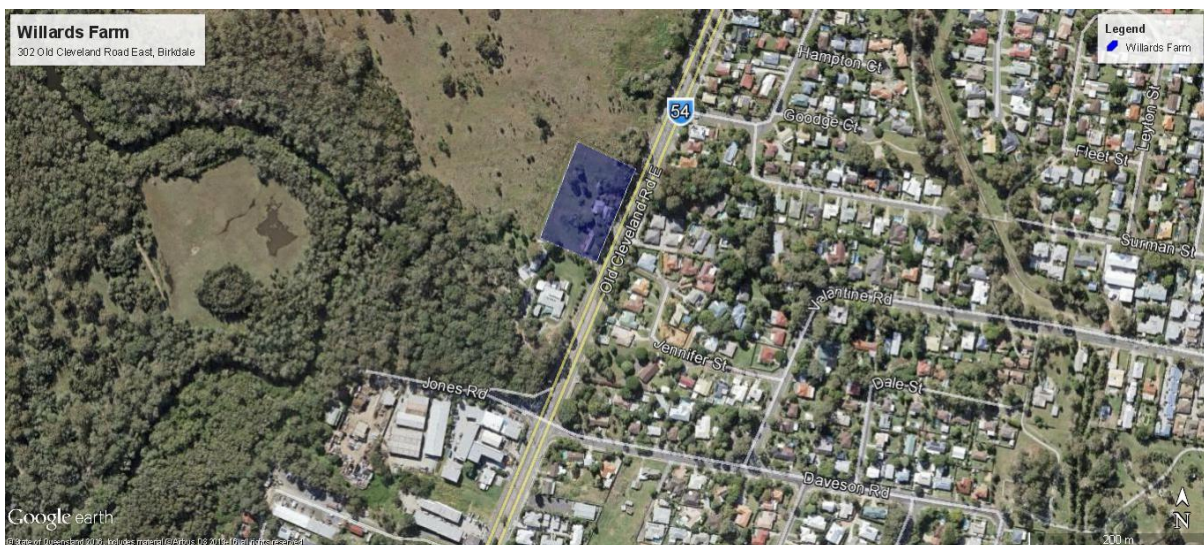


Figure 1: Location Willard's Farm on Old Cleveland Road East, Birkdale (Google Earth Pro 2016).

1.3 Cultural Heritage Significance

Willard's Farm was included within the Redland City Council Heritage Register in June 2016. It is not currently listed on any other statutory heritage register, although it was recommended by the Department of Environment and Heritage Protection (EHP) for entry into the Queensland Heritage Register (QHR) in 2015. However, after a submission by the owner at the time, the Queensland Heritage Council (QHC) made the decision not to enter the place on to the QHR. Willard's Farm is listed with the Queensland National Trust (QNT) as a 'reported place'.

In its recommendation for entry to the QHR in 2015, EHP summarised the place as follows:

‘Willard’s Farm is a farm complex comprising a timber-framed, timber-clad, metal-roofed farmhouse, built in phases from the c1860s as shown by its construction materials and methods, plus associated farm elements (slab milking shed, former cream shed, slab storage shed [*garage*] and elevated water tank) which also demonstrate early construction materials and methods. Set on 8,164m² with mature trees and plantings and original fencing, Willard’s Farm is located in the now-suburban, but formerly-agricultural, area of Capalaba within the boundary of Redland City Council. It is rare early evidence of government-promoted agricultural settlement in Queensland’ (EHP 26/08/15).

1.4 Dates and Personnel

Samantha Winnubst, Dr Natalie Franklin and Simon Gall of Converge undertook site assessments across February and March. Samantha Winnubst and Simon Gall prepared this draft CMP in July, 2016. Anna Ferguson (Architect) was sub-consulted to Converge to provide advice on compliance and options for the restoration works.

1.5 Acknowledgements

Converge acknowledge the important participation of Council Officers and Council Trades and Services Panel Contractors in the development of this report.

2 Historical Context

2.1 Chronology of the Farm's Development

Table 1 provides a summary of the key elements of the establishment and development of Willard's Farm and is based on the history of the site (incorporating EHP assessment) that is outlined in more detail in Section 2.2 below:

Table 1: Chronology of the Farm's Development.

Date	Description
17 August 1863	Land incorporating Willard's Farm purchased as tenants-in-common by James Willard and Mark Blundell. This was portion 46, comprised of 45 acres, bounded by Tingalpa Creek and Cleveland Road.
31 December 1863	Deed of grant (Land Purchase Certificate).
c.1864	Willard built a hut near the creek using timber removed from the block.
August 1866	Transfer of whole of Portion 46 to James Willard.
Late 1860s	<p>Willard built the core of the original residence, most likely from timber sourced and prepared by hand on site, although there was an operating mill in Cleveland by this time.</p> <p>The first stage of house was elevated on stumps and had two rooms, an enclosed back verandah and a detached kitchen. It may have incorporated slabs in its original form.</p> <p>The detached kitchen is also understood to have been constructed around this time based on the hand finished nature of key structural elements.</p> <p>The kitchen may have been substantially altered during later phases of modification to the residential complex, e.g. when the extension was constructed in c.1890s.</p>
Late 1860s/1870s	The milking shed and garage were built using similar techniques as the farmhouse, but utilising slabs. While the date is unknown, the slabs and other elements indicate a similarly early date of construction to the core of the original residence.
1871	Willard selected portion 41.
1873	Willard purchased subdivision 2 of portion 42.
1876	Willard purchased subdivision 1 of portion 42.
1881	Willard gained title to selection portion 41. By this time, he had already erected a slab house with a shingle roof (core of current residence).
1888	The farm was valued at over £10,000.
1 January 1893	Willard mortgaged part of his land (subdivisions 1 and 2 of portion 42) for £225.
c1890s – c1910	<p>Following financial success, Willard enlarged the residential complex to accommodate his ten children. Based on a c.1910 photograph these changes included:</p> <ul style="list-style-type: none"> • Building a wing (residential extension) to the immediate west of the main residence that may also have included a laundry/bathroom or further accommodation in an enclosed portion underneath. This extension was connected to the main residence by a covered walkway and also to the kitchen via a covered verandah. • Potentially improving/modifying the detached kitchen wing to the south, inclusive of potential replacement of slab construction with milled timber. • Substantial changes to the original residence inclusive of extending the original house with an additional room to the south and the addition of

Date	Description
	<p>ornamental elements inclusive of decorative barge boards, a bay window, gable and split staircase at entrance, lattice, decorative handrail and cast iron balustrading. It is considered possible that the western rear verandah of the original house was also enclosed around this time and that, if present, slabs were replaced by milled timber. Shingles continued to be utilised for the roof of the original house and southern extension.</p> <ul style="list-style-type: none"> • Substantial ornamental plantings present by this time. • Brick tank/cistern likely to have been constructed around this time.
Early 20 th century	Addition of gable-roofed cream shed, lowset on a concrete floor. Skillion extension added later.
2 October 1914	Willard passed away and property transferred to his wife Margaret.
15 June 1916	Margaret Willard passed away and the estate was passed on to their eldest son, William and their daughter Margaret.
1923	After William’s death, his share of the estate was passed onto his brother James Jnr.
8 February 1924	The farm was offered for lease. Furniture and stock were auctioned.
1927 – 1937	Margaret and James leased the farm to several shareholders.
1930s	The Toms family resided at the farm. At this time, the name “The Pines” was adopted.
c.1930s	Cocos Palms were evident in front yard by this stage.
1938	The farm was transferred to Herbert Clive Daniel, who is attributed as replacing the shingle roof with metal sheet. It is unknown what the original roof of the kitchen, garage or dairy shed were constructed of, i.e. whether these were also shingle or always consisted of metal sheeting.
April 1940	Dairy herd, pigs and farm machinery were sold.
June 1941	Daniel sold the farm to Rosemary Innes Cotton.
1943	Most of the farm land was requisitioned for military use as a communications centre. Radio towers and a brick building was constructed on portion 42. The Cotton family retained five acres, including the farmhouse and outbuildings.
c.1940s	Low stone wall (partially extant today) and timber fence marking northeast entrance present on survey plan.
1951	Survey shows elevated tank, which operated via gravity fed system to the house and farm, which is likely to have replaced the use of the brick tank. Water was pumped to the tank from the creek using an electric pump.
1980	<p>The Cotton family sold the farm. At this time the property was described as “the house, divided in two sections with three bedrooms, a lounge and bathroom in the front section. An open verandah connects the back section where the kitchen has built in true pioneer style. There is also a large dining room”. This indicates that at this stage the residential extension still consisted of a single room, strengthening the supposition that this was extended and divided into two rooms subsequent to this.</p> <p>It was also noted that outbuildings included a two-bedroom cottage, a maid’s cottage, a coach and harness shed and stables. These outbuildings either no longer exist and/or, alternatively, refer to the extant buildings such as the cream shed, residential extension and garage.</p>
1985	The property was sold again and listed with the National Trust of Queensland, which noted that ancient mango trees and Norfolk pines were present and that the house was ‘probably the oldest residence in the district’.

Date	Description
	<p>It is believed that the north-western and western verandahs adjacent to the two room bedroom wing were constructed around this time (i.e. between 1980 and 1985) and that the western portion of the residential extension was also potentially extended around this time and that the building was subsequently divided to form two rooms, a dining room and bathroom – although the exact timing of this is difficult to determine.</p> <p>The northern staircase between the original house and residential extension is likely to also have been added around this time. Excavation and ‘steeling out’ of the foundations underneath the residential extension and the construction of retaining walls and a laundry is likely to have occurred sometime in this period.</p>
1984 - 2015	<p>A further verandah extension adjacent to the western portion of the kitchen wing (where the chimney was previously located) appears to have been constructed in the last decade or so. Likewise, a skillion roof has been constructed relatively recently over the staircase leading from the kitchen wing and immediately adjacent to the walkway joining the rear of the original house with the bedroom wing, most likely replacing an earlier and smaller patio/awning over the stairs.</p> <p>Brick stairs and retainer leading to the laundry were also constructed sometime in the last 30 or so years and it is considered likely that some of the bricks have been reused from either the brick tank and/or the demolished chimney as they include factory moulded bricks with a ‘B’ frog along with hand moulded and finished, poorly fired bricks, both of which appear in the construction of the brick tank.</p> <p>Excavation has also occurred under the kitchen wing and the building restumped relatively recently – this appears to have destroyed any remaining evidence of the chimney.</p>
2004	The land was subdivided and the southern section of the property, without buildings, was sold.
March 2015	The farm was again sold and proposed to be demolished. Stop work order placed over farm for six months.
August 2015	The farm was proposed for entry to the QHR by EHP.
September 2015	Nomination declined by Queensland Heritage Council following owner’s submission against the listing.
February 2016	Redland City Council purchase the farm complex and commence conservation planning inclusive of implementation of emergency works including restricted vegetation removal, securing of the premises and storage of moveable heritage
June 2016	Farm complex entered on to the Redland City Council Heritage Register

2.2 History

The following history is sourced verbatim from the nomination to the QHR, prepared by EHP (26/08/2015). Where considered pertinent comments have been inserted based on observations made by Converge representative [*italicised text*]:

James Willard, the original owner of the property, arrived at Moreton Bay from Plymouth on the ship Ascendant in June 1858, aged 22 years, with his younger brother, Stephen, aged 18 years. Both were labourers from Sussex. They had followed their brother, Edward, who arrived in Brisbane in August 1857, aged 19, on the Mary Pleasants. All were assisted immigrants, sought by employers to fulfil the enormous shortage of labourers in the future Colony of Queensland. According to family history, James worked at Kedron Brook splitting timber and fencing; and took various jobs in bush work prior to purchasing land.

On 19 May 1860 James Willard married Margaret Jones at St John's pro-cathedral in Brisbane. Margaret, a domestic servant, from Kiltlogan in County Wicklow, Ireland, had arrived from Ireland on the British Empire in February 1859, aged 20 years. Like her husband, her occupation was much sought after in the region and the focus of immigration initiatives. Their marriage resulted in 11 children between 1861 and 1881.

When Queensland became a self-governing colony in 1859, it had a population of about 25,000, no financial support and no money in its treasury. It needed to generate income, so did this through the leasing and sale of land. Among the first actions of the inaugural Queensland parliament when it met in May 1860 was the creation of four land acts to regulate the leasing and purchase of Crown land. The *Alienation of Crown Lands Acts 1860* governed the sale of Crown lands, establishing the means of selling town, suburban and country land, and of land in agricultural reserves.

The idea of creating a class of yeoman farmers (farmers who owned and operated small farms), first in the Moreton Bay district and later throughout Queensland, was championed by Dr John Dunmore Lang in the 1840s and practised by David McConnel when he subdivided and sold land from his Bulimba estate to his farm workers in the 1850s. In the 1860s this concept became entrenched in Queensland Government policy through legislation to promote closer settlement of the land by suitable migrants. As an agricultural labourer, James Willard was an immigrant who fitted the desired profile of this yeoman ideal and was one of the many men who came to the colony for this purpose.

One of the first places in the Moreton Bay district where country land was sold soon after Separation was the locality of Capalaba. Situated about 14 miles (22.5 km) southeast of Brisbane, but close to Cleveland, the once-favoured port for the colony, it included fertile agricultural land. A mail service from Brisbane to Cleveland commenced in 1861 and the town of Tingalpa was surveyed on the Brisbane side of Tingalpa Creek in 1863. The land on which Willard's Farm is sited was 'selected' by James Willard and Mark Blundell of Brisbane, who purchased it as tenants-in-common on 17 August 1863, after it failed to sell at auction. This land, Portion 46, comprised 45 acres (18.2 ha) bounded by Tingalpa Creek on the west and by the Cleveland road on the east. The Deed of Grant (Land Purchase Certificate) was dated 31 December 1863.

To the south of Portion 46 was land purchased by William Davison (portion 47), while to the north was unselected land. Family history reports that Willard built a hut near the creek and lived there until he built a house [*the latter most likely being the current core of the original house*] using timber removed from the block.

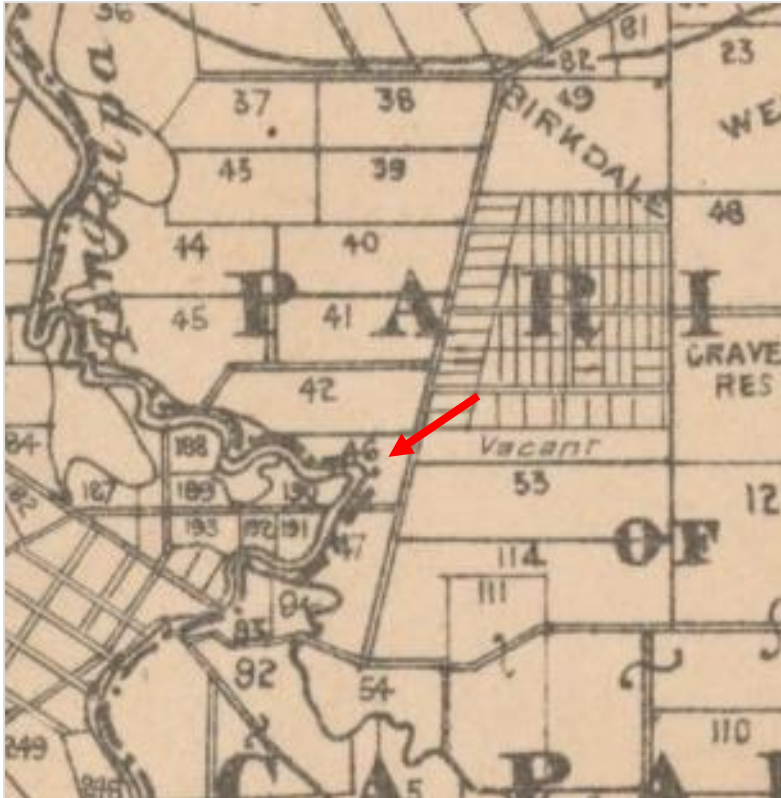


Figure 2: Cadastral map showing Portion 46 (shown by red arrow), n.d. (NRM 2016).

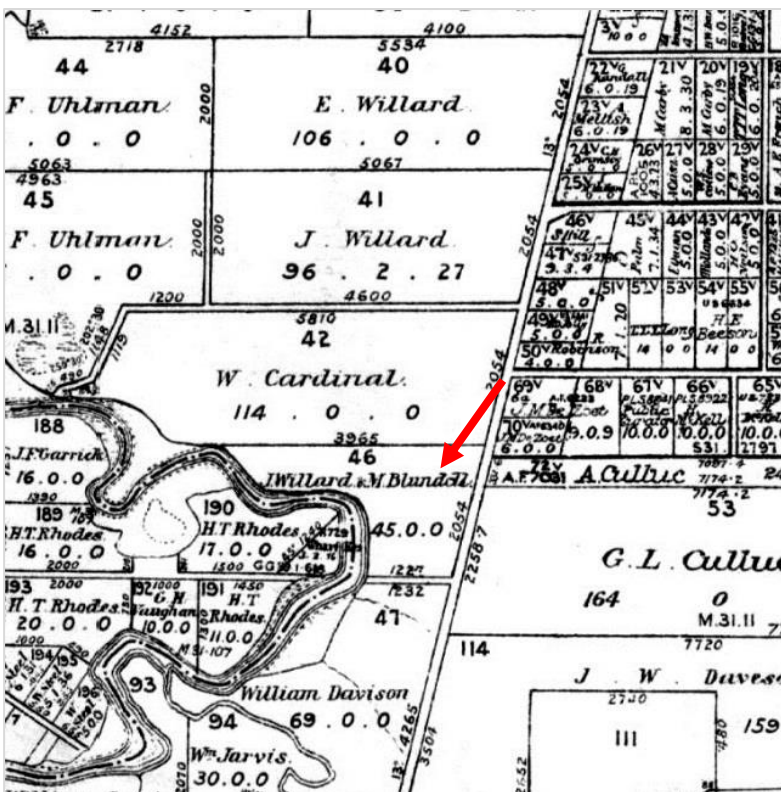


Figure 3: Cadastral map with names of property owners in 1927. Portion 46 is shown with a red arrow (NRM 2016).

Some evidence suggests that James Willard was living in the Capalaba area in the 1860s, after the land purchase. In the second half of 1865 he and his brother Edward applied in Brisbane for timber licences and in January 1866 these were granted for hardwood removal. Local history states that the Willard's bullock wagons took timber from Capalaba to the sawmill at Cleveland Point; which was operating from c1860s [*this is interesting given that a considerable portion of the early structural elements of the main residence (e.g. bearers, wall plates and posts) appear to have been hand sawn and finished*]. In August 1866 transfer of the whole of Portion 46 to James Willard was recorded and the following month, Willard mortgaged the land to the Queensland Building Society for £50. How this money was used is unknown [*it is likely that the original residence was built soon after this*].

Willard's house was constructed in stages and some of the techniques employed are a variant of conventional vernacular methods. Willard is likely to have built some of his growing family's new house himself, with assistance from his neighbour, Davison, possibly as early as the late 1860s. Willard had bush carpentry skills, materials readily available through his timber licence and on his property, and a steam sawmill operating at nearby Cleveland.



Figure 4: Willard's Farm House in c.1890s/early 1900s (Redland City Bulletin 9/12/2015). Off centre entrance is a result of an early extension to the southern portion of the residence some time prior to this photograph being taken (c.1890s). Many of the features present in this photograph remain extant today.

Elevated on stumps, the first stage of the [*original*] house appears to have comprised two rooms with an enclosed back verandah [*it is considered likely that this verandah was enclosed subsequent to construction*] and a detached kitchen [*still extant*] at the rear and possibly a front verandah. This early core of the house is supported on a grid of large log bearers, half notched over large timber stumps and adzed square on top, with pit sawn floor joists and flooring [*much of which is still extant*]. The perimeter bearers also function as wall plates upon which the wall cladding sat within a frame of large adzed squared posts. [*It is uncertain whether this original structure had a shingle roof or whether this was added at a later date e.g. when the residence was extended. Similarly, it is possible that this original structure originally had slab walls, which were potentially replaced with weatherboards at the time the building was extended.*]

Simple two-room cottages such as this were a very common house form throughout Australia in the second half of the 19th century. One room was made slightly larger than the other with a centred front door opening into it and was used as a living room. The other was the bedroom. Verandahs were located across the front, and sometimes across the back or around the house. Kitchen and washing

areas were housed in separate detached structures at the rear and sometimes linked to the rear verandah by a covered walkway.

The milking shed and garage were also constructed using materials and techniques consistent with vernacular construction techniques and Willard’s bush carpentry skills. Both of these early outbuildings were constructed of timber slab, with adzed top and bottom plates. Tie beams and structural posts combined substantial square-adzed and rough-hewn timbers, and the longevity of these structures reflects their solid construction. Later modifications such as weatherboard cladding to gable ends, milled-timber roofs with corrugated metal cladding and various phases of cow bails in the milking shed, facilitated the continued use of these structures as part of the farm complex [*and reflect similar changes within the residential complex*].

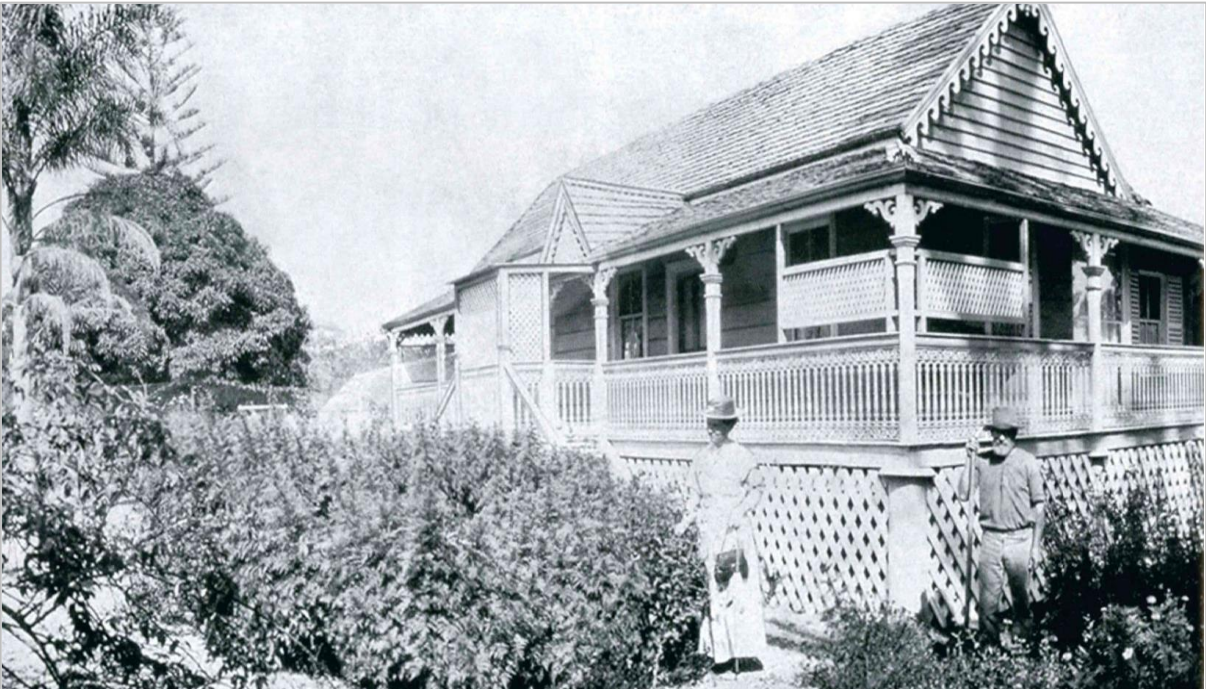


Figure 5: Side and front view of the house, showing ornamental gardens, c.1890s. Note that the building has been extended and demonstrates the addition of a range of period embellishments including iron balustrading, fretwork, and lattice (Howells 2000).

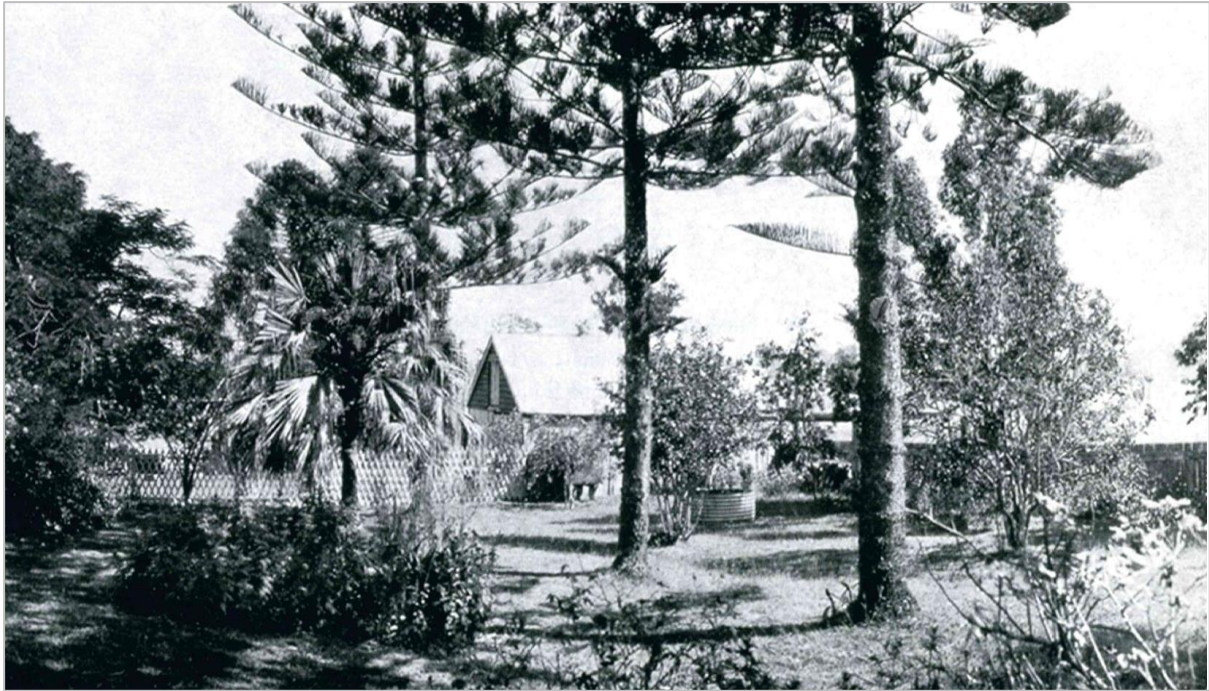


Figure 6: Garage and vegetation in c.1890. Plantings such as the Norfolk Pines, Cabbage Palm and Bunya Pines are still extant (Howells 2000).

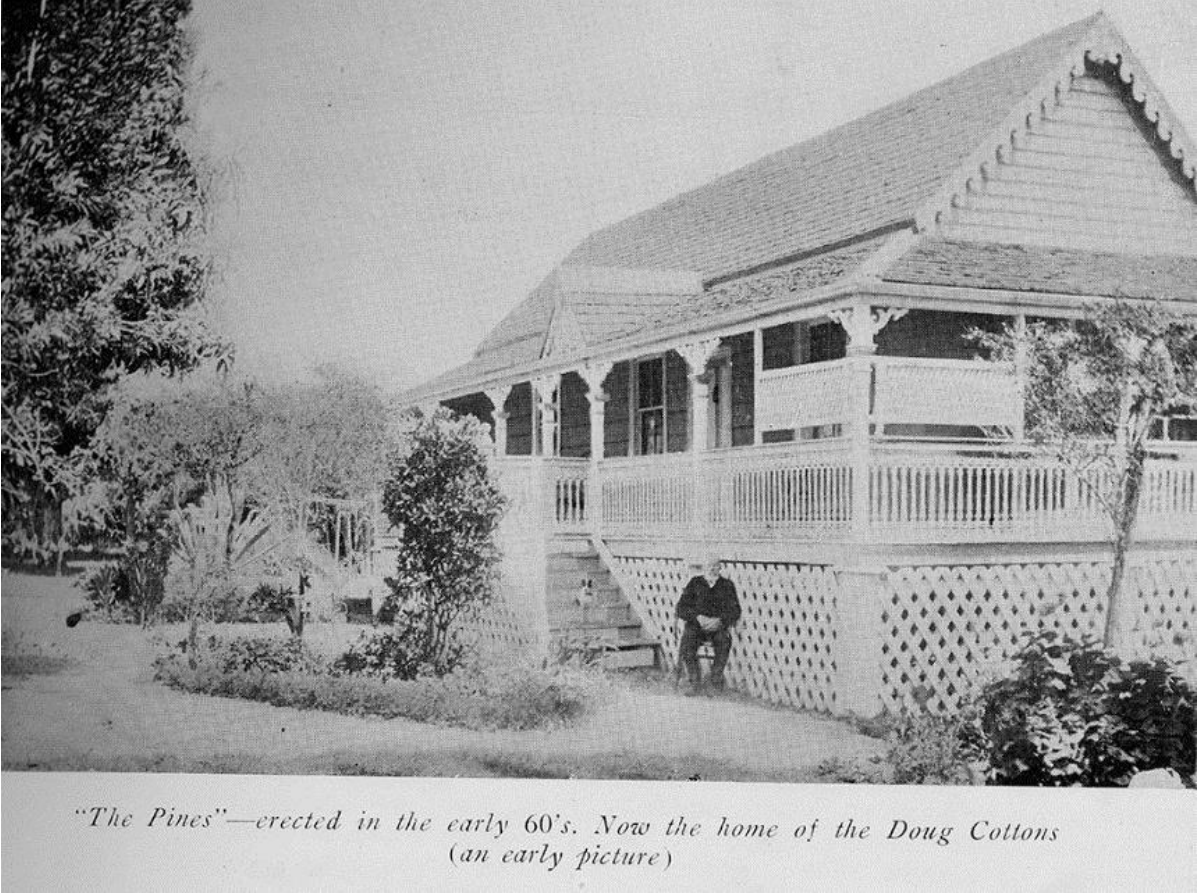


Figure 7: Willard's Farm House and gardens, c.1890s-1910s (Redland Council Library).



Figure 8: Side view of the house, showing the early residential extension. Note that the verandah used to stop at the end of the original house section where it meets the residential extension and the lack of the northern staircase. Enclosed sections with windows under the extension may indicate the presence of a laundry/bathroom or bedroom. (Redland City Library).

Willard's farm was a successful operation, which was praised in a contemporary source. A biography of James Willard in *The Aldine History of Queensland* states that he: 'purchased some land at Capalaba, on which he afterwards settled his wife and family. Here he devoted his energies, especially to the improvement of his land, cultivating farm produce to some extent, although dairy farming formed the chief element in his progress. Being very successful, and becoming more and more practically experienced with the capabilities of the land he had acquired, Mr Willard was soon in a position to increase his property.'

This was done in 1871 when Willard selected nearby agricultural land, fronting the Cleveland road (Portions 41, north of Portion 46) [see Figure 3]. James Willard purchased the adjacent subdivisions: Subdivision 2 of Portion 42, 18 acres (7.28 ha) in June 1873 and Subdivision 1 of Portion 42, 96 acres (38.85 ha) in July 1876. This was a logical decision for Willard as the land was located between his two holdings, Portion 41 and Portion 46. This purchase was pre-dated by his mortgaging Portion 46 again in June 1876 for the sum of £65.

Development of the Capalaba-Cleveland area during the 1870s and 1880s was steady. In 1872 tenders were called to construct a bridge over Tingalpa Creek (upstream from Willard's property), replacing the ford at that site. In 1876 Cleveland was described as a small watering place on the shores of Moreton Bay, 21 miles (34 km) from Brisbane, with a population of 250. In 1879 divisional boards were established as a means of local government throughout Queensland, with the Tingalpa Divisional Board administering the area in which Willard's Farm was established. A branch railway line to Cleveland opened in 1889, providing access to Brisbane markets for farmers in the district.

During the 1870s and 1880s, James Willard was active in the Capalaba-Tingalpa community. In 1871 he became a member of the Road Trust for the Cleveland Road, which was a local community organisation responsible for organising the upkeep of the road. In 1879 he subscribed to the Capalaba School building fund in an effort to establish a school in the area, which occurred in July 1880; and in 1881 he was Chairman of the Capalaba Primary School Committee. In 1880 he nominated for election to the Tingalpa Divisional Board and served as a Board member in 1880 and 1881. In 1888 Willard was

the successful tenderer for the forming and gravelling of 12 chains (0.24km) of the main Wellington Point Road and for erecting a guard fence for the Cleveland Divisional Board. In January 1890 Willard again nominated for membership of his local divisional board (Cleveland), but was unsuccessful.

In 1881, James Willard gained title to his selection, Portion 41. At this time, he had [*already*] made the following improvements to the land: erection of a slab house with a shingle roof [*potential evidence that the initial residence incorporated slab construction in its original form*], clearing of 20 acres of undergrowth, excavation of a waterhole, and fencing of the whole with a two-rail fence of split posts and rails. The associated Lands Department paperwork showed that James Willard had fulfilled the requirement of continuous residence during the ten-year duration of the lease from February 1871, by residing on Portion 46. Further evidence suggesting the site of the house in its current position on Portion 46 is a map of the district locating the homes of potential students at the proposed Capalaba Primary School, dating from April 1879.

Willard further increased his land holdings during the 1880s. He selected 418 acres of grazing land to the south of his property, near Coolnwynpin Creek at Capalaba, in July 1881 and his eldest son, William, selected 160 acres nearby. Other land purchases in the Capalaba area include six blocks of probably residential land near Birkdale Railway Station and at Cleveland, which were listed in his wife's estate in 1916.



Figure 9: Willard's Farm c. early 20th C. Seen from the back, note kitchen wing at the right with substantial chimney, and tank and stand at the rear of the residential extension. Note pantry addition to kitchen already extant but later, western extension to residential extension not yet apparent. The size of the chimney at the rear of the kitchen indicates the likelihood that the kitchen originally incorporated an open hearth but that the steel flue indicates the likely presence of a wood stove by the time this photograph was taken (www.vimeo.com/135320657).

A description of Willard's Farm published in 1888 portrays Willard's success: '...his property...gives evidence of the skilful management bestowed upon it...certainly his farm more closely resembles those in the old country than any around it for many miles. As a proof of the great results to be achieved by patient and steady industry, Mr Willard's prosperity affords a striking instance. He...can now fairly estimate the value of his properties at over £10,000.' Prior to 1890, and possibly afterwards, Willard was employing South Sea Islanders. Early resident, Bettie Perrin, recalled that his South Sea Islander workers resided in a highset slab and shingle shed in a small paddock behind the homestead and

'assisted the Willard's to build up a thriving farm and dairy' [*it is uncertain where this shed was located but should be considered within the broader management of potential archaeological elements*]. Willard continued to supplement his farming income with Divisional Board work in the 1890s; in 1892, five chains (100 m) of formation on the Wellington Point and Capalaba road; and in 1894, re-decking and repairs to Sandy Creek Bridge at Capalaba, in conjunction with his son William.

Willard encountered some difficulties during the 1890s, as did many Queenslanders. The Queensland economy experienced severe depression from 1891 to 1893, reaching its nadir in mid-1893 when 8 of Queensland's 11 banks closed. In January 1893 Willard mortgaged part of his land (Subdivisions 1 and 2 of Portion 42) for £225, payable by January 1895. Between August and November 1893 he experienced difficulties gaining the certificate of title for the 418 acres of land (169 ha) he had selected in Capalaba near Coolnwynpin Creek, as £209 worth of improvements were required on it, but the land was subsequently transferred to Willard in March 1894 after another land court sitting. He continued to undertake road work for the local divisional board in the following decade. The mortgage on Portion 42 was partially paid in October 1903 but fully released.

In the early 20th century Willard was still farming on his land. He grew crops there such as maize and sweet potatoes and kept a dairy herd. From 1899 Willard took a leading role in the Cleveland Division when inoculation of cattle against tick fever was introduced by serving on the Capalaba district committee and being one of the largest cattle owners who submitted stock for the demonstration of inoculation. Subsequently, Willard operated a cattle dip on his land adjacent to Old Cleveland Road from 1904, and one oral history interviewee recalled that 'everybody brought their cattle to be dipped for ticks. It was always known as Willard's dip'.

Willard's agricultural success in the late 19th century was reflected in additions to his home, as was the need to accommodate ten children. A panoramic photograph of the property taken c1910 from the northeast illustrates the main wing of the house enlarged to its current form with bay window opening onto its northern verandah and the two room wing at the rear [*west*] connected to the house by a covered walkway. It also reveals the absence of northern stair and northwest verandah [*considered to be relatively recent c.1980s*]. Most of the detailing visible in this photograph survives except for the roof shingles, front stair porch with double staircase and eastern verandah balustrade, now replaced with a bench seat [*it appears the portions of cast iron balustrade from the eastern verandah have been re-purposed as balustrading for the recent north-western verandah additions*]. Other photographs taken c1920 show the house, outbuildings and garden, including the front fence and entry gate posts.

The milking shed shows evidence of evolving dairying practices. The overall form of the building has remained relatively consistent since at least the early 20th century, when images show the gable-roofed timber slab structure painted white [*most likely lime washed*]. However, changes in milking practices (from hand milking to mechanisation) are reflected in the fabric and layout of the milking shed. Timber notches in posts along the eastern slab wall indicate the locations of rails for the stall divisions. Further research will reveal whether these rails predate, or were contemporaneous with the most recent bails, which comprise a row of 11 hitching uprights constructed of timber log posts connected by an adzed top rail [*these are considered to be original or early fabric*]. The stalls were offset from the timber slab wall to accommodate feed boxes. Cows were secured /released from the hitching uprights by means of a movable timber batten that was held in place by a timber peg.

The concrete floor slab, which occupies the length of the main gable-roofed milking area, is possibly related to a later milking arrangement, as the concrete is formed to finish at the timber bottom plate and is clear of the feed box area [*potentially linked to changes in legislation in the early 20th Century*]. The concrete floor slab provided an impervious surface, with a drain running the length of the shed enabling washing of the milking area. Other modifications relate to the introduction of a mechanised

milking system. Metal pipes run above the bails for the length of the shed. Remnant machinery remains mounted on a timber platform in the rafters at the northern end of the milking area, and a room in the northwest corner of the building - set lower than the milking area - has a concrete slab and upstand mount.

The addition of the gable-roofed cream shed to the complex in the early 20th century also reflects the upgrade of farm infrastructure to adapt to evolving farming practice. In 1904, the *Dairy Produce Act* was introduced, which regulated premises where dairy produce was manufactured and prepared. In accordance with this legislation, the cream shed was constructed away from the milking shed and had a washable concrete floor. The timber-framed building was lowset on timber posts, with the concrete floor elevated on timber tongue-and-groove boards supported by rough-hewn log joists and adzed bearers. The shed had wide eaves and ventilation openings on the east and west sides to keep the cream cool [*subsequently enclosed with cement asbestos sheeting*].

A skillion extension and decorative metal hood over the door were added later. The timber slab garage located at the end of the unsealed driveway also retains evidence of previous modifications and uses. The gable-roofed structure is visible in early 20th Century images of the farm. In one image from c1920s, a horse and cart are standing on the unformed driveway at the northern end of the shed. The shed has an open layout and open ends to the north and south. A loft located at the southern end is constructed of logs and is lit by a six-light casement window in the gable end wall, which appears to have replaced a painted door evident in photos from the early 20th century. A doorway and window on the east wall, both of later construction and detailing than the timber slab walls, are modifications which demonstrate how these functional structures were adapted to facilitate their ongoing use.

James Willard died on 2 October 1914 and his property was transferred to his wife, Margaret. With her death on 15 June 1916, the property was transferred to the Willards' eldest son, William, and unmarried daughter, Margaret, as tenants-in-common [*it is considered that, with the exception of the northwest and western verandahs, the general layout and appearance of the residential complex and outbuildings present today was established by the time of James' death*].

The Queenslander in 1916 described the property, 'for years travellers to Cleveland during the coaching days – and more recently in increasing numbers since the advent, of the motor car – after journeying the great part of the distance through the seemingly endless bush on either side, came suddenly upon the picturesque Willard homestead, with its delightful bit of old-world-looking garden, its weather-worn outbuildings, its landmark of tall sentinel-like Norfolk pines, and, more striking still, the broad, spacious, well-grassed paddocks of some hundreds of acres, gently sloping toward Capalaba [sic] Creek, winding its course below, a welcome change of scene on this forest shrouded road over hill and dale'.

After William's death in 1923, his estate was transferred to his brother, James Willard, Jr. In early 1924, Willard's Farm was offered for lease and its furniture and stock were offered at auction on 8 February 1924. From 1927 to 1937 Margaret and James Willard leased Willard's Farm to several share farmers. The Toms family resided there during the 1930s and a newspaper report in 1933 reported the family had bought the property, but there is no title evidence for this. The name, 'The Pines', was adopted for Willard's Farm by the Toms family. A wedding photograph taken in front of the house circa 1930s shows the front fence, gate and posts in the same configuration as in a previous photograph but with addition of palms in the garden to the north of the house. In November 1938 Willard's Farm (Portions 46, 42 and 41) was transferred to Herbert Clive Daniel. He is attributed with replacing the shingle roof with metal sheet. In April 1940, all of his dairy herd, pigs and farm machinery were sold as part of a 'genuine dispersal sale'. Daniel subsequently sold the property to Rosemary Innes Cotton in June 1941.

World War II brought dramatic change to Willard's Farm. During this period much of the land surrounding the homestead was requisitioned in 1943 by the United States army for a communications centre, with the Cotton family only retaining five acres (2.03 ha) on which the house and outbuildings

were located.. Following this requisition the United States army, they erected a receiving station, primarily on Portion 42, which comprised of a various infrastructure inclusive of a brick communications block and several tall radio masts; an important link in the global communications system operated by the US Army during World War II. After the war, the Commonwealth Government's Postmaster General's department acquired the approximately 159 acres of the former communications centre, being most of Portions 46 and 41, and subdivisions 1 and 2 of Portion 42 with compensation paid totalling £2000.

At this time, the farm layout was indicated in a survey of the adjacent radio receiving complex. The survey noted that three paddocks to the southwest had been cultivated. A narrow paddock that aligned east-west connected to the northwest corner of the farm, where water troughs and a shed were located. While these built elements are no longer extant, two substantial timber fence posts (one recently fallen) and a low stone wall remain in-place in the vicinity of where the paddock connected to the yard, and demonstrate the former layout of the farm complex. Water infrastructure documented in the 1951 survey included the elevated tank, which operated as part of a gravity-fed system across the larger farm. The brick lined in-ground cistern that is located adjacent to the kitchen was not noted at this time. Rather, water was pumped to the elevated tank from a well closer to the creek using an electric pump.

The Cotton family sold the remaining property in 1980. The property was described as follows: 'The house...is divided into two sections. There are three bedrooms, a lounge and bathroom in the front section. An open verandah connects the back section where the kitchen has been built in true pioneer style. There is also a large dining room [*indicating that at this time the residential extension consisted of a single room that was subsequently divided with the addition of a bathroom*].... "The Pines" is set on two hectares of land. There is an old dairy and stables made from slab timber. They are still solid buildings and make useful storage areas.' Another article stated that outbuildings included 'a two-bedroom cottage, a maid's cottage, a coach and harness shed and stables'.

The property was sold again in 1985 [*it is considered that the verandah to the north and west of the residential extension and potentially the subdivision of the extension to incorporate a bathroom were undertaken at by these owners prior to sale in 1985*]. At this time a detailed description of the farmhouse and its associated farm elements was recorded by The National Trust of Queensland. The following description is a summary.

The dwelling is timber, set on low stumps (some adze-hewn). Subfloor framework consists of timbers with one face squared and hand sawn (random width) wide board flooring. It comprises a central core of rooms with a verandah on two sides. To the rear is an attached kitchen. The original shingle roof has been replaced by CGI [corrugated galvanised iron]. The cladding in parts is 10-inch-wide weatherboard. The front is accented by a gable over the entrance. The early origins of the building are evidenced by such things as adzed stumps, pit-sawn timbers on log bearers. The later work to the house includes cast iron railing, decorated barge boards and fret-work gable. Other site features include a well, a water tank on high stumps and four sheds (cow bails, horse stables, store shed, single room dwelling) and a well. Of these items, the cow bails appear to be the oldest structure with evidence of a shingled roof and adzed vertical slabs to the walls. Other structures had sawn slab walls, with CGI as their earliest roofing. The garden is replete with ancient mango trees and Norfolk Pines. It is probably the oldest residence in the district.

The land was subdivided in 2004 and the southern section, without farm buildings, sold. The remaining property was purchased by the current [now former] owner in March 2015. It retains an early farmhouse set in a large garden with mature trees, a slab milking shed with remnant cow bails, a former cream shed, a slab garage, an elevated stand with water tank, front fence with pedestrian and vehicle gates, and a remnant stone wall and gate posts within the property.

Willard's Farm and the Willards have been recognised as important to the local community. Both have featured in local media coverage from the early 1900s to the present day and in a number of

publications about Redlands history and heritage. A road near Willard's Farm is named after the family. Oral histories by local residents have recorded recollections of the farm and the Willards. In 2006 a Willard family re-union attended by over 200 descendants was held at 'The Pines'.

Willard's Farm, established under the *Alienation of Crown Land Act 1860*, resulted from the Colony of Queensland's first attempt to establish agricultural settlement by small farmers. Only one other place in the Queensland Heritage Register (QHR) (601647 Fachwerk House) reflects this period.

The local history book, 'Living on the Edge: Along Tingalpa Creek' (Howells 2000) has an excerpt from an interview with local resident Gwyn Randall, who remembered that there was a burial of a baby boy on the property... 'He wasn't baptised, you see, so he couldn't be buried in a cemetery. They planted a white cedar over him, but someone who lived in the house in later years chopped it out and now we don't know where he was buried' (Howells 2000: 23).

3 Description and Analysis

The following description is adapted from the description provided in the recommendation by EHP (2015). Additional information is included from observations made during the site visits.

3.1 Setting

The Willard's Farm complex is situated on Old Cleveland Road East, in the suburb of Birkdale, approximately 21 kilometres southeast of the Brisbane CBD. It occupies an 8,164m² site that slopes gently to the west from the road and includes the house yard and part of the adjacent paddock. The farm complex is located close to the road and comprises a residential complex incorporating the core of the original house c.1860s, a detached kitchen and a detached residential extension, all joined by covered verandahs and walkways.

The site also incorporates a number of associated outbuildings and landscape elements including fences, gardens and numerous mature trees. The outbuildings include a milking shed, cream shed and a garage. There is also an elevated water tank on a timber stand and a brick tank (EHP 2015). The 'house yard' is delineated on the east by an early picket fence and to the north and south by remnant elements of fence posts, sections of palings and wire fence and sections of post and rail fence, and to the west by a small number of remnant posts. Refer to Figure 10 below for the proposed stages of construction of the residential complex and Figure 11 overleaf for the location of significant structures and features contained within the bounds of the site.



Figure 10: Stages of construction of the residential complex – core of original residence and elements of kitchen (c.1860s - red); brick tank, residential extension and southern verandah/walkway with skillion roof, later additions to kitchen including pantry and stairs (c.1890s to 1910s - yellow); verandahs to north and west of residential extension and western extension (c. 1980 to 1984 -light blue); verandah to west of kitchen and roof over kitchen stairs (post 1985 - dark blue).



Figure 11: The Willard's Farm complex. Boundary (red); house yard boundary (yellow); 1860s to 1890s (red); 1890s to 1910s (yellow); Post 1910 (green); 1980 to 1985 (blue); post 1985 (dark blue) (Image modified from Google Earth pro 2016).

3.2 The Residential Complex

The residential complex consists of three timber structures connected by a series of covered walkways and verandahs, namely a gable-roofed main house with skillion verandahs to the east and west (latter enclosed) facing the road to the east [*original residence*]; a hip-roofed bedroom wing [*now housing the bathroom*] to the northwest [*residential extension*]; and a low-profile skillion-roofed kitchen to the southwest (EHP 2015).

3.2.1 Original House

The original house and is located a short distance from the entrance gate (to the east), which leads to the footpath and Old Cleveland Road East and which aligns with the front stairs. The house is a lowset, single storey building on timber stumps, rectangular in plan with open verandahs to the east (front) and north, and an enclosed verandah along the west (rear). The roof is clad with long sheet, corrugated galvanised iron, and shingle battens are visible above the verandah rafters and under the eaves to the gable ends. With the exception of the replacement of the shingles with iron and of the iron balustrading and timber hand railing with a low timber bench, much of the front of the original house remains as shown in the historical images at Figures 4, 5 and 7. The front verandah features a gabled pediment centred over the front door (itself not centred) and a single set of timber steps, and there is a faceted bay window to the north verandah.

Recycled materials are evident throughout, including a (former) stair stringer incorporated as a verandah floor beam at the southern end along with a range of recycled floor boards replacing failed pine flooring. Likewise, at least one original, adzed end bearer from the southern side of the original core of the residence has been reutilised at the western end of the subsequent extension to this building. The understorey is mostly enclosed with lattice. The earliest portion of the main house is supported on a grid of large, log bearers half-notched over stumps and adzed square on top to carry pit sawn floor joists and flooring. The extension to the south has square, rough-hewn transverse bearers, supporting mill sawn joists and flooring. The east and north verandah floor height appears to have been altered, joists replaced and floor boards overturned.

The external walls are clad with boards of varying profiles and widths reflecting the various phases of modification and additions. Around the core, the front wall has wide (285mm) chamferboard; the north and south walls and gable ends have 150mm weatherboards; the northern bay window has 185mm chamfer boards and the west wall has single-skin V-jointed (VJ), tongue-and-groove (T&G) vertical boards with exposed mid rails. Adzed timber posts are visible on the northeast and northwest corners. The enclosed verandah is clad with single-beaded 140mm vertical boards that finish on an adzed bottom plate and adzed posts demarcate the extent of the early core.

The original house retains extensive early timber joinery. The gable roof and pediment have turned finials, and decorative fretwork features on the verandah post brackets, the gable bargeboard and the pediment infill. The front verandah has stop-chamfered posts with crown and collar moulds and a low timber bench balustrade replacing the earlier cast iron balustrade and which appears to have been subsequently reutilised on the c.1980s verandah additions. The north verandah has a decorative cast-iron balustrade with timber top rail. Windows are mostly double-hung sashes; two-light to the front and six-light to the west. The western and northern double hung windows have timber shutters and, although initial inspection indicates that these may be relatively recent, early photographs (c. 1890 to 1910) show evidence that shutters were already present at this time. Narrow, low-waisted, glazed doors open from the faceted bay window corners, either side of a fixed four-light window. The front door is panelled and the door to the enclosed west verandah is ledged and battened.

The core of the house is rectangular in plan and comprises three front-facing rooms under the gable roof and two rooms on the rear enclosed verandah separated by an enclosed porch. In the central front room, the front door aligns with the rear door and the northern wall has a large opening into the

adjacent room. Narrow, boarded doors at the north and south ends of the house connect the front rooms to the enclosed verandah rooms [*these doors and associated timber architraves are likely to date to the time of the extensions to the house*]. The walls of the central and northern front rooms are lined with double-beaded, horizontal boards, while the southern room has vertical, double-beaded boards. All three rooms have coved and boarded ceilings. The rooms to the west have unlined walls and raked, boarded ceilings [*incorporating some ceiling vent roses – Figure 21*]. Floors throughout are timber boards, covered in modern carpet [*with the exception of the rear, enclosed verandah*] (EHP 2015).



Figure 12: Side (north) view of the original house prior to excess vegetation removal.



Figure 13: Front verandah with balustrade missing and a low bench in its place. One of the original lattice panels was also removed. It is considered likely that the iron balustrading has been repurposed on the north-western verandah.



Figure 14: Shingle battens on east verandah at original house.



Figure 15: Front stairs and adjacent lattice.



Figure 16: Front entrance door to original house.



Figure 17: Privacy gate at passage between original house and residential extension.



Figure 18: Detail of timber chamferboard cladding at verandah (front) of original house.



Figure 19: One of two doors at bay window.



Figure 20: Double hung window at lounge room, seen from front verandah.



Figure 21: Lounge room and door leading to main bedroom (centre of image). Note coved, boarded ceilings.



Figure 22: Enclosed former verandah, room next to lounge room.



Figure 23: Enclosed former verandah and back door leading to verandah and extensions.



Figure 24: Enclosed former verandah next to main bedroom, with small door leading in from bedroom.



Figure 25: Window in main bedroom.

3.2.2 Residential Extension

The residential extension is a detached, hipped roofed, highset building on steel posts and which is aligned at right angles to the original house and kitchen. There are open verandahs on the north and west sides and a narrow verandah/covered walkway to the south and east. The roof is clad with long sheet, corrugated galvanised iron. The extension has been constructed in stages. It was originally shorter than it is now and, although the date of its extension is unclear, it is considered likely to have occurred at the same time as the addition of the veranda in the early 1980s. A roof covers a walkway running from the rear of the original residence and between it and the extension. This walkway also links with the verandah/walkway running the length of the southern side of the residential extension and which also provides a link to the kitchen wing.

The roof over the walkway between the original residence and later extension incorporates a box gutter and appears to have been replaced relatively recently. It was noted that this roof has also been raised by extending the original verandah post at the landing at the rear of the back door, presumably to direct water back to the box gutter running along the eaves of the original residence. This indicates that the original roof was likely to have incorporated an alternative set up that was likely altered to deal with issues of water ingress, however the current setup also demonstrates issues with drainage.

The building's vertical boarded walls (140mm) have externally exposed framing, cross braced to the south, east and part of the north wall, with mid rails to the west and remainder of the north wall. Low-waisted French-doors open onto the north and west verandah, while the south facing French-doors are high-waisted. Windows to the west are two-light double-hung sashes. The verandah has stop-

chamfered posts, with crown and collar mould, and decorative cast-iron balustrades with timber top rails to match the main house but appears to be of more recent construction (c.1980s).

The interior layout comprises two rooms of unequal size, with the western room larger than the eastern room. Both have coved and timber beaded-board ceilings (likely to date to original construction) with a ceiling vent rose (considered to have been installed post extension in the 1980s) in each room. The eastern room has been converted for use as a bathroom, with recent toilet and basin fixtures, and a shower that drains directly onto the timber floor, which has been lacquered. There is evidence that the western room has been enlarged by more than a metre to the west and its decorative wallpaper finish and dado rail are recent alterations. It is considered that this extension occurred in the early 1980s and coincides with the addition of verandahs to the north and west. The interior is also likely to have been divided into two rooms and the French doors, bathroom, architraves and skirting and other decorative elements also likely to have been added at this time, with early photographs showing sash windows with awnings on the northern facing façade (Figure 8).

The sub-floor structure comprises a combination of timber posts on stirrups, rectangular hollow section (RHS) posts and treated stumps supporting hand-sawn bearers and joists. The understorey has a concrete slab floor and is partly enclosed by modern timber lattice, plywood sheeting and concrete-block retaining walls (EHP 2015).



Figure 26: View to residential extension from north verandah of original house, note the cross bracing.



Figure 27: Bedroom in the residential extension. It is considered likely that the cladding, French doors and much of the decorative elements are a more recent addition and potentially dating to the time of the addition of the north-western verandahs c1980s.



Figure 28: Bathroom.



Figure 29: Verandah door to northern stairs at residential extension.

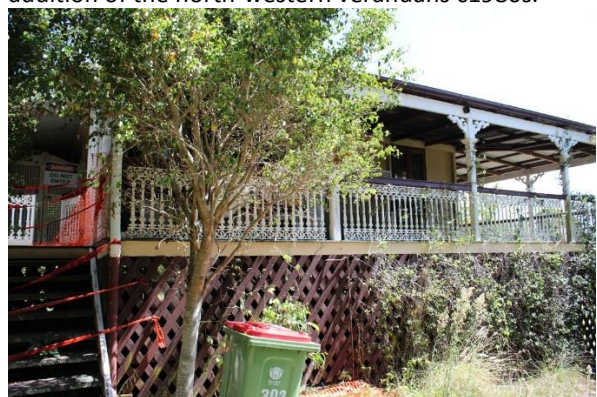


Figure 30: View to extension from north showing later verandahs (c. 1980s).



Figure 31: View to c.1980s verandah behind residential extension and kitchen from west.



Figure 32: View to the west from the verandah at the western side of the residential extension – note reproduction posts manufactured to match original elements.



Figure 33: Underneath verandah at western side of residential extension.



Figure 34: Modern laundry under residential extension.



Figure 35: Balustrade at kitchen staircase and view through to laundry located underneath residential extension. Note reused brick stairs/retainer, now in poor condition.



Figure 36: residential extension and verandah/covered walkway looking east from kitchen doorway. Note recent awning addition over kitchen stairs.

3.2.3 Kitchen

The kitchen is highset on treated stumps and aligned approximately north-south. There is a modern verandah on the western side (c.200s) where the chimney/fireplace was once situated and a small porch extends to the northeast corner adjacent to a pantry extension, over timber stairs and a landing. The exterior walls are single-skin vertical boards with externally exposed framing: cross braced to the south in a manner similar to the residential extension; with mid rails to north, east and west. A relatively recent panelled, bi-fold French-door accesses the west verandah in the approximate location of the former chimney/fireplace (refer to Figure 9), and a boarded door accesses the landing. There is

a double-hung sash window with a straight hood to the south, and double-hung sash windows have been fixed to the inside of square window openings to the north and west, with the northern pantry window and two western windows partially concealed externally by the timber skin of the building. The kitchen has a skillion roof clad in long sheet, corrugated galvanised iron of relatively recent age, most likely replaced at the same time the verandah was added to the west post 1985. Early photographs show a substantial chimney and flue, indicating the potential that the kitchen may have originally incorporated an open hearth.

The kitchen was originally set slightly further to the west than the adjacent residential extension, however a subsequent extension to the residential extension now sees the two buildings being in line on their western sides. The kitchen and landing are connected to, but set lower than, the east-west covered walkway running beside the bedroom extension and access to the grounds is provided by a set of early stairs with a recent roof/awning, although it is considered possible that these stairs have been cut and redirected to the south as part of the construction of the brick stairs leading to the laundry.

The interior layout comprises a single room with a pantry (later, pre-World War II addition) extending from the northwest corner. The wall between the kitchen and pantry is single-skin with vertical double-beaded boards, cross-braced to the north face. The ceiling is lined with triple-beaded boards. The sub-floor structure comprises treated timber stumps supporting square adzed perimeter bearers and log floor joists adzed square top and bottom with the exception of the pantry extension that exhibits milled bearers and joists. The understorey is open and has a treated timber retaining wall to the east and south. The underside of the landing and stair is enclosed with vertical timber boards (EHP 2015).

The date of the kitchen wing's construction is not clear, however the hand finished nature of the substructure are consistent with that of the substructure of the core of the original house, indicating an early construction date. Accordingly, it is believed that some elements may have been constructed at or around the time as the core of the original house c. late 1860s. The kitchen is certainly evident in an early photograph (Figure 9), although key elements of its current form, excluding the modern verandah addition, such as timber cladding, cross bracing, and metal roof are considered likely to date to around the same time as the construction of the adjacent residential extension and the extensions and embellishments to the main residence, namely c.1890 - 1910.



Figure 37: View of kitchen wing from the south – note cross-bracing and addition of verandah and roof over stairs.



Figure 38: Shelving in the kitchen pantry.



Figure 39: Timber bi-fold French doors at kitchen.



Figure 40: Kitchen sink.



Figure 41: Partially concealed window in pantry extension.



Figure 42: Window in kitchen.

3.3 Milking Shed

The milking shed is a long (approx. 24m x 7m) low-set slab timber structure situated to the south of the residence and aligned approximately north-south. The roof is predominantly clad in long sheet corrugated metal (with some sheets in the northern half replaced/partially replaced with polycarbonate sheeting) and comprises a gable with a skillion extending to the west. The gable ends are clad with weatherboards and have centred doorways (the southern of which retains its boarded door) above the square adzed external tie-beams.

Structural posts and bearers are a combination of round and square adzed, and the roof has square milled rafters and rough-hewn log tie-beams. The east and north (below the tie beam) walls are constructed of vertical timber slabs with square adzed top and bottom plates. The north wall has a doorway with a half-height boarded door, and the south wall is open below the tie beam. The northwest corner is enclosed with a combination of weatherboards and timber slabs to the north, and corrugated metal to the west.

The interior layout comprises spaces that reflect the functional requirements of the milking process. The milking shed bails have 11 stalls, which are located along the eastern wall and occupy approximately two-thirds of the main (gable-roofed) shed. The main shed has a concrete slab floor that slopes to a drain that extends the length of the shed. Timber posts, some with balustrades between, align along the western edge of the concrete slab (an approximately 550mm drop) and support the junction of the gable and skillion roofs. A concrete ramp accesses the main shed from the west. A room at the north end of the skillion-roofed space has a concrete slab floor with an up-stand.

The milking bails retain fabric from various phases of construction and use. The bails are formed by an alignment of 11 timber log posts (offset from the eastern wall by approximately 550mm and set at 1600mm centres) supporting a square adzed top rail. The top rail has slots where vertical timber battens (two remaining) slide across (to keep the cow's heads in place) and are secured / released by round timber pegs. Posts along the eastern wall (also spaced at approximately 1600mm centres) have two mortices, which indicate the location of previous stall division rails. Metal pipes in the roof space extend the length of the bails, and remnant machinery is mounted on the tie-beams at the north end of the main shed (EHP 2015).



Figure 43: Looking south towards milking shed.



Figure 44: Interior of milking shed, looking north.



Figure 45: Ceiling of milking shed.



Figure 46: Interior of milking shed, near the cow bales – note skillion addition to west



Figure 47: Original machinery in ceiling of milking shed.



Figure 48: Equipment stored in milking shed at time Council purchased the farm complex.



Figure 49: Equipment stored in extension of the milking shed.



Figure 50: Slab wall and cow bales.

3.4 Cream Shed

The cream shed is a gable-roofed and timber-framed structure, lowset on round timber posts. The walls are single-skin, clad externally with vertical VJ boards. The roof is clad with corrugated metal and has an open skillion extension (supported on modern square posts) to the west. The north (front) elevation is asymmetrically composed, with an off-centre, boarded door accessed by timber steps. The door has a metal sunhood. Single, four-light casements (broken) are centrally located on the east and west walls.

Ventilation openings, set low on the east and west walls, have been sealed with asbestos sheeting to replace wire covered ventilation slots. The single room (approximately 3.5m x 2m) shed has an elevated concrete slab floor on T&G timber boards, supported by rough-hewn log joists and adzed bearers. The flat ceiling is lined with VJ boards (EHP 2015).



Figure 51: Cream shed and skillion annex. – note build-up of soil at eastern foundation



Figure 52: Door at cream shed.



Figure 53: Internal cream shed – note termite damage to internal timber cladding.



Figure 54: Items stored behind cream shed. Likewise, there is a mature mulberry tree growing immediately adjacent to the southwest corner of the building



Figure 55: Under annex at cream shed.



Figure 56: Steps leading into cream shed.

3.5 Garage

The garage is a long (approx. 11.5m x 4.5m), slab timber structure situated to the northwest of the residence and aligned approximately north-south. The gabled roof is clad in corrugated metal and has a skillion extension to the west (a later addition) with lattice panels (recent). The gable ends are clad with weatherboards and have centred openings (a boarded door to the north and six-light casements to the south) above the external tie-beams.

The exposed, square structural posts are combination of machined and adzed. The east and west walls are constructed of vertical timber slabs with adzed top plates. The bottom plates are rebated to form a sill; the eastern bottom plate is set on concrete blocks, while the western bottom plate sits directly on the ground. Some of the timber slabs have been dislodged and are on the ground.

The interior layout comprises a single open-plan space, with open north and south ends and a doorway and window on the eastern side. A loft, with floorboards of varying widths supported on rough-hewn (140mm) logs, occupies the southern end of the gable-roofed structure. A squared length of timber is set into the earth floor in line with the north end of the loft (EHP 2015). The garage is currently on a distinct lean to the east and appears close to collapse with multiple timber slabs having fallen to the ground.



Figure 57: Slab timber walls of the garage.

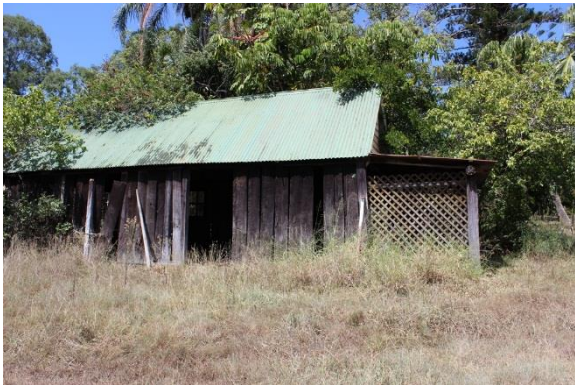


Figure 58: Garage seen from west side, before initial vegetation clearing. The skillion extension is not original



Figure 59: Garage from the east, after vegetation clearing.



Figure 60: Garage internal.



Figure 61: Pitched section of the ceiling of garage, and door in gable.



Figure 62: Flat section of ceiling at garage.

3.6 Gardens and Other Built Elements

The established grounds comprise extensive areas of lawn, garden beds and numerous mature plantings, as well as built landscape features that relate to the historical functions of the site as part of residence and a working dairy farm. The buildings and mature vegetation are concentrated on the eastern side of the site, while the western side comprises open areas of lawn with scattered mature trees. A white, picket fence defines the eastern boundary of the site and runs parallel to the road. A decorative front gate with square timber posts, ball finials and timber dowels, marks the pedestrian entry to the house. There is an unsealed driveway to the north of the residence, which has a timber-rail and braced gate, and another gate to the south of the milking shed. Minor fences comprise timber posts with wire or sections of post and rail and there are a range of remnant elements of fences, particularly to the immediate south/southwest of the cream shed and in the vicinity of the garage.

In the northwest corner of the site a low stone and mortar wall with two substantial timber posts indicates a former gateway from the pastures to the farm yard. Evidence of other remnant built elements in this area include timber posts, metal sheeting and the remains of a small window awning (horizontal-boarded timber awning with a corrugated metal-clad gabled roof that featured a timber-batten infill).

The residential complex, milking shed and elevated water tank are visible from the road, surrounded by vegetation. The tall Norfolk Pines are visible from a distance along Old Cleveland Road East and are a landmark for the area. Views towards the surrounding open pastures to the north and west are obtained from the residence and surrounding lawns (EHP 2015).



Figure 63: Low stone wall with old gate post at edge.



Figure 64: Low stone wall.

3.6.1 Elevated Tank

Located between the residence and the milking shed, the corrugated metal water-tank is set on a 5-6m high timber stand. The tank stand comprises six, rough-hewn, vertical timber posts in a square plan, with a platform of milled timber bearers, joists and boards. The vertical posts are cross-braced with milled timbers. The base of the stand is enclosed with 'ripple iron' corrugated metal to form an outdoor shower (EHP 2015).



Figure 65: Looking up at the tank, standing at the base.



Figure 66: View of tank and house. Milking shed to the left.



Figure 67: Elevated tank.



Figure 68: Brick tank adjacent to kitchen.



Figure 69: Brick cistern.



Figure 70: Inside brick cistern, after external vegetation clearing.

3.6.2 Brick Cistern

To the south of the kitchen there is an approximately 4 metre diameter, in-ground water tank, constructed of brick with internal concrete render. The structure stands up to 500mm above ground level in places. The upper courses are deteriorated and damaged, with missing and replaced bricks and patchy render. The concrete render is visible inside the well to the upper 600mm of the brickwork, with the remainder being face brick. The depth of the cistern is unclear as it contains timber planks and debris that finish approximately 300mm below the render, some of which is likely to originally have formed part of the roof over the tank. A (modern) PVC pipe diverts rainwater from the kitchen roof into the tank, and another PVC pipe is connected to the east side of the tank below ground level (EHP 2015). The age of the cistern is undetermined, however it is considered unlikely that, due to the labour intensive and relatively expensive construction requirements, a brick lined tank would have been constructed after corrugated metal tanks became readily available in the late 19th/early 20th century and as such it is considered likely that the tank was constructed during the time that the extensions and modifications were made to the residential complex c. 1890s to 1910s. The bricks themselves appear to consist of a combination of mechanically moulded and low fired, hand moulded bricks. As such, it is considered likely that the cistern represents an early element of the residential complex – further research is required (refer to Section 5.3; Policy 5.4).

3.6.3 Vegetation

Mature trees including Figs (*Ficus* spp.), Camphor Laurels (*Cinnamomum camphora*), Mangos (*Mangifera indica*), Macadamia (*Macadamia integrifolia*), Mulberry and various palm species are integrated into the gardens surrounding the residence and outbuildings. Of particular note is a row of three mature Norfolk Pines (*Araucaria heterophylla*) which are situated to the north of the residence. Other mature plantings scattered across the western half of the site include Bunya Pines (*Araucaria bidwillii*), palms and Camphor Laurels (EHP 2015).

The photos below are shown prior to, and after, the initial vegetation clearing to demonstrate the extent of the weeds and overgrown trees and bushes in this initial stages of the restoration project.

Before initial vegetation clearing.



Figure 71: Two Norfolk Pines.



Figure 72: Norfolk Pines and palms.



Figure 73: Palms at driveway.



Figure 74: Bunyas and palms to the west of the house.



Figure 75: Overgrown vegetation at front of house, obstructing the front entrance.



Figure 76: Mango trees and other trees and bushes to the south of house.



Figure 77: Camphor laurel tree near driveway.



Figure 78: Mango tree and Frangipani near cream shed.



Figure 79: Ornamental bushes and shrubs at front of house.

After initial clearing (note: mature trees and other significant plants have been left in-situ)



Figure 80: Front entrance now accessible. Still more clearing required. Note build-up of solid and humus at front of house.



Figure 81: Front steps and surrounds now cleared of excessive vegetation.



Figure 82: Side post and rail fence line cleared, ensuring old fence fabric is left in-situ.



Figure 83: Side of house cleared of non-significant and invasive vegetation, including two Brazilian cherry trees (either side of stairs) that were growing in plastic pots but had rooted into the ground.



Figure 84: After clearing of mango and callistemon trees next to the house, removed due to proximity to structure and observed impacts on foundations.



Figure 85: After slashing and trimming near the milking shed.



Figure 86: Initial clearing around original front gate.



Figure 87: Clearing around brick cistern and securing off the area temporarily.

3.7 Archaeological Potential

The history suggests that there were several additional buildings and structures on the property and adjacent properties that are no longer extant, so there is a possibility that subsurface remains of these former buildings could be located at the site. Other potential archaeological material could include:

- Dumps and artefactual material (old ceramics, glass, machinery and other household and farming items). For example, several glass and porcelain artefacts (likely interwar) were noted approximately 20 metres west of the residential extension and associated verandah that may indicate the presence of a small dump or artefact scatter.
- Grave (there was a child's grave marked by a White Cedar tree, however the marker tree is now gone). It is not clear if this grave is within the current property boundary, as parts of the once larger block have been resumed over time.
- Former building footings and structural evidence (e.g. base of former fireplace at rear of kitchen, saw pits, cattle dips etc.). In particular, there are a number of early bricks that have been reused around the base of the residential extension and kitchen wings. It is considered likely that these represent early fabric from either the demolished chimney and/or parts of the brick tank and include a number of early handmade bricks.
- Early landscape features including garden beds and surrounds, fence lines path ways and irrigation and water infrastructure.

A policy for unforeseen discoveries is included in Section 5 to manage the potential for archaeology.

3.8 Condition Prior to Restoration Works

A structural inspection report (Morgan Consulting Engineers, August 2015) was prepared as part of the former owners' submission to the QHC against the proposed nomination for heritage listing. The report included an inspection of the four main buildings on site including the residence, garage, milking shed (dairy) and cream shed. The results of this report have been incorporated into the condition assessment below along with observations from several site visits. It is considered that the emergency and restoration works will resolve the significant issues and ongoing maintenance will improve the minor issues, such as overgrown vegetation.

The assessment by Morgan Consulting Engineers (2015) concluded that all three individual buildings appear to be in reasonable condition but that the connecting verandahs are in extremely poor condition. The lack of maintenance at the time was noted.

Vandalism and theft has been an ongoing issue since the property was vacated and, despite implementation of a range of security measures, has unfortunately continued since Council took

ownership. Items have been stolen from within the house including a cast iron bathtub and light fittings; and pipework, electrical and other fittings have been damaged by vandals. Council have subsequently removed some features from the building and sheds and have stored them in a shipping container on the property (following photography, inventory and cataloguing of the items – see Appendix 1).

3.8.1 Residential Complex

The following condition observations are largely separated into sections for each of the three parts of the residence, namely the original residence, the residential extension and the kitchen wing. General condition observations relating to all three structures are below.

General – all three buildings

- All roof gutters, downpipes and fascia are in a general state of disrepair and need to be cleaned, repaired and/or replaced with steel goods in a consistent form that reflects the age of the residence, with original rainwater goods retained where practical. Likewise, there are systemic failures amongst a number of drains and gutters, leading to inundation and subsequent water damage and rot in a number of areas throughout the residential complex, particularly in regards to covered walkways associated with the residential extension, the vicinity of the kitchen staircase, the walkway between the early residence and residential extension and verandah corners, inclusive of the front verandah and rear landing of the original house. Equally, the majority of storm water is not being channelled a sufficient distance away from structures and there is a potential for pooling under buildings and around stumps.
- The roof covering the walkway running between the original house and the residential extension, in particular the box gutter, appears to be causing water inundation and associated damage in the vicinity of the northern staircase. The current roof over this walkway appears to be a relatively recent modification, inclusive of the related extension of early posts to raise the elevation of the western end of this roof. There appears to be subsidence in at least one pier in the vicinity of the staircase as a result of this failure.
- While some evidence of early electric wiring remains extant, particularly associated with the substructure of the original house, the majority of the wire and associated fixtures appears to be relatively modern. Overall, the electrical wiring and associated fittings are generally in poor condition as many fixtures are missing or broken due to recent theft and vandalism and the wiring more generally requires attention and potential replacement.
- Excavations have been undertaken under both the residential extension and kitchen to allow these spaces to be utilised and between the original residence and kitchen extension to allow access from the kitchen stairs to the laundry are also considered to have created a range of structural, drainage and other issues for both of the extensions and more generally to have negatively transformed the original landscape form in these areas.
- Existing plumbing fixtures exhibit a range of issues, predominantly as a result of vandalism. The septic tank located to the north of the original house along with associated plastic pipes and breather system needs relocating and replacing and, if possible, the property should be linked to the town sewerage system.

Original House

- Subfloor timbers that are exposed to the weather around the outer edge of the residence have suffered with rot. This damage is mostly located at the outer edge of the verandahs. Likewise, a large number of verandah boards have been replaced overtime and/or have suffered considerable weather damage.

- There are noticeable undulations and movement within sections of the timber flooring and sections of the floor appear to have suffered borer damage and have failed/been replaced.
- A number of existing stumps have settled and have been shimmed to relevel the floor. Likewise, there is evidence that the main residence has moved downslope to the west and now sits partially off its stumps. This is particularly noticeable at the western end near the northern stairs and at the rear porch at the back of the closed in verandah which has almost completely separated from the pier.
- The existing stumps are in direct contact with the soil and the bearers, leaving no provision for a termite barrier. Likewise, depressions around the base of the stumps increase the likelihood of water pooling and ultimate failure of the stumps. Stump caps are missing/deficient in some cases.
- Timber lattice between stumps are constructed in contact with the soil leaving no provision for a termite barrier. Likewise, there has been considerable build-up of soil at the eastern side (front) of the original residence – approximately 300 to 600 mm - as a result of the establishment of garden beds and associated humus – this is obscuring external line of site and impacting on the condition of the lattice which represents early fabric. The original lattice under the verandah of the main residence is also broken/failed in places.
- Based on current design criteria the floor joists are undersized, although this is not unusual in heritage buildings of this age.
- The stairs at the front are badly weathered and require replacing.
- There is mould on the external and some of the internal paintwork and the paint is generally weathered and flaking/failing in places. The interior and exterior of the residence needs repainting throughout in an appropriate colour scheme and utilising appropriate materials (Generally, quality solvent-borne paint should be applied when repainting over an existing oil-based system and latex paint should be applied over an existing water-based system – refer <http://www.ehp.qld.gov.au/assets/documents/land/heritage/tn-painting-maintenance.pdf>).
- The bargeboard, rim joist and lattice at the southern end of the front verandah is loose.
- The original balustrade at the original section of the house is loose in places and has been replaced by benches at the front of the residence.

Residential Extension

- There is evidence of vertical movement between the roof and the walls to the extension which reveals a lack of tie-down between these two elements.
- The skillion covered walkway/verandah at the southern side of the extension exhibits several areas of rot as a result of water inundation due to failing gutters combined with issues relating to a drainage issues associated with the junction of various roofing elements at both the juncture with the kitchen and the original residence.
- There is a missing pier under the extension – with just a metal plate in its place. More generally, the ‘steeling out’ of the extension and the construction of cement block retaining walls has resulted in a number of structural issues and it is considered that this portion of the residence may be close to structural failure and requiring urgent rectification through restumping utilising appropriate timber piers and the removal of rectification of the retaining walls. Likewise, the original, northern end bearer has been replaced at the time of construction of the associated verandah, impacting on the early fabric of the substructure. It is considered likely that the addition of the verandahs has negatively impacted on both the aesthetic and overall structural integrity of the building and, likewise, that structural issues with this building may be exacerbating the movement of the original house (structurally connected to the residential extension) both downslope and off its piers.
- There are a number of areas where roof sheeting and flashing are loose and roof sheeting and flashing generally needs repair and painting. Sections of the roof appear loose and in relatively poor condition and it is considered likely that water ingress is occurring as a result.

- There is considerable rot present in a section of the end bearer under the southern, covered walkway/verandah in the vicinity of the kitchen stairs and it will be necessary to replace this section of the bearer.
- At some time in the past the building has been extended to the west and it is possible that this extension has substantially impacted on overall structural integrity of related elements, namely floors, roof and extensions to the covered walkway.

Kitchen

- Leaves and debris have built up on the skillion roof, over the stairs at the kitchen and in the gutters across the building, leading to failure and water ingress. More generally there appears functionality issues with the junction of the roof between the kitchen and residential extension above the covered walkway/verandah.
- There is evidence of either termite damage and/or dry rot in the rear (eastern) wall of the kitchen. Likewise, sections of the southern and eastern kitchen wall are covered in cement sheeting (potentially asbestos), concealing potential condition issues.
- The roof/awning over the kitchen stairs is a recent addition and appears to have potentially exacerbated water ingress and associated issues with rot. Materials are inappropriate and generally it impacts on the overall aesthetics of the area, along with potentially exacerbating issues of water ingress to the adjacent verandah and kitchen.
- There are rot and other structural issues with the recent verandah addition to the west side of the kitchen and its general construction appears to be of overall low quality.
- External and internal paint finishes exhibit mould, general wear and tear and fading and are generally in fair through to poor condition.
- Fittings and fixtures are generally in poor condition and intrusive.
- Timber floors are currently covered in a modern linoleum, obscuring the overall condition of the floor. Some evidence of borers was noted from underneath.
- The ground under the building has been excavated and associated retainers have partially failed and the brick stairs leading to the laundry have also failed.

3.8.2 Milking Shed

Upon Council's purchase of the complex, the milking shed was full of various items, including farming equipment and machinery and miscellaneous items. Items deemed to be of significance to the complex have been stored in the shipping container for safe keeping, following completion of the inventory and catalogue (Appendix 1).

- The wall framing, including particularly the posts, stud framing and vertical timber slabs that are in close proximity to the ground or are in contact with the ground are generally in poor condition with evidence of rot and termite damage.
- The building has very little positive wall bracing and parts of the structure is on a noticeable lean.
- The roofing timbers are generally in reasonable condition (Morgan Consulting Engineers 2015: 3). Several sheets have been replaced by polycarbonate sheeting and a few sheets have corrosion holes that require patching.
- Many of the original timber slabs have come loose and are just leaning against the building or lying on the ground and some appear to be missing.
- The door at the northern end gable is missing and the door at the southern end gable is damaged.
- The roof's ridge capping has come loose at the northern end.
- Some of the weather board at the gable ends are damaged and the paint is weathered. While early photographs indicate that the shed may originally have been lime washed there is now very little paint remaining on the building with the exception of the northern end and it is difficult to determine the original material utilised.

- The window panes (4 out of 6) at the northern wall are broken.
- There is substantial earth and humus build up around the external foundations, particularly on the eastern side of the building, further exacerbating the risk of rot and termite damage and several slabs have failed as a result.
- There are no gutters (and these never appear to have been fitted), little roof overhang and no drainage present – this is further exacerbating the accumulation of water and damp around the base of the structure. A suitable solution to this problem, inclusive of the consideration to install guttering, will need to be explored.
- The building contains a considerable amount of items and fittings left from previous owners, some of which may have associated significance to the farm itself but much of which is considered to be intrusive. These items are obstructing access to much of the shed for the purposes of undertaking assessment and repairs.
- There is evidence of rot and termite damage and general structural deficiency/failure of the wall and roof structure that require repair/rectification.

3.8.3 Cream Shed

- There are sections of the walls and substructure that are buried in the ground and the structure appears to be leaning to the south, potentially as a result of subsidence in one or more piers. Likewise, there is a mature mulberry tree growing very close the southern side of the structure and machinery and other items against this southern wall obscuring access.
- Subfloor timbers that are exposed to the weather have suffered with dry rot.
- The existing stumps and portions of the sub frame are in direct contact with the soil leaving no provision for a termite barrier.
- The ground floor timber walls are constructed in contact with the soil leaving no provision for a termite barrier.
- There is evidence of termite damage and/or dry rot in many sections of the wall and ceiling boards.
- Dry rot affected timbers around the entry steps (Morgan Consulting Engineers 2015: 3-4).
- The glass panels of the window are smashed and its timbers are damaged.
- The paint is weathered.
- The roof is covered in debris, sap and mould from the mango tree branches hanging above it.
- The skillion roofed addition on the west side is not original.
- The original wire ventilation sections have been enclosed with asbestos sheeting and wire mesh removed at some stage in the past.

3.8.4 Garage

- The garage is currently supported on its west side with a steel post. At the first heritage inspection of the place, prior to vegetation management, there were vines growing in the roof of the garage and trees were growing against the structure. In particular, a mature umbrella tree on the eastern side of the shed was considered to be assisting in providing support for the entire structure, which is leaning considerably to the east. Initial vegetation clearing concentrated on areas directly adjacent to buildings, including this one.
- The wall framing, including the stud framing and vertical timber slabs that are in close proximity to the ground or are in contact with the ground are generally in poor condition with evidence of rot and termite damage.
- The building has no positive wall bracing and the structure is on a noticeable lean.
- The roofing timbers are generally in reasonable condition.
- The building is considered to be potentially unstable and may collapse at any time.
- The garage is considered by the structural report to be unsafe and entry to the building should be undertaken with caution (Morgan Consulting Engineers 2015: 3-4).

- There are missing timber planks at the mezzanine floor/loft.
- The window and door on the east side both have missing or broken glass panes and have rotten timber – (these are considered to be later additions).
- The paint is peeling in places and generally in poor condition.
- The frame around the north gable door has dry rot.
- There is evidence of re-use of timbers throughout the building along with patching of posts and other elements.
- The barge board at the gable on the south has come loose.
- Some of the slab timbers have fallen from the wall and several appear to be missing.
- There is a build-up of excess soil and mulch around the base of the walls, especially the east wall.

3.8.5 Other structures and elements

- The elevated water tank's timber platform is heavily decayed and the corrugated iron tank is heavily corroded. The timber tank stand appears to be in fair condition, however there is currently a Cocos Palm growing out of the top of the tank and it is likely filled with detritus.
- The brick cistern is in a state of disrepair. It formerly had a roof/cover which has collapsed into the interior of the cistern. The cistern is currently open and vegetation is growing through the brick cistern and it is holding water and debris. The depth of the brick cistern is also unclear and it currently poses a safety hazard.
- There is a modern septic system in the ground near the house (plastic/poly) that is in very poor condition. It has large cracks and should be removed along with related pipework and breathers that are intrusive elements. Should septic be required in the future it should be relocated to another suitable location on site.
- The timber post and rail fence along the driveway to the garage is in disrepair in sections, while other sections are overgrown or missing. Likewise, there are several fence posts and extant sections of picket fence to the immediate south of the cream shed that are in poor condition and now incorporate areas of overgrown vegetation and various pieces of machinery. Several other posts, including the corner/gate post and low stone wall to the northwest of the extension are extant but in generally poor condition.
- The front gate (in line with front steps) has corrosion at the hinges and broken/loose decorative dowels and the paint is generally in poor condition. The overall condition of the front fence cannot be fully determined as much of its length is obscured by vegetation. A number of loose and broken palings have been observed.
- The brick stairs/retaining wall leading to the understorey of the residential extension (at the south) are in extremely poor condition and no longer serviceable. This feature may have been constructed utilising early bricks from the site (e.g. from the demolished chimney)

3.8.6 Landscape

- At the time that Council took over ownership of the complex, the vegetation around the entire site was very overgrown and required immediate management. Converge assisted Council with advice regarding initial emergency vegetation management of the complex, including initial advice regarding trees and vegetation to be retained and what should be removed (refer to Appendix 2). Council's arborist was present during this process. Initial vegetation works consisted of:
 - Clearing of heavily overgrown areas around structures and removal of trees or branches that were causing immediate risk to various structures and features. Of particular note being the removal of the mature mango tree directly adjacent to the house.
 - Weeds were cleared and the grounds were slashed, taking care not to impact on fence lines and other historic items.

- Dead branches and fronds were removed from trees where considered necessary/appropriate. In particular attention was paid to removing dead limbs from the Norfolk Pines due to safety concerns and also due to their impact on the long term health of the pines.
- Clearing exposed evidence of coral and other elements forming garden borders at the front of the main residence. Likewise, several glass and porcelain artefacts were present approximately 20 metres west of the residential extension.
- There are a number of significant early plantings that are now either dead, in extremely poor condition and/or are impacting directly on structures, inclusive of a mature mulberry tree at the southern side of the cream shed. Decisions regarding the future of these plantings will need to be made as part of broader discussions regarding future management.
- Significant vegetation remains along the eastern perimeter adjacent to the road which is impacting directly on the early picket fence and more generally obscuring the view of the property to and from the roadway. Many of these plantings are considered to be intrusive and will require removal, thinning or other management.
- Some plantings, while today considered to represent an environmental pest, are in fact typical period plantings from early historical periods – of particular note being the various Cocos Palms and Camphor Laurel trees and, potentially, the Guava trees. In the case of the Cocos Palms and Guavas it is however important to note that many of these may be the result of seeding from original plantings and/or bird droppings.

3.9 Comparative Analysis

A comparative analysis is an examination of a place in relation to similar places and is used to assist the understanding of significance, in particular to establish its rarity and representativeness. All of the examples provided below are listed on the QHR. The search of the register for comparative examples was limited by place type (agriculture/farm) and 25 results were returned. Of these 25 places, nine (9) were historic farm complexes, including a homestead with outbuildings.

The following examples of historic dairies are all located in South East Queensland – Mayes Cottage dates to 1872, Bankfoot House dates to c.1878, Argyle Homestead and Castleholme Homestead both date to c.1870s; Schmidt Farmhouse is from c.1900 and Colonsay Farm is the most recent in this analysis, dating from 1909 for the farmhouse and 1940s for the dairy.

The analysis also includes Ormiston House Estate, which unlike the other examples, was not a dairy farm, but it is included for being an historic farming complex in the Redlands area. Ormiston House Estate dates from a similar period as Willard's Farm, c.1858-1865.

3.9.1 Mayes Cottage

Mayes Cottage is located in Kingston in the Logan City Council area. It is listed on the QHR (ID 600662) as an early dairy farm complex, dating from 1872. It retains the original house from 1872, a second house from 1887, a dairy and feed shed, all of which were built with timber from the property. It is comparable to Willards Farm for being a surviving example of a dairy complex with timber slab buildings. The house contains original furniture owned by the Mayes family from the 1880s to the 1930s.

Mayes Cottage is owned by Logan City Council and is open to the public as a tourist attraction that provides 'a rare opportunity to experience a unique part of Logan's heritage' (Logan City Council 2016).



Figure 88: Mayes Cottage (EHP 2016).



Figure 89: Mayes Cottage in 1887 (Logan City Council).

3.9.2 Bankfoot House



Figure 90: Bankfoot House (EHP 2007).



Figure 91: Bankfoot house from the southwest (EHP 2007).

Bankfoot House is located at Glasshouse and is listed on the QHR (ID 602702) as a rare example of a farm complex. Bankfoot House is significant for being a rare early example of a farm complex, and is from around the same general period as Willard's Farm.

Comparative features include its farmhouse (slightly later than Willard's 1860s original residence at 1878), dairy, sheds and early equipment and mature trees including a Fig and Bunya Pines. Bankfoot House is a lowset timber farmhouse, with verandahs and a corrugated iron roof and, like Willard's farmhouse, it has been modified and extended over time, but retains the original building at its core, and has utilised local timber. Both houses (Willard's and Bankfoot) have been modified by enclosing sections of an original verandah and both complexes demonstrate recycling and reuse of materials.

Both sites contain burials, although these may be outside the heritage boundary as specific locations have not been determined. It was once common practice to bury family members (especially children) on private properties. Bankfoot House is owned by the Sunshine Coast Council and is operated as a tourist attraction (museum) in partnership with the Friends of Bankfoot House.

3.9.3 Argyle Homestead

Argyle Homestead (c.1870s) is located near Toowoomba at Geham and is listed on the QHR (600436). The site includes the homestead, outbuildings and mature trees including local and exotic species. While Argyle Homestead is also an historic farm complex, Argyle Homestead is grander and more classical in its style than Willard's house, although it also exhibits a high pitched gable roof. Like Willard's Farm, Argyle Homestead also retains a slab shed, which stands as evidence of its original use as a farm. It was renovated in the 1980s and is owned privately and now used as guesthouse accommodation and is a tourist attraction.



Figure 92: Argyle Homestead.

3.9.4 Castleholme Homestead

Castleholme Homestead is located at Bryden (near Wivenhoe) and is listed on the QHR (600491). The Castleholme Homestead was originally a small cedar dwelling but, like Willard’s and Bankfoot homesteads, it was extended over time. Castleholme Homestead was also originally a dairy farm and has several timber outbuildings still extant, including slab sheds. The property was resumed by the Queensland Government in 1978 for the construction of Wivenhoe, although the house and outbuildings were not in the inundation area. The house is dilapidated but the outbuildings are in fair condition.



Figure 93: Castleholme Homestead in 1979 (EHP).



Figure 94: Castleholme outbuildings in 1979 (EHP).

3.9.5 Schmidt Farmhouse and Outbuildings

The Schmidt Farmhouse and Outbuildings is located at Worongary and is listed on the QHR (601889). Like Willard’s Farm, the Schmidt Farmhouse and Outbuildings includes a house, barn and creamery and was a dairy farm. The Schmidt farmhouse has a kitchen wing and part of the verandah has been enclosed. The Schmidt Homestead was originally built with a shingle roof and like Willard’s house, the battens from the old shingle roof are still in-situ. The barn at the complex is constructed of slab timber, although it has been rebuilt so has some recent elements. It also has a small weatherboard clad cream shed with a corrugated iron roof and concrete floor, but it is not within the heritage boundary. The property was acquired by Council in 1988. The site is now used as a museum and heritage centre for the Mudgeeraba Light Horse.



Figure 95: Schmidt Homestead (EHP).



Figure 96: Slab barn – recently rebuilt (EHP).

3.9.6 Colonsay Farm



Figure 97: Colonsay farmhouse in 2006 (EHP).



Figure 98: Horse shed in 2006 (EHP).

Colonsay Farm is located in the Wide Bay district, near Hervey Bay. It is listed on the QHR (ID# 602771) for being an intact example of a small, early 20th century dairy farm. In addition to the highset timber farmhouse, the complex includes two dairy sheds – hand milking bails in the slab barn and later ‘walk through’ dairy with electrically operated milking machines, which together demonstrate the evolution of the dairy industry in Queensland. Also extant on the complex is a separator shed/cream house, two piggeries and mature vegetation including a fig tree. The current farmhouse is the second for the complex (first no longer extant), and was built with timber from the site. During the mid-20th century, the farm was also used for sugar and small crops. Changes were made to the house from the late 1960s including enclosing the verandah. Parts of the black were subdivided in the 1980s and 1990s. The remainder of the farm is now used for beef cattle.

3.9.7 Ormiston House Estate

Ormiston House Estate is listed on the QHR (ID# 600775) for being closely related to the establishment of the sugar industry in Queensland. The complex includes the house, a slab kitchen, former store, laundry, lodge, a monastery (built by subsequent owner; the Carmelite Nuns in c.1960) and extensive grounds that extend to the foreshore of Raby Bay with mature exotic plantings and Bunya Pine avenues. Unlike the other examples, the Ormiston House was constructed of brick rather than timber; and the lodge and the monastery are also brick. The kitchen is made of split log slabs and the laundry is single skin timber. The house was built in stages between c.1858 and 1865 for the hon. Louis Hope, who was instrumental in the development of the sugar industry. The complex is still owned by the Carmelite Nuns and is operated as a museum by the Ormiston House Restoration Association.



Figure 99: Ormiston House in 1992 (EHP).

3.9.8 Conclusion of Comparative Analysis

The key points to note from the analysis are that, while there are several comparative farm complexes on the QHR, they are no longer common, particularly in areas of high development such as Capalaba/Birkdale. Rural areas are becoming more and more developed and complexes such as these are making way for housing estates and the like, with Willard's Farm itself recently saved from this very fate.

There are several similarities between Willard's Farm and the other complexes listed in this section, particularly with regards to construction methods for the houses and outbuildings. In particular, the similarities with the adaptations over time, such as the addition of a kitchen wing and the enclosure/part enclosure of verandahs to create more space at the houses, and the general evolution of each place illustrates a once common pattern of timber farmhouse evolution.

Most of the above examples are now tourist attractions – Mayes Cottage, Schmidt Farmhouse, Bankfoot House and Ormiston House Estate are all operated as museum/heritage centres and Argyle Homestead is run as a guesthouse. Colonsay is a unique example in that it is still being used for agricultural purposes.

4 Cultural Heritage Significance

4.1 Determining Cultural Heritage Significance

The heritage significance of a place is determined through the application of heritage criteria. The best-practice framework for the conservation of tangible cultural heritage in Australia is the Burra Charter 2013, which guides cultural heritage management in Australia. The Burra Charter (2013) defines conservation as ‘the process of looking after a place so as to retain its cultural significance’ (Article 1.4). A place is considered significant if it possesses aesthetic, historic, scientific, social or spiritual value for past, present or future generations (Article 1.2). The definition given for each of these values is as follows:

Aesthetic value refers to the sensory and perceptual experience of a place—that is, how we respond to visual and non-visual aspects such as sounds, smells and other factors having a strong impact on human thoughts, feelings and attitudes. Aesthetic qualities may include the concept of beauty and formal aesthetic ideals. Expressions of aesthetics are culturally influenced.

Historic value is intended to encompass all aspects of history—for example, the history of aesthetics, art and architecture, science, spirituality and society. It therefore often underlies other values. A place may have historic value because it has influenced, or has been influenced by, an historic event, phase, movement or activity, person or group of people. It may be the site of an important event. For any place the significance will be greater where the evidence of the association or event survives at the place, or where the setting is substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of such change or absence of evidence.

Scientific value refers to the information content of a place and its ability to reveal more about an aspect of the past through examination or investigation of the place, including the use of archaeological techniques. The relative scientific value of a place is likely to depend on the importance of the information or data involved, on its rarity, quality or representativeness, and its potential to contribute further important information about the place itself or a type or class of place or to address important research questions. To establish potential, it may be necessary to carry out some form of testing or sampling. For example, in the case of an archaeological site, this could be established by a test excavation.

Social value refers to the associations that a place has for a particular community or cultural group and the social or cultural meanings that it holds for them.

Spiritual value refers to the intangible values and meanings embodied in or evoked by a place which give it importance in the spiritual identity, or the traditional knowledge, art and practices of a cultural group. Spiritual value may also be reflected in the intensity of aesthetic and emotional responses or community associations, and be expressed through cultural practices and related places.

These values are reflected in established heritage criteria that are used by all heritage agencies and statutory heritage Acts in Australia. The criteria are generally broadened from the four Burra Charter values to eight and are represented by the letters A-H. The criteria in the *Queensland Heritage Act 1992* (QHA) are:

- A. If the place is important in demonstrating the evolution or pattern of Queensland’s history.
- B. If the place demonstrates rare, uncommon or endangered aspects of Queensland’s cultural heritage.
- C. If the place has potential to yield information that will contribute to an understanding of Queensland’s history.
- D. If the place is important in demonstrating the principal characteristics of a particular class of cultural places.

- E. If the place is important because of its aesthetic significance.
- F. If the place is important in demonstrating a high degree of creative or technical achievement at a particular period.
- G. If the place has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- H. If the place has a special association with the life or work of a particular person, group or organisation of importance in Queensland's history.

The relevant criteria for a place are grouped together into statements, which are collectively referred to as the statement of significance.

4.2 Statement of Significance

The following statement of significance is adapted from the recommendation prepared by EHP (2015). Converge has reviewed the assessment and concurs with its findings.

Table 2: Statement of Significance (modified from EHP 2015).

Criteria	Significance
A	<p>Willard's Farm (established 1863), provides rare, early evidence of government-promoted agricultural settlement in Queensland, particularly given its proximity to dense urban settlement. It is important in demonstrating the policy of successive governments until the mid-20th century, of achieving closer settlement of Queensland by small farmers through legislation, starting with the <i>Crown Land Alienation Act 1860</i>.</p> <p>It is also important in demonstrating the first Queensland Government's decision to raise revenue and settle the colony through lease and sale of land for pastoral and agricultural purposes.</p> <p>The farm complex, comprising residence (c1860s-c1910), outbuildings (c1860s-c1910), farm infrastructure and mature vegetation, are important surviving evidence of this rare, early Queensland agricultural property.</p>
B	<p>As one of the oldest surviving farms and residences within the Redlands, Willard's farm demonstrates rare, uncommon and endangered aspects of Queensland's cultural heritage. Representing a relatively intact and early residential and dairying complex (including retaining the core of the original 1860s residence and dairy shed), the site incorporates substantial evidence of the use 'bush carpentry' construction techniques and locally sourced materials, and the subsequent expansion and modification of the residential complex demonstrates both the changing fortunes of the owners and developments in building techniques and the associated availability of commercial building materials. The site also provides evidence of 19th century, pre-mechanised dairying techniques and agrarian utilitarian architecture along with demonstrating subsequent developments inclusive of partial mechanisation within the first quarter of the 20th century.</p> <p>Examples of such an early, intact dairy farm and residential complex are considered to be extremely rare within the Brisbane region and more generally across the State and provide important insight into small scale dairying, a way of life that was once common in the Redlands but through residential and other development is now uncommon. Since the decline of dairying in Queensland in the second half of the 20th Century, particularly for smaller scale producers, many early dairy complexes were abandoned, demolished or adapted for storage. Likewise, many dairying complexes were substantially modified as a result of the move to more mechanised means of production. Consequently, early complexes such as Willard's Farm are becoming increasingly uncommon.</p> <p>It is further considered that neighbouring Commonwealth land that was resumed from the farm during World War II may contain further elements of early farming infrastructure, inclusive of fences and outbuildings.</p>

Criteria	Significance
C	<p>The farmhouse and outbuildings retain important surviving evidence of early timber construction techniques no longer in general use.</p> <p>Analysis of fabric has the potential to reveal important information about the early development of Queensland vernacular building styles and techniques, and the transition from (and in this case combination of) timber-slab (roughhewn, adzed and hand-sawn timber) to timber-framed (milled timber) construction.</p> <p>The milking shed has the potential to reveal information about the evolution of dairy operations from the 19th to the early 20th centuries, particularly in relation to early, non-mechanised techniques and related infrastructure.</p>
D	<p>Willard's Farm is a rare, early example of a farm complex developed from the mid-19th century. The complex includes a farmhouse with later additions including a detached kitchen and kitchen wings (c1860s to c1910); a large, slab milking shed and timber framed cream shed, a slab garage, a tank and stand, and other remnant structures including fencing.</p> <p>The grounds include garden elements and many mature trees including Norfolk Pines (<i>Araucaria heterophylla</i>), Bunya Pines (<i>Araucaria bidwilli</i>), Palms (<i>Arecaceae</i> spp.), Mangos (<i>Mangifera indica</i>), Figs (<i>Ficus</i> spp.), Camphor Laurels (<i>Cinnamomum camphora</i>), Macadamia (<i>Macadamia integrifolia</i>).</p>
E	<p>Willard's Farm contributes to the streetscape of Old Cleveland Road East and is a landmark in the local area. Its tall Norfolk Pines and Bunya Pines are a prominent part of the local landscape. The picturesque setting of the 19th century dairying and residential complex has a semi-rural outlook to the north and west. The early fences and slab timber outbuildings add to the aesthetic appeal.</p>
H	<p>Willard's farm is important to the district for its strong association with the Willard Family. The Willards were a local pioneering family who arrived in the 1860s and operated the dairy farm until 1926. James Willard was a Councillor in the Tingalpa Divisional Board in 1880.</p>

4.3 Additional Significance

Willard's Farm is also significant for its association with the WWII receiving station (on adjacent block) which was an 'important link in the global communications system operated by the US Army during World War II' (EHP). Although the receiving station is outside the current boundary of Willard's Farm, the area was requisitioned by the military during World War II from the once larger property.

4.4 Hierarchy of Significance

The buildings and features at the complex possess varying degrees of significance. The following hierarchy of significance was prepared to assist the restoration and ongoing conservation of the place. The various gradings entail different management requirements. For example – an element of exceptional significance should be retained and conserved in-situ with as little intervention as possible, whereas an element of low significance may be altered or removed if there is sufficient justification to do so. Refer to Policy 1.3 in Section 5 for management guidelines based on gradings.

The hierarchy of significant elements is guided by the following criteria:

Table 3: Criteria for significance hierarchy.

Grading	Justification
Exceptional	Rare or outstanding element, exhibiting a high degree of intactness or other such quality(s) and is interpretable to a high degree, although alteration or degradation may be evident.
High	Featuring a high degree of original or early fabric or demonstrative of a key part of the place’s significance, with a degree of alteration which does not unduly detract from that significance
Moderate	Altered or modified elements. Elements with some heritage value which contribute to the overall significance of the place.
Low	Difficult or unable to be interpreted, not an important function, subject to high alteration, potentially detracting from the significance of the place.
None	Neither significant nor intrusive.
Intrusive	Damaging the site’s overall significance, an aspect of the site’s significance and/or significant fabric.

The levels of significance below have been determined using the criteria above.

Table 4: Hierarchy of significant elements for the Residence.

Grading	Elements	Location/ Comment
Exceptional	Original form of 1860s house and subsequent extensions	West of the road. The house is largely intact in its early 20 th Century form and retains a high degree of original and early fabric.
	Timber detailing and finials at gable roof, and timber fretwork on east and north verandahs	An early part of the residence, representing early detailing and fabric. The details at the verandah posts along with the cast iron balustrading have been replicated on the recent verandah extensions at the northwest and western sides of the property – these are not significant (although it is important to note that it is likely that those sections of iron balustrading removed from the eastern verandah have been reused on these extensions – these sections should be retained and reinstated on the eastern verandah).
	Lattice	At original house, attached to verandah posts and under verandah to ground. The lattice panel on the north verandah (above stairs) is may have been reused from the front verandah and should be returned to original position if able to be demonstrated that it was originally from this location.

Grading	Elements	Location/ Comment
Exceptional (Cont.)	Balustrade (cast iron) and verandah (early), verandah posts and other decorative elements inclusive of gable above entrance.	<p>Considered that the majority of these features are likely to have been added during the initial phase of extension and introduction of various aesthetic additions c1890s.</p> <p>While not all original features, they represent early features that demonstrate developments in the prosperity of the Willard family and also changes in aesthetics and the availability of commercial building and decorative products.</p> <p>Much of the balustrade on the new verandahs at the extension and kitchen wing are reproduction with very similar design but different material, however some of the original balustrade from the front (eastern) verandah appears to have been reused in these areas also.</p> <p>Original balustrades should be returned to the front section (where seat balustrade was built).</p>
	Weatherboard and chamferboard cladding on original residence	Mostly original and early fabric.
	Bay window	Not original, but an early addition to the building – most likely during the initial phase of extension and introduction of various aesthetic additions such as decorative iron balustrades. Evident in early photographs.
	Adzed bearers, hand finished posts and piers and pit sawn elements – kitchen and original house.	Under house, piers and end joists. Original structural elements indicative of locally sourced materials and local, hand manufacture on site.
	Shingle roof batons	Verandah roof at original house and potentially concealed in ceilings of original residence. Evidence of early roof construction.
High	Original form of c1890s extension (not including recent north and west verandahs).	The extensions have been modified since they were constructed, most likely in the 1980s e.g. a pantry was added to the kitchen and the two roomed extension was extended further to the west and one of the rooms was converted to a bathroom.
	Verandah boards at original house	Original or early fabric but mostly in poor condition.
	Enclosed verandah on original house	The original section of the house originally had a verandah at either side. The west verandah was enclosed at some point to create more internal space/rooms; however, this is likely to be an early modification that has retained integrity.

Grading	Elements	Location/ Comment
Moderate	Corrugated iron sheeting at original house and extension	<p>The roof sheeting at the original residence is not original, but appears to be early, potentially representing the original sheeting that replaced the original shingle roof in the 1930s.</p> <p>There are gaps at the edges of the sheets at the gable, allowing water ingress and pests into the building.</p> <p>Part of the roof sheeting on the residential extension may be early or original, but the building has been extended to the west.</p>
	Lattice gates	In between original house and 1890s extension. (Note: age not clear. Further research could increase significance).
	Southern steps	These steps appear to early fabric but may have been remodelled or relocated from a previous location. This is inferred due to the extensive wear on the stair treads in dictating that the upper sections remain in situ, although the low portion may have been moved to allow the construction of the later laundry access.
Low	Steps at front of 1860s house	These are not original, with early images showing a spilt staircase here from c1890s – possibly linked to other aesthetic and structural improvements dating from this period.
	Roof and walkway between 1860s house and 1890s extension	<p>There has been a roof here for a very long time, possibly since the extension was built, however, the current roof is not original and may have been replaced at the same time as much of the walkway itself c1980s – 1990s.</p> <p>It is likely that much of the walkway was also replaced at around this time.</p>
	Kitchen fitout	Not original fabric. Contemporary gas stove. Pantry is a later addition as evidenced by milled, exact period unknown but likely to be 1950s or earlier.
None	French doors at kitchen (west) and at the extension (north and west sides).	<p>These are not original, they would have been added to provide access to the new verandahs at the north and west of the extensions.</p> <p>While there would have been one or more entrances to the extension on the southern side from the covered walkway, it is considered unlikely that the current French doors are original or indeed if there ever were French doors – rather it is considered likely that original entrances would have been consistent with those throughout the remainder of the residence.</p> <p>Windows (and hoods) were removed in places for the placement of doors. Likewise, the placement of the bi-fold French doors at the western side of the kitchen are located where the original chimney and hearth was situated.</p>

Grading	Elements	Location/ Comment
	Bathroom fitout	<p>Not original fabric and likely to represent a c1980s improvement. The cast iron bathtub was removed/taken prior to Council taking ownership of the place – as such it is unknown whether this represented reuse of earlier fabric.</p> <p>Likewise, the internal dividing wall is also potentially a relatively recent addition c.1980s as are the French doors, architraves and skirting.</p>
	Wallpaper and dado rail in extension. Skirting and architrave.	In western room of the extension. These are recent additions. Likewise, the skirting and architraves are also considered likely to be an addition dating to the c1980s modifications.
Intrusive	Skillion extension over stairs – east side of kitchen.	<p>Recent addition/alteration c2000s. Attached to east side of kitchen, running off the verandah and over the steps to provide protection from the weather. Poor design, causing water ingress issues.</p> <p>Given the generally good condition of the stairs for their age it is considered likely that there was always a porch or some form of roof here, however research has not revealed an indication of form or materials. It should be further noted that excavations relating to the stairway to the laundry and other related elements indicate that the stairs may originally have extended directly out and east from the kitchen and that the current layout is a result of modifications necessitated by these excavations.</p>
	Air-conditioning unit	In bedroom window of original part of the residence. Intrudes on the overall aesthetics of the southern wall.
	External roof ventilation	Not original features. Intrudes on overall aesthetics of the roof of the original part of the house.
	Carpet (original residence)	Not original feature. In original section of the house.
	Linoleum flooring (kitchen wing)	Not original feature. In the kitchen wing.
	Enclosed area under the extension and excavated area under kitchen.	<p>Relatively recent fitout. Enclosed area underneath the extension. Steel poles have replaced some original posts. One post is entirely missing and more generally the entire pier structure is non-compliant, creating serious structural issues.</p> <p>It appears that the northern most bearer/end bearer has been replaced when the northern verandah was added c1980s, removing the original adzed bearer. Likewise, the western extension incorporates milled joists and bearers.</p> <p>The floor has been concreted and concrete block retainers introduced on the eastern side.</p>
	Polypipe downpipes, breathers and drainage attached to the house.	In various places across the house. Detracts from overall aesthetics of the building.

Grading	Elements	Location/ Comment
	Steps at north of 1860s house	Early images showing that there were not originally steps in this location. Possibly added when north verandah was added to the extension c1980s.
	Furniture and fixtures in the original house and kitchen wing.	Not original features, including electrical fittings.
	North and west verandahs on the extension and kitchen.	Not original and detracting from the aesthetics and interpretation of the original/early fabric and design intentions. Considered to be c.1980s, noting that the verandah is already present in real estate advertising for the sale of the property in 1984. The section of verandah to the west of the kitchen is considered to be a more recent addition dating as late as the 2000s.

Table 5: Hierarchy of significant elements for the Milking Shed.

Grading	Elements	Location/Comment
Exceptional	Form of original shed	South of the residence. The shed is an early feature in the complex and it is key in demonstrating the significance of the place as an early dairy in the region.
	Cow bails	East side of shed. Provides evidence of use as a dairy. Evidence also of local manufacture and bush carpentry and, based on their construction techniques, may in fact represent the original bails – represent a unique opportunity to interpret the dairying history of the place.
	Original dairy machinery and pipes	Throughout shed, including metal pipes and equipment fixed to a platform in the roof. Provides evidence of use as a dairy inclusive of evidence of evolution from manual to partial mechanisation.
	Corrugated roof sheeting	Appears to be original or early. Parts have been replaced/ patched up.
	Door/doorway at gable ends	Original/early feature of the shed.
	Slab walls (original fabric)	East and north side of shed. Demonstrates bush carpentry methods and use local material.
High	Concrete floor and drain, including concrete access ramp on west side.	Early addition to the milking shed, possibly in conjunction with partial mechanisation and construction of cream shed.
Moderate	Window and half board door	In poor condition. Evidence of re-use of fabric. Located at the northern façade of the shed.
Low	Former chicken coup	Evidence of re-use of part of the dairy as a chicken coup, following cessation of dairying at the farm. At the south western end of the shed.
	Eastern skillion extension	The enclosed skillion extension and the concrete floor are not original but they are part of the evolution and changing use of the place over time.

Grading	Elements	Location/Comment
None	Miscellaneous items in and immediately adjacent to shed	There are a large number of items in the shed that are not related to the history of the place as a dairy (i.e. car parts, old tyres, recent shelves). These items have been stored here by a previous owner/s but do not contribute to the significance of the place. Caution should however be exercised to ensure that there are no items of significance relating to the farm amongst these objects prior to removal.
Intrusive	Polycarbonate sheeting	Some of the original roof sheeting has been replaced with Polycarbonate sheeting.

Table 6: Hierarchy of significant elements for the Cream Shed.

Grading	Elements	Location/ Comment
Exceptional	Original form of gable roofed cream shed	The shed is located south west of the residence. It demonstrates evolution of dairy farming practice in Queensland. According to <i>Dairy Produce Act 1904</i> , cream sheds had to be separate from the milking shed with a washable concrete floor.
	Concrete floor	Original feature of the shed. Constructed to comply with <i>Dairy Produce Act 1904</i> .
High	Corrugated iron roof	The sheeting is likely to have been replaced. Metal not as weathered as other structures.
Moderate	Skillion extension	A later addition. The skillion (to the west) is not an original part of the cream shed.
	Decorative hood at doorway	A later addition to the shed.
Low	Window	The window on the east wall may be early fabric but it is smashed and the timber is rotten.
	Asbestos sheeting	Asbestos sheeting has been used to close ventilation openings in the lower wall section on the east and west sides. The ventilation holes were part of the design to keep the cream cool. The installation of the sheeting provides evidence of a change in use (re-use) of the building as a bedroom.
None	Lattice at skillion extension	Modern lattice. Treated pine.

Table 7: Hierarchy of significant elements for the Garage.

Grading	Elements	Location/ Comment
Exceptional	Original form and fabric of the shed including the loft	The garage is an early part of the complex and is likely to have been utilised for storage of horse drawn transport and associated horse tack and possibly feed.
	Doorway and weatherboard cladding at gable ends	Original/early feature of the shed.

Grading	Elements	Location/ Comment
	Slab timber walls and remnant timber elements including hand finished posts and splice repairs	Original fabric. Some of the slabs and other timber elements are in poor condition and others have already been replaced. Provides evidence of bush carpentry methods.
High	Corrugated roof sheeting	Possibly early fabric. Framing has been replaced however – see below.
Moderate	Door and window	Located at east wall. These are later, albeit potentially relatively early, additions to the shed. Some of the glass panels on both the door and window are broken.
Moderate to Low	Timber roof framing	The fabric appears to have been predominantly replaced.
None	Door at north gable ends.	Not original door.
	Lattice at skillion extension	On eastern and western sides. Modern lattice (treated pine). Although old photos show a waist height lattice fence at the east side of the shed to the house.
	Concrete blocks under slab walls	Not original. Added at some time in the past in an effort to rectify structural issues in the walls.
Intrusive	Skillion extension	To the south. Not original and detracts from the interpretation of the structure's original design intention.

Table 8: Hierarchy of significant elements for Landscape and Other Elements.

Grading	Elements	Location
Exceptional	Mature trees – original and/or early plantings	Decorative plantings inclusive of Hoop pines and Bunya pines, frangipani, Camphor Laurel etc.; Palms (Cocos, Cabbage Palm etc.) and various fruit trees including Mangoes; Macadamia, mulberry and guava trees at various locations (predominantly to the south of the residence); various shrubs (Note: Further research needs to be undertaken to differentiate between deliberate plantings and those that are a result of natural seeding process or expansion due to lack of garden maintenance, particularly along the eastern fence line and in relation to Cocos Palms and guavas).
	Brick cistern	To the immediate south of the kitchen. Age of cistern currently unknown but likely to be relatively early. Condition is poor. Significance may increase with further research.
	Early fencing and gates	Various places including beside driveway, at front of house (road alignment), beside garage, beside cream shed and at low stone wall.
High	Tank and stand	South of house, original/early feature but in overall poor condition.

Grading	Elements	Location
	Low stone wall and gate post	Date of wall's construction is uncertain. Key significance lies in the fact that, in conjunction with the adjacent gate posts, the wall delineates the gate from the house yard to adjacent paddocks.
Moderate	Coral and stone garden beds in front garden	Further research is required to determine how long the coral has been in the garden bed. Further research may increase significance level.
Low	Mango tree adjacent to house	In-between original house and kitchen, causing condition issues to the house, specifically excessive leaf litter and branches on the roof. (Note: Removed during emergency works conducted during the preparation of this CMP).
	Shower under elevated tank	The shower may be relatively early but the water heater is not original. Further research required (i.e. oral history).
Intrusive	Arbor (near garage)	Not original. Treated pine feature.
	Water heater under elevated tank.	Not original, modern feature.
	Modern septic system and related infrastructure (plastic)	In poor condition

5 Conservation Management

5.1 Matters Arising from Condition and Significance

The following issues have been identified as priorities for the management of the heritage significance of the complex:

1. Existing factors currently impacting on overall condition and preservation of significant elements of the site such as drainage, damage from pests and issues with substructure should be rectified as soon as possible.
2. Significant elements should be managed according to their identified significance ranking.
3. Intrusive elements should be removed where opportunity arises.
4. The historic complex should be maintained and conserved within its original rural (undeveloped) setting, with a particular focus on elements of Exceptional and High significance. This process should incorporate the development of a management strategy for the grounds, which includes a full assessment and consideration of the significance of individual plantings, particularly mature trees that are a prominent feature of the broader historic landscape.
5. The site, particularly built elements, need to be restored to allow regular use as soon as possible in order to assist both with ongoing maintenance and to deter theft and vandalism. The scale, form, materials and setting of the complex should be respected and any proposed management or use options should be sympathetic to its significance.
6. Broader development at the site should be avoided, or if necessary, carefully managed and undertaken only with full consideration of the cultural heritage significance of the site.
7. The archaeological potential of the site itself and the surrounding landscape should be considered and, where relevant, suitable management strategies developed prior to any ground disturbing works.
8. While outside the scope of this CMP, it is noted that adjacent Commonwealth land originally comprised part of Willard's Farm prior to the 1940s and as such may contain evidence of early settlement and subsequent pastoral use of the site. Furthermore, this adjacent land incorporates an added significance due to its use as a receiver station during World War 2. Ideally, further research and field investigations should be undertaken to identify any features of significance that may add to an overall understanding of the significance of Willard's Farm in its entirety, including the elements relating to the role played during World War 2.

5.2 Statutory Obligations

Willard's Farm was recently listed on the Redland Heritage Register but is not listed on any other statutory register at this time. Given that the place was rejected for entry to the QHR, under the provisions of the *Queensland Heritage Act 1992*, it cannot be renominated for entry to the QHR for five years from the time it was last nominated, see below.

Section 37 (of the *Queensland Heritage Act 1992*): 'Particular restriction on application'

If a place has been removed from the Queensland heritage register as a State heritage place, or the council has decided under this part not to enter a place in the register, a person or other entity cannot apply to have the place entered in the register until at least 5 years after—

- (a) the day the place was removed from the register; or
- (b) the day the council decided not to enter the place in the register.

5.2.1 Redland Planning Scheme

The local planning scheme is used to provide a legislative baseline for the management of the heritage significance of the site. Local heritage places are managed under the 'Heritage Places and Character Precinct Overlay' (Part 5, Division 8).

The overlay code contains provisions for development and use of local heritage places and incorporates specific outcomes and probable solutions. The code seeks to recognise and conserve heritage places and ensure uses and other development do not detract from the cultural heritage values of such places.

Outcomes for heritage places under the Redlands Planning Scheme (Assessable Development) include:

That the heritage place is conserved in a manner that –

- Is sympathetic and respectful to the character, appearance and setting of the place;
- Incorporates ongoing care and management of the place, by retaining the place.

Restoration and renovation of the heritage place is sympathetic and respectful to the character appearance and setting of the place.

Extension to the heritage place –

Is of a similar bulk, scale and height of the existing place and utilises similar materials;

Ensures mechanical plant and associated facilities or infrastructure do not adversely impact on the appearance of the place.

5.2.2 Archaeological Potential

As noted in Section 3.7, the landscape at Willard's Farm has archaeological potential. This potential includes former graves, artefact scatters and potential evidence of previous construction and other features such as saw pits and cattle dips, some of which may date back to the earliest phases of the establishment of the farm. Conservation Policy 3, in Section 5.3 below, provides guidance for the management of archaeological potential at the site.

It is important to note that, regardless of the level of heritage listing, archaeological potential is protected under the *Queensland Heritage Act 1992* (QHA). The relevant clauses of the QHA state:

Section 89: Requirement to give notice about discovery.

A person who discovers a thing the person knows or ought reasonably to know is an archaeological artefact or underwater cultural heritage artefact that is an important source of information about an aspect of Queensland's history must give the chief executive a notice under this section.

The notice must:

- be in the approved form; and
- be given to the chief executive as soon as practicable after the person discovers the thing; and
- state where the thing was discovered; and
- include a description or photographs of the thing.

Section 90: Offence about interfering with archaeological artefact.

This section applies to an archaeological artefact for which a person has, under section 89, given the chief executive a notice regarding the presence of an archaeological artefact.

A person who knows that the notice has been given must not, without the chief executive's written consent or unless the person has a reasonable excuse, interfere with the archaeological artefact until at least 20 business days after the giving of the notice.

5.3 Conservation Policies

This section of the CMP proposes a strategy for the management of Willard's Farm. The following policies are recommended for conservation of cultural heritage values and are based on information provided in previous chapters.

5.3.1 Policy 1: Conservation Best Practice

POLICY 1: CONSERVATION BEST PRACTICE	
Policy 1.1	Willard's Farm should be carefully managed in accordance with the principles of the Burra Charter (2013).
Policy 1.2	People skilled and experienced in the conservation of historic places should assist with the planning, design and implementation of master planning, maintenance and development and interpretive programs for Willard's Farm.
Policy 1.3	<p>Significant fabric at Willard's Farm will require specific care depending on the assigned heritage value, as follows:</p> <p>Exceptional: Retain, conserve and maintain in accordance with the Burra Charter. No adaptation should occur unless essential for the ongoing protection or preservation of the building, feature and/or overall complex. Any proposed change must be preceded by careful consideration, assessment and recording.</p> <p>High: Retain and conserve in accordance with the Burra Charter. Minor adaptation may be considered provided significant fabric is conserved and careful assessment and recording occurs. The items should be retained as is, subject to essential maintenance. The items should not be removed unless essential to comply with other statutory requirements.</p> <p>Moderate: Maintain, conserve, restore, reconstruct and adapt or otherwise act in accordance with the Burra Charter. Removal in part or full may be acceptable if no alternative option is available, however there would need to be a compelling reason for removal of heritage features (no prudent or feasible alternative).</p> <p>Low: Maintain, conserve, restore, reconstruct and adapt or otherwise act in accordance with the Burra Charter wherever possible. Alterations and adaptation generally acceptable but should be sympathetic to the surrounding heritage features and values.</p> <p>None: Retain, adapt, remove or modify as required.</p> <p>Intrusive: Modify or remove, where appropriate, to reduce impacts to surrounding heritage features.</p> <p><u>Note: Avoidance of impact on the heritage fabric at all levels of significance should be prioritised where ever possible.</u></p>

5.3.2 Policy 2: Managing Change

POLICY 2: MANAGING CHANGE	
Policy 2.1	<p>Council should establish a document file for both hard copy and digital material relating to the property in order to keep comprehensive records of all changes, alterations, and modifications to heritage features and the place more generally.</p> <p>Any significant changes to heritage features should be recorded to archival standards, as described in EHP's guidelines for 'Archival Recording of Heritage Places':</p> <p>http://www.ehp.qld.gov.au/assets/documents/land/heritage/archival-recording-heritage-places.pdf</p> <p>Original details and finishes (inclusive of evidence of current and preceding paint schemes) should be recorded prior to any major refurbishment or alterations. Recording should be undertaken by a suitably experienced heritage specialist and recorded data must be submitted to Council for inclusion in the document file.</p> <p>Recording should include at a minimum drawings and photographs, and recording changes through methods such as measured drawings, building plans, and relevant specification data before changes occur. Any evidence of early work or details uncovered during the execution of the work should similarly be recorded and submitted to Council for inclusion in the document file.</p>
Policy 2.2	<p>Works should be managed so that the conservation of the place is of a high standard, while still endeavouring to preserve key elements of the 'patina' of the place.</p> <p>For example, the weathered nature of the hand finished slabs on the garage and milking shed, the 'rusted' iron roof of the dairy shed and more generally the many layers of paint on the residential complex) that demonstrate the age and evolution of the place should be preserved where possible.</p>
Policy 2.3	<p>Changes at Willard's Farm should be carried out while conserving its heritage values wherever possible.</p> <p>Review all change with reference to this CMP and the Burra Charter (2013), assessing proposed changes against the identified heritage values of the place. Where change may impact adversely on these values, all alternative courses of action will be considered and the course of action with the lowest potential for adverse impacts will generally be the preferred outcome.</p>
Policy 2.4	<p>The demolition of all or part of any feature intrinsic to the significance of the place (refer to Section 4.3) should not occur except where all 'prudent and feasible' measures are examined first.</p> <p>Prior to any demolition works being undertaken to elements of significance it should be demonstrated that:</p> <ul style="list-style-type: none">(i) The element is so structurally unsound as to be beyond reasonable economic repair; or(ii) The existing condition of the element poses a significant health or safety risk that is beyond reasonable economic repair. <p>In such cases, a structural report should be prepared by an engineer suitably experienced in the management of built heritage. This report must clearly and succinctly outline the process of exploring all 'prudent and feasible' alternatives and</p>

POLICY 2: MANAGING CHANGE

	<p>the subsequent justification for proceeding with the demolition of all or part of any feature considered intrinsic to the significance of the place.</p>
Policy 2.5	<p>There is to be no upgrading that involves changes to any significant fabric without prior consultation with Council and, where applicable, a suitably experienced heritage consultant.</p> <p>New work should not intrude into the spaces/features of Exceptional or High significance. Likewise, any new work should be conducted to carefully manage any impacts on the overall amenity of the place, inclusive of views from and to the property.</p> <p>In areas identified as having been changed/modified in relatively recent times (i.e. 1980s onwards) either in this CMP or through subsequent verifiable research, there may be opportunities to improve or recover significance – for example the removal of the recent verandahs on the residential extension and kitchen and reinstatement of windows and other elements in order to return the building to a more original, earlier state corresponding with the identified overall significance of the place.</p>
Policy 2.6	<p>New work is to be clearly identifiable e.g. by use of clearly modern/different materials, date stamping and/or through photographic recording and/or clearly defined architectural drawings.</p> <p>Evidence of such changes should be lodged with Council and retained as part of the document file for the place. This provides a useful future reference and is consistent with the Burra Charter.</p>
Policy 2.7	<p>Any proposed changes to the site, particularly those involving ground disturbance in previously undisturbed areas, will need to occur in compliance with an approved strategy that accounts for the potential for archaeological discoveries – refer to Policy 3.2</p>
Policy 2.8	<p>Future works and maintenance projects should consider the option of reconstructing and/or reinstating removed significant elements and landscape features in forms more representative of the original (i.e. like for like).</p> <p>In particular, reinstatement should be considered where original materials may still exist that can be reinstated e.g. returning the original iron balustrade to the front verandah where it was removed for a bench seat balustrade. Further research and reference to early photographs of Willard's Farm would greatly assist this process.</p>

5.3.3 Policy 3: Unforeseen Discoveries

POLICY 3: ARCHAEOLOGY AND UNFORESEEN DISCOVERIES

Policy 3.1	<p>Prepare a policy for the management of unforeseen discoveries, inclusive of archaeological finds.</p> <p>At a minimum this policy should require that unforeseen discoveries should be documented and referred to a relevant heritage professional for advice. Such a discovery may include an archaeological find (including Aboriginal or historic (non-Aboriginal), the discovery of previously concealed finishes, structural element or other physical feature, that potentially has the potential to assist in understanding an aspect/s of the heritage values of the place. Depending on the nature of the find, authorities or specialists may need to be consulted. In the event of an unforeseen</p>
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POLICY 3: ARCHAEOLOGY AND UNFORESEEN DISCOVERIES

	<p>discovery during any site works, at a minimum the relevant works should cease immediately in the affected area, the find should be left where it is found, and reported immediately to the Council asset manager.</p>
<p>Policy 3.2</p>	<p>Commission an archaeologist to assist them in the preparation of an archaeological plan for Willard’s Farm.</p> <p>At a minimum this plan should identify features and/or areas of archaeological potential (refer to Section 3.7) that require management, inclusive of undertaking further research to determine (where possible):</p> <ul style="list-style-type: none"> • the location of the potential child’s grave; • the age and significance of the brick cistern; • the age and significance of other archaeological features and items of moveable heritage such as the various early bricks observed under and around the kitchen and the garden beds present at the front (east) of the original house. <p>As guidance to the development of this plan it is recommended that:</p> <ol style="list-style-type: none"> 1. Wherever possible subsurface disturbance be restricted to reduce the impact on potential archaeological remains at the site. 2. Any proposed changes to the site involving ground disturbance occur in compliance with an approved strategy that accounts for the potential for archaeological discoveries. 3. A project archaeologist be identified for programs incorporating substantial ground disturbance. 4. Discoveries be recorded and preserved <i>in situ</i> wherever practicable and feasible or otherwise recorded and collected in accordance with a moveable heritage collection policy. 5. This strategy be developed in conjunction with a landscape plan that incorporates the identification of areas of archaeological potential and a collection policy for the recording and preservation of key elements of moveable heritage, including archaeological discoveries, associated with the place.

5.3.4 Policy 4: Use and Setting

POLICY 4: USE AND SETTING

<p>Policy 4.1</p>	<p>Prepare a landscape plan to manage the health and longevity of significant plantings, and to provide guidance for the removal of intrusive plantings and a strategy for new/replacement plantings and the preservation/development of associated landscaping elements such as pathways at the historic farm complex.</p> <p>A key component of the plan should be the preservation of the established gardens and the otherwise predominantly rural setting of Willard's Farm in a manner that is consistent with its historic values. Future plantings should be consistent with the</p>
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POLICY 4: USE AND SETTING

	<p>historical use and the heritage values of the place and, where relevant, reflective of typical/representative plantings of a specific, chosen period such as the late 19th/early 20th century. Ideally, this plan should be developed through a combination of historic research and input from a team including a landscape architect with relevant heritage experience, a heritage specialist and a Council appointed arborist. This plan should also include a cyclical maintenance regime for management of all plantings of identified historic significance.</p>
Policy 4.2	<p>Undertake community consultation to determine options for the future use/s of the site that also allow for the practical preservation of its heritage significance.</p> <p>Where possible consultation should include the participation of heritage specialists and/or a heritage architect.</p> <p>Key elements relating to future use of the site that were identified during the development of this CMP include:</p> <ol style="list-style-type: none">1. Establishing a museum/educational centre that focuses specifically on interpreting the history of the site up until World War 2 (inclusive of surrounding properties that were originally part of the site).2. Interpretation should focus on the importance of the site as providing early evidence of government-promoted agricultural settlement in Queensland, elements of local manufacture and materials and the ‘bush carpentry’ skills demonstrated by early fabric.3. Where practicable interpretation of the site should include an explanation and practical demonstration of the dairying and agricultural elements of the site, particularly those elements contained within the dairy shed and the subsequent legislative changes that led to evolution at the site e.g. the concrete floors and construction of the cream shed.4. The site should be utilised to interpret the agricultural history of Birkdale and Capalaba and of the Redlands more generally. In order to support the running costs and upkeep of the site, the use could also be expanded to incorporate meeting rooms, a café and/or wedding/function venue options, although it is noted that the nature of the buildings and related significant elements present major issues for the development of equal opportunity access to the majority of the structures, particularly the residential complex.
Policy 4.3	<p>Prepare a masterplan for Willard’s Farm to enable a co-ordinated approach to the management of the site.</p> <p>This masterplan should include possibilities for the interpretation and future use and development of the site (inclusive of the reinstatement of plumbing and electrical services) and should incorporate the key elements of the landscape plan (Policy 4.1) and community consultation (Policy 4.2). The masterplan should be prepared by Council in consultation with key community stakeholders and with assistance where required from qualified professionals with experience in the management and interpretation of heritage places. The masterplan should also consider how members of the local community can participate in the ongoing management, maintenance and use of the site wherever possible. Any master planning process will need to consider how the place can be practically utilised while preserving significant elements.</p>

5.3.5 Policy 5: Conserving Willard's Farm – General

POLICY 5: CONSERVING WILLARD'S FARM – GENERAL	
Policy 5.1	<p>Develop and deploy a program of urgent conservation works to arrest the immediate condition issues for the place (see Section 3.8).</p> <p>This program will ideally be divided into short-term and long-term approaches (Policies 6 and 7 respectively), with works should be planned in conjunction with the advice and condition assessment included in this CMP (See section 3 and Appendices) and should be developed with the assistance of a team of heritage specialists, inclusive of heritage architect and a heritage engineer where relevant.</p> <p>The short-term works should address urgent condition issues such as stabilising the structures, preventing water ingress, addressing rot and termites, and clearing/removing non-significant vegetation and pruning and otherwise managing significant vegetation around the structures. The long-term work should include removing intrusive additions and provide for the ongoing conservation of the significant buildings, structures and landscape features with the ultimate goal of returning the place to regular use.</p>
Policy 5.2	<p>Engage skilled and qualified tradespeople to conduct works at Willard's Farm, preferably with demonstrated experience working on heritage buildings.</p> <p>It is recommended that these works be specified and supervised by a team of heritage specialists, including a heritage architect and a heritage engineer where applicable.</p>
Policy 5.3	<p>Engage a heritage architect to prepare current (as-is) measured drawings and elevations of the residential complex and outbuildings.</p> <p>These plans should be included in the masterplan for the site and appended to this CMP and will also be of great assistance when specifying any subsequent works to the place.</p>

POLICY 5: CONSERVING WILLARD'S FARM – GENERAL

Policy 5.4	<p>Engage a structural engineer to provide detailed structural assessment of all built structures to assist in the planning for conservation works at the complex during the master-planning phase.</p> <p>In particular, it is recommended that this assessment focus on the residence, inclusive of extension and kitchen, to provide advice in relation to the rectification of the various structural issues identified in this document. Where relevant the engineer should consult with the architect and heritage consultant regarding the development and specification of associated works programs.</p>
Policy 5.5	<p>Engage a heritage paint specialist to provide detailed advice regarding painting materials, methodology and colour schemes for the interior and exterior of the residential complex and cream shed along with other painted elements such as the garage, dairy shed and front fence.</p> <p>This advice should incorporate an assessment of physical evidence of early paint schemes via acceptable invasive techniques and/or otherwise providing advice on a period appropriate scheme and suitable materials where specific physical evidence cannot be determined. Such an assessment should include a determination on any toxic materials such as lead that may be present in early paint finishes.</p> <p>Specifically, in relation to the residential complex the CMP recommends that, where physical evidence cannot be uncovered, colours and finishes reflect the trends of the late 19th/early 20th century, as this period is considered to best reflect the earliest, dominant phase of the complex in its current form, inclusive of extensions and predominant stylistic and decorative elements.</p> <p>Paint finishes and conservation options should also be provided for the garage and milking shed, noting the preference to preserve the patina of the existing roof on the milking shed and the need to suitable preserve elements of exceptional significance such as the timber slabs e.g. consideration of the appropriateness and practicality of utilising a lime wash along with the use of suitable materials to impregnate/preserve this fabric against further rot and insect damage.</p> <p>More generally, preparation prior to painting should involve the minimum amount to ensure a good quality, long lasting finish while preserving the patina of age (e.g. evidence of multiple previous coats) and physical remnants of earlier paint schemes wherever possible.</p> <p>General guidance on paint type and application is provided in EHP's technical guide: http://www.ehp.qld.gov.au/assets/documents/land/heritage/tn-painting-maintenance.pdf.</p>

5.3.6 Policy 6: Short-term Conservation Works (Immediate – Urgent and Emergency Works)

POLICY 6: SHORT-TERM CONSERVATION WORKS

Policy 6.1	<p>Clear roofing, gutters and flashing of all buildings from debris, vegetation and leaves.</p> <p>Gutters and downpipes should be cleared, repaired and made good across the residential complex. As it is considered unlikely that any of the gutters are original, consideration should be given to introducing consistency across the entirety of residential complex. Likewise, the overall system should be designed to provide</p>
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POLICY 6: SHORT-TERM CONSERVATION WORKS

maximum efficiency while including aesthetic considerations in relation to placement and number of down pipes.

Recent (PVC) downpipes and rainwater goods, inclusive of breather pipes, should be removed and replaced with metal downpipes/ rain water goods, similar to the existing metal rainwater goods. Utilise metal spikes to fix and support guttering to fascia's.

All fixtures should be painted and material should consider any potential reaction with existing roof and drainage fixtures.

Assess the adequacy of the roof design at junctures between various buildings and covered walkway/verandah rooves. Consider alternative design options/solutions in consultation with a heritage architect and/or engineer where this is creating drainage/ingress issues e.g. box drain at rear of original residence and junction between extension and kitchen buildings.

Repair or, where repair not feasible, replace flashings and repair/refasten sheets that are causing water to enter into the residence and generally check roof sheets for leaks and patch where necessary – this should include the removal of recent roof vents (whirly birds) at the original house and residential extension and repair/replacement of ridge capping at milking shed. With the exception of polycarbonate sheeting on the dairy shed, only replace roof sheets where necessary. Replacement sheeting should be long sheet corrugated iron. Repairs to all rooves should incorporate an assessment of roof structures to determine structural integrity – with necessary rectification being made during this repair process.

The kitchen roof should remain unpainted. Likewise, it is currently proposed to not paint the roof but rather explore options to preserve the early sheeting while exhibiting the current patina of the weathered sheeting. As the roof at the garage, residential extension, original house and cream shed are painted these should be repainted (colour and paint type to be determined following further analysis).

General guidance on roofing and guttering is provided in EHP's technical guide: <http://www.ehp.qld.gov.au/assets/documents/land/heritage/technical-note-roofing.pdf>.

Policy 6.2

Ensure storm water is draining away from the buildings to prevent water from pooling underneath structures, especially around stumps.

Where possible the layout of existing pipes should be simplified through the use of concealed, underground storm water pipes that direct water away from the building (currently these are generally running along exposed portions of building interiors), noting requirements to avoid and monitor for archaeological finds and features.

On outbuildings such as the milking shed and garage where no gutters appear to ever have been fitted, consideration should be given to developing alternative drainage methods such as gravel trenches, concealed drainage pipes etc. in conjunction with the removal of soil and detritus deposits adjacent to exposed foundations as per policy 6.3. Ultimately, if no feasible alternatives can be developed and if considered essential to the preservation of significant fabric (particularly early framework and slab walls) then suitable gutters and associated downpipes and drainage should be installed.

POLICY 6: SHORT-TERM CONSERVATION WORKS

<p>Policy 6.3</p>	<p>Clear excess mulch and soil away from the substructures of all buildings, particularly the milking shed and garage as they are set on the ground; and from the garden at the front of the house where excess soil has built up over time.</p> <p>Given the potential significance of the associated garden beds this should incorporate a combined manual/mechanical investigation of the garden beds by an archaeologist.</p>
<p>Policy 6.4</p>	<p>Stabilise and level the sub-structure of each building under advisement from a suitably qualified and experienced heritage engineer.</p> <p>Replace original/early fabric only where no prudent or feasible alternative, particularly early hand finished and/or pit sawn elements</p>
<p>Policy 6.5</p>	<p>Ensure top plate is tied down to the roof structure for each building and that the structures are generally sound.</p>
<p>Policy 6.6</p>	<p>Assess site for presence of asbestos (currently identified in both the dairy shed and cream shed and potentially on the exterior walls of the kitchen) and other contaminants and chemicals that may be present on site.</p> <p>Remove asbestos where consider to pose a health risk, otherwise retain and develop an asbestos register for the site.</p>
<p>Policy 6.7</p>	<p>Develop and implement a pest and termite inspection and management regime for all built elements of the site.</p> <p>This plan should include immediate treatment of all built structures incorporating timber elements, inclusive of fences.</p>
<p>Policy 6.8</p>	<p>Replace rotten and termite damaged timbers of all buildings on a like for like basis where necessary and under advisement from a heritage engineer.</p> <p>All new timbers should be clearly identifiable as recent additions through means such as date stamping. Where original structural timbers (e.g. adzed bearers and posts) are rotten, options should be explored to retain structurally sound sections (e.g. portions end bearer of covered walkway/verandah on southern side of extension), and only replacing those portions that have failed.</p>
<p>Policy 6.9</p>	<p>Erect security fence or alternative to provide a short term safety solution for the brick cistern.</p> <p>Long term goal should be to clean and repair the cistern inclusive of reinstating a roof to make safe. Interpretive opportunities should be considered, inclusive of allowing the interior to be lit and/or made viewable.</p>
<p>Policy 6.10</p>	<p>Carefully clear weeds and excessive vegetation away from the base of buildings and other features such as fences.</p> <p>DO NOT fell significant trees unless they pose substantial threat to persons or buildings and there is no prudent or feasible alternative. Likewise, consideration should be given to the significance of each individual planting to ascertain whether or not it is significant prior to removal of shrubs and other vegetation. All significant plantings should be identified in a detailed site plan that can be incorporated as part of a broader landscape masterplan.</p>
<p>Policy 6.11</p>	<p>Trim/prune and otherwise manage significant trees as necessary (including the Norfolk Pines) to remove dead wood and maintain health of trees.</p>

POLICY 6: SHORT-TERM CONSERVATION WORKS

	<p>Clean dead fronds from the mature palms. It is further recommended that all significant plantings be inspected by an arborist and long term management regimes established to ensure the health and longevity of all significant plantings. If the assessment shows that individual trees require removal, then consideration should be given to replacing like with like.</p>
Policy 6.12	<p>Clear the milking shed of excess (non-significant) items to enable proper examination of the building prior to conservation works and to allow for future interpretation of the space.</p> <p>Some of the stored items can possibly be re-used (i.e. building materials stored in ceiling could potentially be re-used as part of the residences' conservation works). Other items (i.e. car parts) could be donated to a local men's shed or the like.</p> <p>Items relating to the history of the place as a dairy, should be sorted until conservation works are complete, or in the case of fixed items, like the machinery in the ceiling, they should be left in-situ. Removed (stored) items with interpretative value should be returned to the shed following completion of works.</p> <p>Conservation works should be undertaken to ensure the survival of the bails and other elements of dairying infrastructure.</p>
Policy 6.13	<p>Remove carpet from the original house and vinyl flooring from kitchen to allow inspection of the timber floors underneath.</p> <p>Replace damaged floor boards like for like where required.</p>
Policy 6.14	<p>Heritage engineer to undertake structural assessment of residential complex substructure to determine best approach to stabilise buildings.</p> <p>In particular, it is recommended that the retaining walls under the kitchen and residential extension are removed and that of timber piers under residential extension, inclusive of replacing missing pier, are reinstated. Inspect all piers and replace as necessary. Retain early original adzed timber piers and bearers and pit sawn joists and flooring wherever possible. Undertake essential emergency works in accordance with the advice of the heritage engineer and more generally in compliance with the policies outlined in this CMP.</p>
Policy 6.15	<p>Repair/ replace bargeboard and lattice at southern end of verandah of original house.</p> <p>Much of the exposed verandah boards have also failed and will require replacement as they currently represent a safety risk. It is expected that some joists may also require repair/replacement. Where possible original materials should be retained and/or reutilised or otherwise replaced like for like, ensuring that new additions are date stamped or otherwise clearly identified as new materials.</p>
Policy 6.16	<p>Replace missing timber slabs from milking shed and garage. Reinstate existing slabs wherever possible (i.e. some have fallen from the wall due to leaning building – these should be re-inserted if possible).</p> <p>Replace missing slabs with like material (i.e. hand finished hardwood slabs), ensuring that new additions are date stamped or otherwise clearly identified as new materials.</p>
Policy 6.18	<p>Construct internal frame to prevent collapse of garage building.</p> <p>The original fabric and frame should be strengthened where necessary, straightened and attached to this new, internal frame, which should be constructed in such a way</p>

POLICY 6: SHORT-TERM CONSERVATION WORKS

as to be non-intrusive but clearly modern in construction (recommended box steel framework painted black).

5.3.7 Policy 7: Longer-term conservation works (As soon as practicable)

POLICY 7: LONGER-TERM CONSERVATION WORKS

Policy 7.1	<p>Removal of intrusive elements including the recent west and north west verandahs on the extension and kitchen to return the building to its former design intention.</p> <p>It may be necessary to undertake this removal at an earlier stage of the project if required as part of the rectification of structural issues associated with the extension.</p> <p>Other elements to be removed include shutters and air-conditioning unit on the original residence, poly downpipe, modern lattice under the extension, external roof vents (whirly birds) and retaining walls.</p> <p>Further research will be required to establish whether lattice or battens were originally present between the posts under both the kitchen and extension and then a decision made as to whether these should be reinstated.</p>
Policy 7.2	<p>Remove bench seat balustrade and return the original decorative iron balustrade to the front verandah, utilising balustrade from verandah at north side of extension.</p> <p>Note that some of the balustrade at the recent verandah is reproduction with slightly different design details and different material.</p> <p>Careful examination should be undertaken to ensure re-use of original fabric wherever possible.</p> <p>Repair existing balustrade at original house and retain in-situ.</p>
Policy 7.3	<p>Repair/ replace windows at cream shed, milking shed and garage on a like for like basis.</p>
Policy 7.4	<p>Remove lattice at skillion extension at south of garage. Also consider removal of skillion extension once structural rectification has occurred.</p>
Policy 7.5	<p>Remove the treated pine arbour in the yard to the east of the garage.</p>
Policy 7.6	<p>Repair existing post and rail fence along the driveway to the garage, retaining and strengthening original material wherever possible.</p>
Policy 7.7	<p>Repair and repaint front fence and gate – retain as much original fabric as possible.</p>
Policy 7.8	<p>Repair/ replace broken lattice under verandah following removal of excess soil.</p>
Policy 7.9	<p>Clean mould off all external and internal painted surfaces (inclusive of the roof) of all residential buildings and the cream shed and otherwise prepare and repaint with appropriate colour schemes. Undertake further research to determine appropriate paint materials and colours (if any) for garage and dairy shed.</p> <p>Given that there remains a high percentage of original/early fabric associated with each of these buildings it is considered likely that further research, inclusive of a physical examination and related advice by an appropriate paint expert, will allow original and/or early paint schemes to be established. Likewise, appropriate paint products should be used that are in keeping with the age and materials of the building – refer to Policy 5.5.</p>

POLICY 7: LONGER-TERM CONSERVATION WORKS

	<p>Note: While further research is required it is considered likely that both the milking shed and garage where originally lime washed – certainly they both appear to have been painted white in early photographs - and there remain sections of white paint on some portions of the milking shed today. Accordingly, consideration should be given to reinstating this finish on these two buildings.</p>
	<p>Replace/repair/remove stairs.</p> <p>Replace stairs at the front verandah of the residence inclusive of investigating possibility of re-instating early split design as per early photographs.</p> <p>Replace the steps at the cream shed.</p> <p>Remove stairs at north of residence and reinstate balustrading.</p> <p>Repair rear steps east of kitchen, retaining evidence of wear and patina where possible. Further research may be required to determine original layout of these stairs.</p>
Policy 7.10	<p>Replace missing gable doors from garage and milking shed.</p> <p>Repair/replace existing doors on a like for like basis.</p>
Policy 7.11	<p>Replace missing timber planks at the mezzanine floor of the garage.</p>
Policy 7.12	<p>Remove poly septic tank and connect sewerage to the property if possible.</p> <p>Otherwise septic tank should be relocated to a more suitable location on site.</p>
Policy 7.13	<p>Remove broken brick stairs/retaining wall at south side of residence and clean up the area.</p> <p>Attempts should be made to reinstate the original landscape form where possible. Re-landscape area and introduce appropriate plantings in accordance with landscape plan – see Policy 4.</p>
Policy 7.14	<p>Reinstate natural/pre 1980s landscape in and around residential complex where possible.</p> <p>Works should consider removal of recent retaining walls and suitable management of archaeological potential.</p>

5.3.8 Policy 8: Maintenance

POLICY 8: MAINTENANCE

Policy 8.1	<p>A maintenance and repair program should be developed and implemented for the place.</p> <p>The program should include regular inspections of building fabric and landscape maintenance. Refer to Section 6.</p>
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5.4 Heritage Listing

It is recommended that Willard’s Farm be re-nominated for entry to the QHR under the provisions of the *Queensland Heritage Act 1992*, however as stated in Section 5.2, this cannot be undertaken for five years from the date that the QHC rejected the previous nomination. Listing on the QHR would

assist with the long term protection of the site as it provides additional protective measures than local heritage listing alone.

5.5 Review of the CMP

A review of this CMP should be carried out within approximately 5 – 7 years from approval of the final version so as to ensure the currency of the document. This review may be required earlier should substantial restoration works be completed at the site over the next few years. Irrespective of this requirement to review, the existing CMP should continue to be used as the principal guide for understanding, conserving and interpreting the heritage values as part of the future of ongoing heritage management, until such reviews are completed and (if necessary) a new plan subsequently endorsed.

Reviews should be undertaken by experienced heritage conservation practitioners in conjunction with relevant site management representatives and any identified stakeholders.

The aim of the review must be to:

- Assess whether the CMP is consistent with best practice management principles current at the time.
- Assess whether the plan is effective in protecting and conserving the heritage values of Willard's Farm, particular in relation to any significant changes that may have occurred to the place.
- Make recommendations for the improved protection of heritage values of Willard's Farm.

Revision of the CMP must also incorporate any new and changed information about Willard's Farm that may have become evident through monitoring, community input and further research.

6 Implementation

The implementation chapter sets out the specific plans to implement the conservation policies. The Action plan lists specific tasks recommended in the policies. The maintenance plan provides an outline of tasks to ensure the place is well-maintained, in the long-term the best approach to conserving significance.

6.1 Summary of CMP Findings

The following summary is provided to highlight the key points raised in the CMP:

- The buildings and significant plantings predominantly date from the 1860s through until the first quarter of the 20th Century. Subsequent modifications have occurred at as yet undetermined dates, inclusive of the addition of a pantry to the kitchen (pre 1930s?), addition of a verandah to the north and east of the extension (1980s?), addition of a verandah to the west of the kitchen (2000s).
- This complex of buildings was previously nominated for entry to the QHR. Although it was not successfully entered into the QHR, this CMP recommends that a further attempt be undertaken in time to have the place entered on the QHR. The place was recently entered on the Redland Heritage Register.
- Although the place is not currently listed on the QHR, it should be treated as though it is to ensure effective conservation of the place and to protect it until it is successfully heritage listed.
- The significance of the place extends beyond the current boundaries, given its history as a farm that was divided over time and partly acquired for military use during WWII. It is considered that there remains a high potential for further, important fabric relating to the history of the farm to be located in adjacent Commonwealth land, inclusive of fences, saw pits, cattle dips, outbuildings, and water pumping/sourcing infrastructure.
- Always consult the CMP for further information about the place and for more detailed information about obligations.

6.2 Action Plan

Actions identified in this plan are organised according to priority. The time frame is based on a period of five years, at which time the CMP should be reviewed.

HIGH [within 1 year].

MEDIUM [within 2 years]

LOW [within 3-5 years].

Note: Ideally all HIGH priority work ideally should be undertaken as part of a single, coordinated program. This will enable an efficient and logical approach to urgent conservation matters, thereby saving time and cost.

Table 9: Action Plan.

Action	Policy	Priority	Planning
Undertake consultation to develop a Master Plan document to determine ongoing suitable use for Willard's Farm.	4.3	HIGH	<ul style="list-style-type: none"> A masterplan should be developed for the site such that the future use of the place can be decided upon and to more generally guide subsequent works at the site. Ensure use is compatible with heritage values.
Undertake community consultation for future use	4.2	HIGH	<ul style="list-style-type: none"> Council to undertake community consultation with the participation of heritage specialists and a heritage architect as required.
Prepare a policy for the management of unforeseen discoveries	3.1	HIGH	<ul style="list-style-type: none"> Council to prepare with assistance from heritage specialist and/or archaeologist as required. Append report to CMP and include results in updated CMP when reviewed.
Prepare archaeological management plan.	3.2	HIGH	<ul style="list-style-type: none"> Engage archaeologist to prepare plan. Append report to CMP and include results in updated CMP when reviewed.
Prepare landscape plan.	4.1	HIGH	<ul style="list-style-type: none"> Engage heritage landscape architect to work in conjunction with heritage specialist and Council arborist to prepare plan. Append report to CMP and include results in updated CMP when reviewed.
Engage skilled and qualified tradespeople to conduct works at Willard's Farm	5.2	HIGH	<ul style="list-style-type: none"> Council should commission skilled tradespeople, preferably with demonstrated experience working on heritage buildings, to conduct works at Willard's farm. It is recommended that these works be specified and supervised by a team of heritage specialists, including a heritage architect and a heritage engineer where applicable.
Prepare architectural plans.	5.3	HIGH	<ul style="list-style-type: none"> Engage architect to prepare plans, including as-is and concept plans for the conservation works and proposed uses.
Undertake structural assessment of the buildings.	5.4	HIGH	<ul style="list-style-type: none"> Engage experienced structural heritage engineer to provide advice on the built elements at the complex.
Undertake paint scheme analysis and provide detailed on materials, methodology and colour scheme.	5.5	HIGH	<ul style="list-style-type: none"> Engage specialist to undertake the analysis and append results to this CMP.

Action	Policy	Priority	Planning
<p>Address urgent condition issues identified by this CMP, including:</p> <ul style="list-style-type: none"> • Clearing/ replacing/ repairing all gutters and downpipes. • Correcting stormwater issues. • Clearing excess mulch and soil from structures. • Stabilise and level all structures. • Ensure top plate is tied down at residence. • Repair/ replace flashings and check for roof leaks. <p>Undertake termite and pest inspection and develop and implement management strategy</p> <ul style="list-style-type: none"> • Replace/ repair rotten and termite damaged timbers across all structures. • Erect security fence or undertake repair work to brick cistern. • Clear weeds and excessive vegetation from around the buildings. • Manage significant trees. • Remove all rubbish and excess items from the buildings. • Remove carpet from the original house and vinyl flooring from kitchen and repair timber flooring. • Replace missing pier and steel piers under extension. • Repair/ replace bargeboard and related repairs at southern end of original house's verandah. • Replace missing timber slabs from milking shed and garage. • Repair/ replace ridge cap from milking shed. 	5.1; 6.1 – 6.18	HIGH	<ul style="list-style-type: none"> • Ideally approach as a single, coordinated program to identify nature and extent of urgent repairs. • Works should be supervised by a heritage professional. • Photographic recording should precede all works to significant features.

Action	Policy	Priority	Planning
<p>Address all other condition issues identified by this CMP, including:</p> <ul style="list-style-type: none"> • Remove intrusive items/ features including recent verandahs and bench seat balustrade, skillion at garage and recent arbor. • Return original balustrade to the front verandah if possible. • Repair/ replace broken windows at outbuildings. • Repair existing fences and gates. • Repair/ replace original lattice. • Re-paint all painted areas. • Replace missing gable doors from milking shed and garage and repair/ replace broken doors. • Replace missing timber planks at garage mezzanine. • Remove poly septic tank and connect to town sewerage. • Remove broken stairs/ retaining wall and re-landscape area in accordance with landscape plan. 	5.1; 7.1 – 7.13	MEDIUM	<ul style="list-style-type: none"> • Ideally approach as a single, coordinated program, wherever possible. • Works should be supervised by a heritage professional. • Photographic recording should precede all works to significant features. • Refer to landscape plan (Policy 4).
Nominate Willard’s Farm for entry to the QHR.	N/A	LOW	<ul style="list-style-type: none"> • After completion of urgent works and conservation works, and after five year waiting period.
Review the CMP and update as necessary.	N/A	LOW	<ul style="list-style-type: none"> • After completion of urgent works and conservation works. Update should reflect changes due to conservation works and outcome of heritage nomination. • To be prepared by heritage professional.

6.3 Maintenance Plan

Following the completion of urgent works, it is important that regular maintenance occur at Willard's Farm. This section provides guidance for the ongoing general maintenance of Willard's Farm.

6.3.1 Regular Condition Survey

A regime should be established for the key elements of Willard's Farm. This regime should be undertaken by the site custodian (manager) and should include the following;

- Significant fabric should be regularly checked for defects/damage to condition and other maintenance issues. This should include survey sheets and, where relevant, a copy of measured drawings to be annotated as a record of condition.
- Willard's Farm should be inspected regularly with a basic condition report completed at each inspection.

6.3.2 Landscape Maintenance

The landscape surrounding the Willard's Farm should be maintained and conserved with a respect for the identified heritage values as a priority. Changes to landscape elements, including removal of trees/vegetation (for example), must be in accordance with the policies in this CMP, and the landscape plan developed as per Policy 4.

6.3.3 General Works and Activities

A program of general maintenance should be continued for Willard's Farm, which includes the following tasks:

- General cleaning and maintenance of the building.
- Repair and re-painting of significant elements.
- Scheduled pest inspections and implementation of associated management strategy.
- Scheduled structural inspections.
- Scheduled risk management inspections of the site.
- Mowing of grass.
- Brush cutting around trees, fences and infrastructure.
- Chemical control of weeds, particular around footings to avoid brush cutting.
- Pruning of trees and shrubs.

A plan is provided overleaf to guide the general maintenance and cleaning of Willard's Farm. The following plan is intended for the maintenance of the place post-restoration works, however, the actual timing and tasks may differ depending on the individual needs of the place combined with existing Council practices.

Table 10: Ongoing Maintenance Plan for Willard’s Farm (post-restoration works).

Frequency	Item	Inspection notes
Half yearly	Roof	<p><u>Look for:</u></p> <ul style="list-style-type: none"> Loose sheets or missing fixings. Metal sheets for rust (particularly at the laps).
	Gutters and downpipes	<ul style="list-style-type: none"> Gutters and downpipes, including guards, sumps and rainwater heads are clear of leaves and other debris. Gutters and downpipes for cracks, rust, drips on the outside, loose and missing brackets, moss and stains near downpipes. Fall of gutter. Discharge of downpipes adjacent to the building.
	Ceiling spaces	<ul style="list-style-type: none"> For light visible through holes or water staining on framing elements. Water often travels a tortuous path from where it enters a building to where it exits. For wildlife. Signs of termite infestation (this may be reduced to an annual inspection if an effective termite management system is in place).
	Exterior	<ul style="list-style-type: none"> External timber cladding for splits, cracking or failed fixings. For fire hazards, such as rubbish, undergrowth, combustible materials. That doors and windows are secure. Paint failing or chalking. That water is not entering the building. For cracks, leaning or subsidence in external walls. Overhanging tree branches, trim if necessary.
	Termite and insect inspections	<ul style="list-style-type: none"> For termite infestations and other notable insect or vermin attack.
1-2 years	Roof flashings and capping	<ul style="list-style-type: none"> Loose or raised fixings to metal cappings. Cappings that have lifted, slipped or are deformed from wind damage.
	Eaves	<ul style="list-style-type: none"> Holes from old service pipes where birds can nest. Surface stains to fascia and soffit that indicate roof or valley and gutter failure. Blocked ventilation holes and clear. Paint failure and/or decay to linings—this can indicate roof covering failure. Cobwebs and wasp or hornet nests and remove.
	Timber – fabric	<ul style="list-style-type: none"> Loose or missing cladding, corner stops, mouldings, soffits and fascia. For weathering and potential decay around window sills. Boarding in contact with the ground or plants. Termite activity.

Frequency	Item	Inspection notes
3 years (structural condition audit by engineer)	Roof steel	<ul style="list-style-type: none"> • Loose or raised fixings—loose fixings can indicate batten failure. • Sheet edges and surfaces that are deformed from being walked on. • Rust stains around fixings, where sheets are lapped around flashings.
	Timber – (framing)	<ul style="list-style-type: none"> • Members are secure and true. • For movement of vertical beams and posts. • Members are not in direct contact with the ground. • For termite activity.
As necessary	Broken glass	<ul style="list-style-type: none"> • Replace as necessary.
	Walls and structure	<ul style="list-style-type: none"> • Record and monitor all cracks. Seek advice from a structural engineer for large cracks.
	Lawn	<ul style="list-style-type: none"> • Mowing and brush cutting.

References Cited

Queensland Government, Natural Resources and Mines, Historical Cadastral Map Series - Queensland, accessed 24 March 2016, <https://data.qld.gov.au/dataset/historical-cadastral-map-seriesqueensland>

Redland City Bulletin, Report called after Heritage Council fails to list Willard's Farm, 9/12/2015, accessed 24 March 2016, <http://www.redlandcitybulletin.com.au/story/3338006/no-heritage-listing-for-willards-farm/>

The Burra Charter 2013, The Australia ICOMOS Charter for Places of Cultural Significance accessed June 28 2016 <http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf>

Appendix

Appendix 1: Inventory of Removal Heritage

Appendix 2: Brief Landscape Report

Appendix 3: Measured Drawings

Appendix 4: Emergency Works

Emergency works currently proposed for Willard's Farm include:

- Clearing and 'making good' gutters and downpipes.
- Establishing appropriate storm water drainage systems to ensure that water is removed away from the buildings and preventing pooling under and adjacent to structures, particularly around stumps and foundations.
- Clearing mulch/soil away from substructures of all buildings, particularly the foundations of the three outbuildings, strengthening of frame and reinstating fallen slabs.
- Stabilising the garage structure through the construction of and fixing to a standalone internal frame.
- Stabilising/levelling the sub-structure of each of the three main buildings.
- Checking/establishing tie-downs of top plate to roof structures.
- Removing/correcting any flashings that are causing water ingress and checking roof sheeting for leaks.
- Replacing rotted structural timbers (e.g. section of bearer under rear stairs).
- Making the brick tank safe.
- Landscape management: i.e. clearing weeds and undergrowth, pruning significant trees and felling invasive/ dangerous trees.

12 MAYORAL MINUTE

In accordance with s.22 of POL-3127 *Council Meeting Standing Orders*, the Mayor may put to the meeting a written motion called a 'Mayoral Minute', on any matter. Such motion may be put to the meeting without being seconded, may be put at that stage in the meeting considered appropriate by the Mayor and once passed becomes a resolution of Council.

13 NOTICES OF MOTION TO REPEAL OR AMEND RESOLUTIONS

In accordance with s.262 *Local Government Regulation 2012*.

14 NOTICES OF MOTION

In accordance with s.3(4) of POL-3127 *Council Meeting Standing Orders*

15 URGENT BUSINESS WITHOUT NOTICE

In accordance with s.26 of POL-3127 *Council Meeting Standing Orders*, a Councillor may bring forward an item of urgent business if the meeting resolves that the matter is urgent.

Urgent Business Checklist	YES	NO
To achieve an outcome, does this matter have to be dealt with at a general meeting of Council?		
Does this matter require a decision that only Council can make?		
Can the matter wait to be placed on the agenda for the next Council meeting?		
Is it in the public interest to raise this matter at this meeting?		
Can the matter be dealt with administratively?		
If the matter relates to a request for information, has the request been made to the CEO or to a General Manager previously?		

16 CLOSED SESSION**16.1 COMMUNITY & CUSTOMER SERVICES****16.1.1 2016/2017 ROUND 1 SPONSORSHIP**

Objective Reference: A124439
Reports and Attachments (Archives)

Authorising Officer:



Louise Rusan
General Manager Community and Customer Services

Responsible Officer:

Luke Wallace
Group Manager Community and Cultural Services

Report Author:

Monique Whitewood
Community Grants Coordinator

EXECUTIVE SUMMARY

Council or Committee has a broad power under Section 275(1) of the Local Government Regulation 2012 to close a meeting to the public where there are genuine reasons why the discussion on a matter should be kept confidential.

OFFICER'S RECOMMENDATION

That the meeting be closed to the public to discuss this matter pursuant to Section 275(1) of the *Local Government Regulation 2012*.

The reason that is applicable in this instance is as follows:

- (h) *other business for which a public discussion would be likely to prejudice the interests of the local government or someone else, or enable a person to gain a financial advantage.*

16.2 INFRASTRUCTURE & OPERATIONS**16.2.1 DELEGATED AUTHORITY – WASTE TRANSFER STATION OPERATIONS**

Objective Reference: A2059899
Reports and Attachments (Archives)

Authorising Officer:



Gary Soutar
General Manager Infrastructure & Operations

Responsible Officer:

Kevin McGuire
Group Manager Water & Waste Operations

Report Author:

Claire Black
Senior Contracts Advisor

EXECUTIVE SUMMARY

Council or Committee has a broad power under section 275(1) of the *Local Government Regulation 2012* to close a meeting to the public where there are genuine reasons why the discussion on a matter should be kept confidential.

OFFICER'S RECOMMENDATION

That the meeting be closed to the public to discuss this matter pursuant to Section 275(1) of the *Local Government Regulation 2012*.

The reason that is applicable in this instance is as follows:

(e) contracts proposed to be made by it

17 MEETING CLOSURE
