

17 November 2015

Infrastructure Agreement

Shoreline Redlands Pty Ltd ABN 92 163 078 715

Redland City Council ABN 86 058 929 428

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This Infrastructure Agreement

is made the day of 2015 between the following parties:

Shoreline Redlands Pty Ltd ABN 92 163 078 715 of 88A Old
Cleveland Road, Capalaba
(Developer)

AND

Redland City Council ABN 86 058 929 428 of Corner Bloomfield &
Middle Streets, Cleveland, Queensland
(Council)

Recitals

- A The Developer has lodged the Development Application with Council over the Application Land.
- B The Proposed Development requires the provision of infrastructure.
- C The Development Obligations require infrastructure to be provided before or as part of the Proposed Development so that the Development Obligations are correlated with the Proposed Development.
- D This Agreement attaches to the Development Land.
- E This Agreement forms part of the common material for Council's assessment of the Development Application.

The parties agree

that in consideration of, among other things, the mutual promises contained in this Agreement:

1. Definitions and Interpretation

1.1 Definitions

In this Agreement:

Actual Cost means the final cost of the design and construction of the completed Work Contribution endorsed by a Registered Professional Engineer of Queensland (RPEQ).

- (a) The Actual Cost includes:
 - (i) the cost of planning and designing the Work Contribution;
 - (ii) the cost of survey and site investigation for the Work Contribution;
 - (iii) a cost under a contract for the provision of the relevant Work Contribution;
 - (iv) a portable long service leave payment under a contract for the provision of the relevant Work Contribution;

- (v) an insurance premium for the Work Contribution; and
 - (vi) the cost of obtaining any necessary Approval for the Work Contribution;
- (b) The Actual Cost does not include:
- (i) the inspection fee of Council for the commencement and end of the maintenance period for the work and all connection to live mains charges;
 - (ii) a cost of carrying out temporary works or providing temporary infrastructure not forming part of the ultimate configuration of the Works Contribution;
 - (iii) a cost of the decommissioning, removal and rehabilitation works or temporary works or providing temporary infrastructure not forming part of the ultimate configuration of the Works Contribution;
 - (iv) any Infrastructure Contribution provided by Council or a person other than the Developer;
 - (v) a cost to the extent that GST is payable and an input tax credit can be claimed by the Developer;
 - (vi) a cost attributable directly or indirectly to the failure of a party to perform and fulfil this Agreement or a document provided for under this Agreement other than to the extent the failure is the result of a failure by Council to perform and fulfil this Agreement or the document provided for under this Agreement;
 - (vii) a cost caused or contributed to by a party's negligent or wilful act or omission;

Agreement means this agreement and includes any annexure, exhibit and schedule to this agreement;

Application means an application for an Approval;

Application Land means the land the subject of the Development Application which is:

- (a) the Shoreline Land;
- (b) the Other Land; and
- (c) the Prescribed Land;

Approval means a consent, permit, licence, certificate, authorisation, registration, membership, allocation or approval under a law and includes a development approval;

Approval Authority means an Authority under a law having the function to decide an Approval;

Authority means a government, semi-government, local government, statutory, public, ministerial, civil, administrative, fiscal or judicial body or other entity or body with relevant power or authority;

Balance Investigation Zone Land means land which is included in the Investigation Zone under the Planning Scheme in force as at the Commencement Date which is:

- (a) south of Redland Bay; and
- (b) not part of the Development Land;

Business Day has the meaning given to it in the *Acts Interpretation Act 1954* (Qld);

Calendar Day means from one midnight to the following one;

Claim means an allegation, debt, cause of action, liability claim, proceeding, suit or demand of any nature at law or otherwise, whether present or future, fixed or unascertained, actual or contingent;

Commencement Date means the date when the last party executes this Agreement;

Council means Redland City Council ABN 86 058 929 428;

CPI means the Consumer Price: All Groups Index for Brisbane, published by the Australian Bureau of Statistics or if that index is no longer published, then an index which in the Council's reasonable opinion is a similar index;

Cycle and Path Network Plan means the Cycle & Path Network Plan in the Development Approval which at the Commencement Date is Map CT9 dated 28 October 2015, included in Schedule 5 of this Agreement;

Developable Lot means an Initial Lot or a Subsequent Lot which is not a Developed Lot;

Developed Lot means a lot forming part of the Development Land which is:

- (a) provided with the infrastructure and services necessary to enable its use in accordance with the Development Entitlements; and
- (b) not intended to be the subject of:
 - (i) an Application for a material change of use; and
 - (ii) a further reconfiguring of a lot;

Developer means the party identified as the Developer in this Agreement;

Development Application means the development application described in Schedule 2;

Development Approval means a development approval given by the Council for the Development Application as described in Schedule 2, if an approval is given by Council;

Development Entitlements means the entitlements for the development of the Development Land in the Development Approval;

Development Land means the following:

- (a) the Shoreline Land;
- (b) the Other Land; and
- (c) if a Notice is given under clause 2.4(c), the Prescribed Land;

Development Obligations means an obligation under this Agreement to be performed and fulfilled by a party;

Financial Contribution means the provision of a monetary sum for infrastructure;

Force Majeure means an event:

- (a) being a Commonwealth or State government decree, an act of God, industrial disturbance, act of public enemy, war, international blockade, public riot, lightning, flood, earthquake, fire, storm or other physical or material restraint;
- (b) which is not within the reasonable control of the party claiming Force Majeure; and
- (c) which could not have been prevented by that party exercising a standard of knowledge, foresight, care and diligence consistent with that of a prudent and competent person under the circumstances;

Initial Lot means a lot comprising the Development Land at the Commencement Date;

Infrastructure Charging Instrument means a law or an instrument prepared under a law for the levying of a charge for development infrastructure;

Note: The Infrastructure Charging Instrument at the Commencement Date is Redland Adopted Infrastructure Charges Resolution (No. 2.1) 2014.

Infrastructure Contribution means a contribution for infrastructure which may be in the form of the following:

- (a) a Financial Contribution;
- (b) a Land Contribution;
- (c) a Work Contribution;

Investigation Zone Land means the Development Land and the Balance Investigation Zone Land;

Land Contribution means the provision of land including an easement for infrastructure;

Master Plan means the master plan for the Proposed Development approved in accordance with the requirements of the Development Approval which at the Commencement Date is drawing 14009_SK013[23] dated 1 October 2015, included in Schedule 5 of this Agreement;

Notice means a document to be given by a party or a person under this Agreement;

Other Land means the land stated in Schedule 2;

Owner means an owner of all or part of the Development Land for the time being;

Plan of Subdivision means a plan however called for reconfiguring a lot, which under a law requires the Approval in whatever form, of a local government before it can be registered or otherwise recorded under that law;

Planned Cost means the establishment cost of a Work Contribution stated in Schedule 3;

Planning Scheme means the Redlands Planning Scheme as amended, and any planning scheme that replaces it and applies to the Application Land;

Planning Scheme Policy 9 (Infrastructure Works) means Part 11 Policy 9 (Infrastructure Works) of the Planning Scheme, and any document that replaces it and applies to the Application Land;

Note: The Planning Scheme Policy 9 (Infrastructure Works) at the Commencement Date is Version 7 of the Planning Scheme.

Prescribed Approval Conditions means the conditions for an Approval of the Development Application in Schedule 4;

Prescribed Land means Lot 74 on S31102;

Priority Infrastructure Plan means Part 10 of the Planning Scheme and any instrument that replaces it including a Local Government Infrastructure Plan (**LGIP**);

Proposed Development means the development of the Development Land provided for in the Development Entitlements;

Shoreline Land means the land stated in Schedule 2;

SPA means the *Sustainable Planning Act 2009* (Qld);

Special Conditions means the special conditions in Schedule 1;

Subsequent Lot means a lot forming part of the Development Land which is not an Initial Lot;

Tax means the following:

- (a) a tax, levy, impost, deduction, charge or duty (including stamp and transactional duty) imposed under a law by an Authority, excluding GST;
- (b) any interest, penalty, fine and expense for a matter under paragraph (a);

Transferee means a person to whom the Developer proposes to sell a Developable Lot;

Water Network Map means the water network map in the Development Approval which at the Commencement Date is drawing W9 dated 11 November 2015, included in Schedule 5 of this Agreement;

Work Contribution means the provision of work for infrastructure;

Works means the works described in the Infrastructure Contributions Schedule in Schedule 3.

1.2 Undefined word

If a word is not defined in this Agreement, unless the context or subject matter otherwise indicates or requires, the word is to have a meaning given to it by the following:

- (a) SPA;
- (b) a relevant local planning instrument if the word is not defined in SPA;
- (c) the Macquarie Dictionary if the word is not defined in SPA or a relevant planning instrument.

1.3 Interpretation

In this Agreement, headings and bold type are for convenience only and do not affect the interpretation of this Agreement and, unless the context otherwise requires:

- (a) words importing the singular include the plural and vice versa;
- (b) words importing a gender include any gender;
- (c) other parts of speech and grammatical forms of a word or phrase defined in this Agreement have a corresponding meaning;
- (d) an expression importing a natural person includes any company, partnership, joint venture, association, corporation or other body corporate and any Government Agency;
- (e) a reference to any thing (including any right) includes a part of that thing but nothing in this clause 1.3(e) implies that performance of part of an obligation constitutes performance of the obligation;
- (f) a reference to a clause, party, annexure, exhibit or schedule is a reference to a clause of, and a party, annexure, exhibit and schedule to, this Agreement;
- (g) a reference to a statute, regulation, proclamation, ordinance or by-law includes all statutes, regulations, proclamations, ordinances or by-laws amending, consolidating or replacing it, whether passed by the same or another Government Agency with legal power to do so, and a reference to a statute includes all regulations, proclamations, ordinances and by-laws issued under that statute;
- (h) a reference to a document (including reference to the Development Approval if given by Council) includes all amendments or supplements to, or replacements or novations of, that document;
- (i) a reference to a party to a document includes that party's successors and permitted assigns;
- (j) a reference to an agreement other than this Agreement includes an undertaking, deed, agreement or legally enforceable arrangement in writing;
- (k) a reference to a document includes any agreement in writing, or any decision notice, other notice, certificate, instrument or other document of any kind;
- (l) all references to "\$" and "dollars" are to the lawful currency of Australia;
- (m) all references to dates and times are to Australian Eastern Standard Time;
- (n) a reference to a day is a Calendar Day;
- (o) no provision of this Agreement will be construed adversely to a party solely on the ground that the party was responsible for the preparation of this Agreement or that provision.

1.4 Inclusive expressions

Specifying anything in this Agreement after the words "includes" or "for example" or similar expressions does not limit what else is included unless there is express wording to the contrary.

1.5 Business Day

Where the day on or by which any thing is to be done is not a Business Day, that thing must be done on or by the next Business Day.

1.6 Trustee

A party which is a trustee is bound both personally and in its capacity as trustee.

2. Infrastructure Agreement

2.1 Application of Act

This Agreement constitutes an infrastructure agreement pursuant to section 670 of SPA.

2.2 Application of the Infrastructure Agreement

This Agreement applies to all development comprising the Proposed Development of the Development Land.

2.3 Agreement binding

The Developer consents to the Development Obligations contained in this Agreement attaching to the Development Land at the Commencement Date so as to bind, under section 674 of SPA, the Owner and the Owner's successors in title.

2.4 Owner's consent

The Developer warrants that:

- (a) it is not the Owner of the Development Land;
- (b) it has provided Council with a document evidencing the consent of the Owner of the Development Land to the Development Obligations specified in this Agreement being attached to the Development Land with such evidence being contained in Annexure A of this Agreement;
- (c) it consents to the Development Obligations specified in this Agreement being attached to the Prescribed Land once the Developer gives a Notice to the Council with a document evidencing the consent of the owner of the Prescribed Land to the Development Obligations specified in this Agreement being attached to the Prescribed Land.

2.5 Relationship to an Approval

If a Development Obligation is inconsistent with an Approval for the Proposed Development, the Development Obligation is to prevail to the extent of the inconsistency.

2.6 Relationship to a planning instrument

If a Development Entitlement or Development Obligation is affected by a change to a planning instrument, the parties are to in a manner which is as timely as is reasonably practicable:

- (a) confer with a view to reaching an agreement as to the affect the change has on a Development Entitlement and a Development Obligation;

- (b) if the parties agree that a Development Entitlement or Development Obligation is affected by the change, using their best endeavours, review the Development Obligations and negotiate in good faith and change this Agreement to put the parties in as near practical position as they would have been had it not been for the change to the planning instrument including where appropriate:
 - (i) the repayment of amounts paid and reimbursement of amounts expended under this Agreement;
 - (ii) changing or cancelling the Development Obligations if the Development Entitlements are changed without the consent of the Developer;
- (c) invoke the dispute resolution process under clause 12 if an agreement cannot be reached for a matter in clauses 2.6(a) and (b); and
- (d) have regard to the following in relation to a matter in clauses 2.6(a) and (b):
 - (i) this Agreement;
 - (ii) the intent of the parties in entering into this Agreement as stated in the recitals.

2.7 Relationship to an Infrastructure Charging Instrument

If a Development Obligation is inconsistent with an Infrastructure Charging Instrument, the Development Obligation is to prevail to the extent of the inconsistency.

2.8 No Fetter

Nothing in this Agreement is intended to fetter the discretion of the Council in relation to a decision about the Development Application or any further Application that may be made in respect of the Development Land.

3. Operation of the infrastructure agreement

3.1 Commencement of the Infrastructure Agreement

This Agreement is to be of no effect until the Commencement Date.

3.2 Development Application

- (a) The Council is to decide the Development Application in a manner which is as timely as is reasonably practicable.
- (b) The Developer is not to make a Claim against the Council other than as a respondent to a Claim made by another person, if the Council gives an Approval subject to the Prescribed Approval Conditions for the Development Application.
- (c) Clause 3.2(d) applies if the Council or an Authority:
 - (i) propose to change the Approval for the Development Application given by the Council; or
 - (ii) gives an Approval for the Development Application which is not subject to the Prescribed Approval Conditions.
- (d) The parties are to in a manner which is as timely as is reasonably practicable:

- (i) confer with a view to reaching an agreement as to the effect, if any, the change resulting from the event in clause 3.2(c) (**the prescribed change**) may have on a Development Entitlement and a Development Obligation;
 - (ii) if the parties agree that a Development Entitlement or Development Obligation may be affected by the prescribed change, use their best endeavours to review the Development Obligation, negotiate in good faith and change this Agreement to put the parties in as near as practical a position as they would have been had it not been for the prescribed change having regard to the intent of the parties in entering into this Agreement as stated in the recitals;
 - (iii) invoke the dispute resolution process under clause 12 if an agreement cannot be reached for a matter in clauses 3.2(c)(i) and(ii);
 - (iv) in respect of clause 3.2(c)(i) use their reasonable endeavours to ensure that the prescribed change is not made under SPA until clauses 3.2(c)(i) to (iii) are performed and fulfilled.
- (e) For the avoidance of doubt, clause 3.2(b) does not prevent the Developer making an Application to the Council for change to an Approval for the Development Application given by the Council.

3.3 Termination of the infrastructure agreement

- (a) A party may give to each other party a Notice which states that it proposes to terminate this Agreement if one of the following events has occurred:
- (i) the Council in deciding the Development Application does not give an Approval subject to the Prescribed Approval Conditions or conditions which are materially similar to the Prescribed Approval Conditions;
 - (ii) the Development Entitlements:
 - (A) do not take effect under SPA; or
 - (B) cease to have effect under SPA;
 - (iii) the parties agree as follows:
 - (A) the Proposed Development has been completed and the Development Obligations have been performed and fulfilled;
 - (B) to terminate this Agreement;
 - (iv) the parties agree as follows:
 - (A) that the performance and fulfilment of this Agreement has been frustrated by an event outside of the control of the parties;
 - (B) to terminate this Agreement.

- (b) A party may at a date, which is 20 Business Days after the giving of the Notice under clause 3.3(a), give to each other party a Notice which states that this Agreement is terminated.
- (c) Prior to a party acting under clause 3.3(a)(i), one of the following events must have occurred:
 - (i) if the Development Entitlements have not taken effect under SPA:
 - (A) the Development Application is withdrawn under section 356(1) of SPA; or
 - (B) the resolution of any proceeding in the Planning and Environment Court involving the Development Application to the effect that the Development Application is withdrawn, set aside or otherwise not permitted to proceed;
 - (ii) if the Development Entitlements have taken effect under SPA:
 - (A) the Developer has made a request to cancel the Development Approval under SPA including obtaining the consent of all owners of the Application Land to the making of that request; and
 - (B) Council has, as required by section 381 of SPA, cancelled the Development Approval and given the requisite notice;
 - (iii) Council does not give an Approval.

4. Obligations of parties

4.1 The Developer's obligations

The Developer will, at its own cost comply with the Special Conditions and the Infrastructure Contributions Schedule in Schedule 3 on the later of the following:

- (i) the Commencement Date; or
- (ii) the date the Development Entitlements take effect.

4.2 Council's obligations

Council will at its own cost, comply with the Special Conditions and the Infrastructure Contributions Schedule in Schedule 3 on the later of the following:

- (a) the Commencement Date;
- (b) the date the Development Entitlements take effect.

5. Dealing in respect of the Development Land

5.1 Reconfiguring of the Development Land

- (a) If the Development Land is subject to reconfiguring of a lot to create a Developed Lot, then a Development Obligation no longer:
 - (i) remains attached to the Developed Lot; and
 - (ii) binds the Owner of the Developed Lot.

- (b) If the Development Land is subject to a reconfiguring of a lot to create a Developable Lot, then a Development Obligation:
 - (i) remains attached to the Developable Lot; and
 - (ii) binds the Owner of the Developable Lot.

5.2 Dealing with the Development Land

- (a) The Developer is not to sell a Developable Lot to a Transferee unless the Developer and the Transferee have executed one of the following documents:
 - (i) a document in which the Transferee covenants and agrees to the following:
 - (A) that the Developable Lot is subject to this Agreement;
 - (B) that a Development Obligation in respect of a Developable Lot (**Prescribed Development Obligation**) may be unperformed and unfulfilled;
 - (C) that a Prescribed Development Obligation attaches to the Developable Lot and binds a future Owner;
 - (D) that the Owner of the Developable Lot is liable to the Council to perform and fulfil a Prescribed Development Obligation which remains unperformed and unfulfilled;
 - (ii) a deed in which the Transferee becomes contractually bound to the Council to perform and fulfil the Prescribed Development Obligation.
- (b) However, clause 5.2(a) does not prevent the Developer from entering into an agreement for the sale of a Developable Lot which is conditional upon compliance with the matters stated in clause 5.2(a).
- (c) For the avoidance of doubt:
 - (i) clause 5.2(a) does not apply to a sale by an Owner of the Development Land of a Developable Lot to the Developer;
 - (ii) if the Developer and the Transferee execute a document under clause 5.2(a)(i), the Developer does not cease being liable to the Council to perform and fulfil a Prescribed Development Obligation which remains unperformed and unfulfilled;
- (d) The Developer must provide Council with an original copy of all documents and deeds which are required to be executed under this clause within 10 Business Days of execution.

6. Compliance with a Development Obligation

6.1 Works

Without limiting the Developer's obligations under this Agreement or otherwise, the Developer warrants that it will carry out the Works (or cause the Works to be carried out):

- (a) in a proper and workmanlike manner in accordance with:
 - (i) legislative requirements;
 - (ii) codes of practice;
 - (iii) Australian and Main Roads standards;
 - (iv) the requirements of the applicable Planning Scheme Policies including Policy 9 – Infrastructure Works – Chapter 5 – Road and Path Design; and
 - (v) the approved plans and specifications;
- (b) with due diligence and without delay;
- (c) with the standard of skill, care and diligence in the performance of the Works that would be expected of a provider of work and services of a nature similar of the Works; and
- (d) such that all registrations, permits, licences, qualifications and other requirements of its trade are in full force and effect at all times.

6.2 Approval of Specifications

- (a) All designs and specifications for the Works which the Developer is obliged to do (including, without limiting the generality, the specification of all filling, excavation and other earthworks and the final design and specification for the Works) must be prepared by the Developer and submitted for the approval of any Authority as required by law.
- (b) The Developer must not commence the Works before the Developer has obtained all necessary Approvals, including the Development Approval if given by the Council.

6.3 Final Specification of Works

- (a) The Works must be done to the satisfaction of the Council, acting reasonably, in the interpretation and application of this clause:
 - (i) it is recognised that some provisions of this Agreement do provide a particular specification for the Works and, in some cases do show diagrammatically and in an indicative way the location of the Works on plans or diagrams;
 - (ii) a specification or location has been determined on the basis of present knowledge and expectation as to circumstances which will prevail at the time the Works are to be carried out; and
 - (iii) the circumstances actually prevailing at the relevant time may result in it being necessary or appropriate to adopt a different specification or vary the location for the final design or performance of the Works.
- (b) The inclusion of a particular specification in this Agreement or the depiction of the location of the Works on a plan within the Agreement does not prevent the Developer from seeking Approval to an altered specification or location and does not prevent the Council from giving Approval where an alteration is necessary or appropriate having regard to the circumstances prevailing at the relevant time.

- (c) An Approval under clause 6.3(b) shall not be unreasonably withheld or delayed by the Council.

6.4 Notice of Completion

Upon effective completion of the Works, the Developer must require inspection and Approval of the works by the Council by giving a Notice in that regard.

6.5 On Maintenance

On maintenance requirements and acceptance of infrastructure shall be in accordance with the Planning Scheme requirements.

6.6 Right of access

- (a) The Developer is to, upon the receipt of a Notice given by the Council to the Developer which states that access is requested to any part of the Development Land, permit or facilitate the Council to have access to the land for the following:
 - (i) examining and inspecting the state and condition of any Works, including preparation for work;
 - (ii) ascertaining whether Development Obligations of the Developer have been performed and fulfilled; or
 - (iii) performing any Works which the Council has agreed or is empowered to perform.
- (b) The Council is to, upon the receipt of a Notice given by the Developer to the Council which states that access is requested to land of which the Council is the Owner or which is under the control of the Council, permit the Developer to have access to the land for the performance and fulfilment of a Development Obligation.
- (c) If the Council exercises its powers referred to in this clause it is to be taken to have indemnified the Developer against all claims for or injury to persons or loss or damage to property as a result of the negligent act or omission of Council officers or agents authorised by the Council are on the Development Land except where such claims arise from or in connection with the Developer's negligence or breach of duty.

6.7 Exercise of a right of access

- (a) A right of access includes the following:
 - (i) a right to bring machinery, equipment and materials onto the relevant land;
 - (ii) a right to effect and install Work which is required and authorised to be performed and fulfilled.
- (b) A party exercising a right of access is:
 - (i) to exercise reasonable care so as not to cause damage or injury to property or a person;
 - (ii) taken to be an invitee of the owner and the occupier of the relevant land; and

- (iii) to promptly rectify any damage caused to property.

7. Insurance

7.1 Insurances to be effected

The Developer must effect and maintain, or cause to be effected and maintained:

- (a) public and third party liability insurance covering:
 - (i) claims in respect of:
 - (A) damage to any real or personal property including property owned by Council; and
 - (B) the injury to, or death of, any person;
 - (C) caused by the carrying out of the Works;
 - (ii) for at least \$20 million per claim;
 - (iii) note the interests of Council and also protects all subcontractors and agents engaged in connection with the performance of the Works and the Developer's other obligations under this Agreement;
 - (iv) for the duration of the carrying out of the Works;
 - (v) on terms and with an insurer approved by Council, acting reasonably;
- (b) insurance of the Works for their full replacement value in the joint names of Council and the Developer;
- (c) worker's compensation insurance:
 - (i) in accordance with all laws; and
 - (ii) for the duration of the carrying out of the Works;
- (d) compulsory third party liability insurance:
 - (i) for registered vehicles owned or leased by the Developer, in accordance with the requirements of any compulsory motor vehicle third party legislation;
 - (ii) which provides protection to Council arising out of the use of the Developer's vehicles in addition to the Developer; and
 - (iii) for the duration of the carrying out of the Works;
- (e) property damage liability insurance:
 - (i) covering all motor vehicles owned, leased or hired by the Developer used in connection with the Works or the Developer's other obligations under this Agreement including the use of unregistered motor vehicles and plant;
 - (ii) with a limit of not less than \$20 million;
 - (iii) for the duration of the duration of the carrying out of the Works.

7.2 Requirements of Insurance

- (a) The Developer must pay all deductibles in relation to the above insurances.
- (b) Whenever requested by Council, the Developer must provide to Council, evidence to Council's satisfaction of its compliance with this clause 7.
- (c) Evidence under clause 7.2(b) may, if requested by Council, include a full copy of the insurance policy document.

8. Indemnity

- (a) Without limiting any other right or remedy of Council, the Developer indemnifies Council against a claim by a third party (including the Developer's employees, agents, and contractors) or costs (including legal costs), fines, penalties, losses and damages suffered or incurred by Council arising in respect of a matter under this Agreement applicable to the Developer directly or indirectly out of or in connection with the Developer's (or its employees, agents or contractors):
 - (i) breach of this Agreement; or
 - (ii) intentional act or omission; or
 - (iii) negligent act or omission.
- (b) The indemnity in this clause 8 will be reduced proportionately to the extent that a negligent act or omission of Council contributed to the liability, costs, fines, penalties, losses or damages.
- (c) Until such time as the Developer gives a Notice to the Council under clause 2.4(c) that the owner of the Prescribed Land consents to the Development Obligations specified in this Agreement being attached to the Prescribed Land, the Developer indemnifies Council for any costs (including legal costs), losses and damages suffered or incurred by Council arising in respect of any of the following:
 - (i) a third party making an Application to convert development infrastructure under section 659(1) of the SPA (or any similar process under subsequent legislation) for the development of the Prescribed Land provided for in the Development Approval;
 - (ii) an offset applied or the payment of any refund arising out of any approval of the Application referred to in clause 8(c)(i).
- (d) The Council is to act reasonably to minimise the amount of any indemnity payable by the Developer to the Council under clause 8(c).
- (e) To remove any doubt, clause 8(b) does not limit Council's future discretion in relation to a decision about an Application involving the Application Land.
- (f) All obligations to indemnify under this Agreement survive termination of this Agreement.

9. Workplace Health and Safety

- (a) Words in inverted commas in this clause 9 have the meaning given to them in the *Work Health and Safety Act 2011* (Qld) (**Act**) and the *Work Health and Safety Regulation 2011* (Qld).

- (b) Where the Act requires the appointment of a "principal contractor" for the Works:
 - (i) the Developer (as "person conducting a business or undertaking" for the "construction works") must procure that the contractor carrying out the Works is appointed as the "principal contractor" for the Works;
 - (ii) if the Developer does not comply with clause 9(b)(i) the Developer will be deemed to be the "principal contractor" for the Works; and
 - (iii) the Developer must cooperate with Council, and must ensure that any subcontractors or other persons engaged to perform any of the Works cooperate with Council, to enable Council to comply with its obligations under any safety law.

10. INDEXATION

10.1 Application of this clause

This clause applies to an amount stated or calculated under this Agreement other than an amount which is stated not to be indexed.

10.2 Indexation of an amount

An amount is to be indexed in accordance with the following formula:

$$IA = A \times \frac{\text{Index Number (Later Period)}}{\text{Index Number (Base Period)}}$$

where:

IA is the indexed amount.

A is the amount to be indexed.

Index Number is the number in the index stated in Schedule 2.

Base Period is the period stated in Schedule 2.

Later Period is the period stated in Schedule 2.

11. GST

11.1 Definition – GST

GST means a tax that is payable under the GST Law and imposed as a goods and services tax by any of the following:

- (a) the *A New Tax System (Goods and Service Tax Imposition – General) Act 1999*;
- (b) the *A New Tax System (Goods and Service Tax Imposition – Customs) Act 1999*;
- (c) the *A New Tax System (Goods and Service Tax Imposition – Excise) Act 1999*;
- (d) Regulations related to any of these Acts;
- (e) any amendment to any of these Acts or regulations or both or any other Act by any of the Commonwealth, State or Territory Governments which imposes a

goods and services tax, a broad based consumption tax, value added tax, retail turnover tax or a tax of a similar nature.

11.2 Definition – GST Law

GST Law has the meaning given by Section 195-1 of the *A New Tax System (Goods and Services Tax) Act 1999*.

11.3 Goods and Services Tax

- (a) All Payments specified in this Agreement are exclusive of GST.
- (b) If the supplier of a supply is liable under the GST Law for any GST on that supply, the recipient must pay to the supplier instead of the Payment for that supply, an amount (the Adjusted Payment) calculated in accordance with the following formula:

$$AP = P + (P \times R)$$

Where:

AP is the Adjusted Payment;

P is the Payment; and

R is the rate of goods and services tax specified in the *A New Tax System (Goods and Services Tax Imposition – General) Act 1999*.

- (c) The recipient must pay to the supplier the Adjusted Payment calculated under clause 11.3(d) at the same time as the recipient is required to pay the Primary Payment under this Agreement.
- (d) The supplier must issue to the recipient a Tax Invoice in respect of each payment made under clause 11.3 on the payment being made.
- (e) If the supplier refunds to the recipient any amount under this Agreement, the supplier must also issue to the recipient an Adjustment Note in respect of the refund.

12. Dispute Resolution

12.1 First Determination Notice

When a party decides to refer a dispute for determination by a person (**Determinator**) it must do so by a Notice (**First Determination Notice**) to the other party.

12.2 Contents of Notice

The First Determination Notice must specify the following:

- (a) the name, address and occupation of a specific determinator (the Nominated Determinator); and
- (b) a nomination of a specified class of determinators, being one of the classes specified in the left column of the paragraphs in clause 12.6; and
- (c) complete particulars of the dispute or difference to ensure that all expert determinations under this Agreement, can be expeditiously and fully completed.

12.3 Second Determination Notice

Unless within 14 days of receipt of the First Determination Notice, the other party gives a Notice (**Second Determination Notice**) to the party giving the First Determination Notice, the Nominated Determinator must be the Determinator.

12.4 Default Appointment

The Second Determination Notice may reject the Nominated Determinator but accept the specific class of determinator specified in the First Determination Notice, in which event the Determinator must be:

- (a) a member of the class of persons specified in the First Determination Notice; and
- (b) appointed by the president of the appropriate institute or association in accordance with the relevant part of clause 12.6.

12.5 President to Appoint

If the Second Determination Notice rejects the specific class of Determinator specified in the First Determination Notice, the question of the appropriate class of Determinator must be referred, at the request of any party, to a mediator appointed by the President for the time being of the Queensland Law Society Inc., whose decision as to the class of persons from which the Determinator will be appointed, must be final and binding upon the parties, and either party may request the president of the appropriate institute or association to appoint the Determinator.

12.6 Classes of Determinator

Failing agreement to the contrary, where any dispute or difference is referred for determination, the Determinator must be appointed by one of the following institutes or associations as is appropriate in the circumstances:

- (a) if an architect: by the President for the time being of the Australian Institute of Architects, Queensland Chapter; or
- (b) if a real estate agent: by the President for the time being of the Real Estate Institute of Queensland; or
- (c) if a quantity surveyor: by the President for the time being of the Institute of Engineers, Australia, Queensland Chapter; or
- (d) if an engineer: by the President for the time being of the Institution of Engineers, Australia, Queensland Chapter; or
- (e) if a mediator: by the President for the time being of the Institute of Arbitrators Australia, Queensland Chapter; or
- (f) if an accountant: by the President for the time being of the Institute of Chartered Accountants, Queensland Division; or
- (g) if an actuary: by the President for the time being of the Actuaries Institute of Australia, Queensland Division; or
- (h) if a valuer: by the President for the time being of the Australian Property Institute, Queensland Division.

In each case being a Determinator experienced in work involving residential subdivisions.

12.7 Parties to Use Best Endeavours

When any dispute or difference has been referred for determination, the parties must each:

- (a) use their best endeavours to make available to the Determinator all facts and circumstances which the Determinator requires in order to settle or determine the dispute or difference; and
- (b) ensure that their respective employees, agents or consultants are available to appear at any hearing or enquiry called for, by the Determinator.

12.8 Right to be Heard

The parties each have the right to:

- (a) make submissions to the Determinator; and
- (b) be heard by the Determinator.

12.9 Determinator's Decision

The decision of the Determinator must be made and delivered to the parties within a period of 5 Business Days (or such other period as the parties may agree, or the Determinator may determine) after the date of submission of the dispute or difference to the Determinator.

12.10 Determinator may Appoint other Expert to Assist

- (a) The Determinator may with the consent of the parties (and must if required by a party) appoint any other expert (being a member of an institute or association specified in clause 12.6) to consult with, assist and advise the Determinator.
- (b) The cost of an expert appointed pursuant to paragraph (a) is deemed to form part of the determination costs and expenses.

12.11 Determinator to Act as an Expert

The Determinator must act as an expert, not as an arbitrator, and his decision will be final and binding upon the parties.

12.12 Costs of Determination

The Determinator must also determine:

- (a) the amount of costs and expenses of, and relating to, the reference of any dispute or difference to him; and
- (b) which party or parties must bear the costs and expenses, and in what shares, and in making the determination, the Determinator must take into account the reasonableness of the parties leading up to the expert determination.

12.13 Conduct Pending Expert Determination

In the event of any dispute being referred for the decision of an independent expert as provided under clause 12.6:

- (a) if it is possible to do so, the construction of the Works must proceed pending the decision; and
- (b) if either party is challenging any payment claimed by the other:
 - (i) so much of that payment (as is admitted to owing) must be paid immediately; and
 - (ii) an appropriate adjustment must be made within 14 Business Days of the expert's decision.

13. Force Majeure

13.1 Notice of Force Majeure

If a party is unable by reason of Force Majeure to perform and fulfil an obligation, the party is to, as soon as is reasonably practicable after the Force Majeure, give to each other party a Notice which states the following:

- (a) that Force Majeure is in existence;
- (b) full particulars of the Force Majeure.

13.2 Suspension of an Obligation

An obligation of a party so far as it is affected by Force Majeure is suspended during the following:

- (a) the continuance of Force Majeure;
- (b) a further period which is reasonable in the circumstances.

13.3 Removal or amelioration of Force Majeure

The party giving a Notice of Force Majeure is to, as soon as is reasonably practicable, use its best endeavours to remove the Force Majeure or ameliorate its effect.

13.4 Dispute resolution process to apply

If the parties are unable to agree on the existence of a party's Force Majeure or the period during which an obligation is suspended during the continuance of Force Majeure the dispute is to be resolved under clause 12.

14. General

14.1 Severance

If any clause or provision of this Agreement is void, illegal or unenforceable for any reason, that clause or provision will be severed from this Agreement and the remaining clauses and provisions will continue in full force and effect.

14.2 Payment of costs

- (a) Subject to clause 14.2(b), the Developer must pay all costs, charges and expenses, including those of Council, of and incidental to the negotiation, preparation and execution of this Agreement or counterparts of it, and any other document or instrument required under this Agreement.
- (b) The parties agree that the costs, charges and expenses for the purposes of clause 14.2(a) are fixed at \$83,000 inclusive of GST (**Council's Fixed Costs**).
- (c) If the Council issues a Development Approval, the Developer must pay Council's Fixed Costs within 90 days of the Development Entitlements taking effect.

14.3 Tax

The Developer is liable for and is to pay on demand by a Notice given by the Council to the Developer the Council's costs for a Tax (other than if it arises from the default by the Council) for the following in respect of the Developer:

- (a) this Agreement;
- (b) a document for an Infrastructure Contribution;
- (c) a document provided for under this Agreement;
- (d) a transaction evidenced, effected or contemplated by this Agreement or a document referred to in paragraphs (a) to (c).

14.4 Notices

- (a) Any Notice or other communication including any request, demand, consent or approval, to or by a party to this Agreement:
 - (i) must be in legible writing and in English addressed to:
 - (A) if to the Developer:

Attention: Garry Hargrave
Address: PO Box 649
Cleveland QLD 4163

Facsimile No: (07) 3821 2804
 - (B) if to Redland City Council:

Attention: General Counsel
Address: Corner Bloomfield & Middle Streets
Cleveland QLD 4163

Facsimile No: (07) 3829 8765
 - (ii) must be signed by an authorised officer of the sender or the solicitors for the sender;
 - (iii) is regarded as being given by the sender and received by the addressee:
 - (A) in the case of delivery by hand, on the day of delivery if delivered by 5pm on a Business Day, or otherwise on the next Business Day;

- (B) in the case of delivery by post, on the day when, by the ordinary course of post, it would have been delivered;
 - (C) in the case of a facsimile, whether or not legibly received, on the day shown on the facsimile transmission report produced by the machine from which the facsimile was sent which indicates that the facsimile was sent in its entirety to the facsimile number of the addressee notified for the purpose of this clause, but if the time of transmission is after 5pm on the Business Day that the facsimile is taken to have been received, on the following Business Day; and
- (iv) can be relied upon by the addressee and the addressee is not liable to any other person for any consequence of that reliance if the addressee believes it to be genuine, correct and authorised by the sender.
- (b) A facsimile transmission is regarded as legible unless the addressee telephones the sender within 2 hours after transmission is received or regarded as received under clause 14.4(a)(iii)(C) and informs the sender that is not legible.
- (c) In this clause 14.4, a reference to an addressee includes a reference to an addressee's officers, agents or employees.

14.5 Jurisdiction

- (a) This Agreement is governed by the laws of Queensland.
- (b) Each of the parties irrevocably submits to the exclusive jurisdiction of the Courts of Queensland.

14.6 Waivers

- (a) Waiver of any right arising from a breach of this Agreement or of any right, power, authority, discretion or remedy arising upon default under this Agreement must be in writing and signed by the party granting the waiver.
- (b) A right, power, authority, discretion or remedy is not waived if there is a failure or delay in exercise, or partial exercise, of:
 - (i) a right arising from a breach of this Agreement; or
 - (ii) a right, power, authority, discretion or remedy created or arising upon default under this Agreement.
- (c) A party is not entitled to rely on a delay in the exercise or non-exercise of a right, power, authority, discretion or remedy arising from a breach of this Agreement or on a default under this Agreement as constituting a waiver of that right, power, authority, discretion or remedy.
- (d) A party may not rely on any conduct of another party as a defence to exercise of a right, power, authority, discretion or remedy by that other party.
- (e) This clause may not itself be waived except by writing.

14.7 Variation

- (a) The parties may at any time agree to change, review or replace this Agreement.

- (b) The parties may agree the circumstances and the manner in which a change, review or replacement of this Agreement is to be conducted.
- (c) A change, review or replacement of this Agreement must be in writing and signed by the parties.

14.8 Cumulative rights

The rights, powers, authorities, discretions and remedies arising out of or under this Agreement are cumulative and do not exclude any other right, power, authority, discretion or remedy of a party.

14.9 Further assurances

Each party must do all things and execute all further documents necessary to give full effect to this Agreement.

14.10 Entire agreement

This Agreement supersedes all previous agreements in respect of its subject matter and embodies the entire agreement between the parties in respect of its subject matter.

14.11 Time of the essence

Time is of the essence of this Agreement.

Schedule 1 Special Conditions

1. Infrastructure Contribution for the Proposed Development

1.1 Limit of Infrastructure Contributions

The Developer is to provide the following Infrastructure Contributions for the Proposed Development:

- (a) in respect of sewerage infrastructure, the Land Contributions and Work Contributions for sewerage infrastructure specified in the Special Conditions and the Infrastructure Contributions Schedule in Schedule 3;
- (b) in respect of water supply infrastructure:
 - (i) the Land Contributions and Work Contributions for water supply infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3;
 - (ii) a Financial Contribution under the Infrastructure Charging Instrument for the Proposed Development for water supply infrastructure;
- (c) in respect of transport infrastructure being local roads:
 - (i) the Land Contributions and Work Contributions for the major collector road specified in the Infrastructure Contributions Schedule in Schedule 3;
 - (ii) a Financial Contribution under the Infrastructure Charging Instrument for the Proposed Development for local road infrastructure other than for the first 406 Developed Lots within the Shoreline Land which is calculated based on a charge for the infrastructure network of \$9,800 per lot;
- (d) in respect of transport infrastructure being cycleways:
 - (i) the Land Contributions and Work Contributions for trunk cycleways infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3;
 - (ii) a Financial Contribution under the Infrastructure Charging Instrument for the Proposed Development for cycleways infrastructure other than:
 - (A) for the first 1,407 Developed Lots within the Shoreline Land which is calculated based on a charge for the infrastructure network of \$4,200 per lot;
 - (B) for the first 34 Developed Lots within Lot 2 on RP140163 which is calculated based on a charge for the infrastructure network of \$4,200 per lot;
- (e) in respect of public parks infrastructure, the Land Contributions and Work Contributions for public parks infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3;
- (f) in respect of land for community facilities infrastructure:
 - (i) the Land Contributions and Work Contributions for community facilities infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3;

- (ii) a Financial Contribution under the Infrastructure Charging Instrument for the Proposed Development other than for the first 2,077 Developed Lots within the Shoreline Land which is calculated based on a charge for the infrastructure network of \$840 per lot;
- (g) in respect of stormwater infrastructure, the Land Contributions and Work Contributions for stormwater infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3;
- (h) in respect of marine infrastructure, the Financial Contributions, Land Contributions and Work Contributions for marine infrastructure specified in the Infrastructure Contributions Schedule in Schedule 3.

1.2 No further Infrastructure Contributions

- (a) The Developer is not required to make any Infrastructure Contributions for the Proposed Development other than the following:
 - (i) the Infrastructure Contributions specified in Special Condition 1.1;
 - (ii) a Work Contribution or Land Contribution not stated in Special Condition 1.1(a) which:
 - (A) is not for development infrastructure that is identified as trunk infrastructure in the Planning Scheme or otherwise complies with the identified trunk infrastructure criteria stated in Schedule 5 of the Infrastructure Charging Instrument at the Commencement Date; and
 - (B) is necessary to service only the Proposed Development of the Development Land; and
 - (C) is the most efficient and cost effective solution for servicing only the Proposed Development of the Development Land.
- (b) However, the value of an offset under Special Conditions 1.1(c), 1.1(d) or 1.1(f) may be reviewed and adjusted by the Council acting reasonably if the Planned Cost of providing the relevant Infrastructure Contribution the subject of the offset exceeds the Actual Cost of its provision.
- (c) The Developer must provide details of the Actual Cost of providing the relevant Infrastructure Contribution the subject of an offset under Special Conditions 1.1(c), 1.1(d) or 1.1(f) upon receiving a written request from Council.
- (d) If the Council proposes to adjust the amount of an offset under Special Condition 1.2(b), the Council is to give the Developer a Notice containing detailed reasons and calculations supporting the adjustment at least 20 Business Days prior to the adjustment being made.

1.3 Benefited area for sewerage, public parks and marine infrastructure

- (a) This clause applies where the Infrastructure Contributions to be provided by the Developer for sewerage infrastructure, public parks or marine infrastructure under Special Condition 1.1 situated on (or will be situated on) land owned by, or under the control of Council and service part of the Balance Investigation Zone Land (**Benefited Area**).

- (b) The Council is to, so far it is within its legal power to do so, require the development of the Benefited Area to make to the Council a Financial Contribution for:
 - (i) sewerage infrastructure and public parks infrastructure under the Infrastructure Charging Instrument;
 - (ii) for marine infrastructure under item 8.1 of the Infrastructure Contributions Schedule in Schedule 3.
- (c) The Council agrees to pay the Developer the Financial Contribution received by the Council under Special Condition 1.3(b) up to an amount which is proportional to the cost of the sewerage infrastructure, public parks infrastructure or marine infrastructure that services the Benefited Area.
- (d) A payment by the Council to the Developer under Special Condition 1.3(c) is to be made annually by 30 September in the financial year following the collection of the Financial Contribution.

1.4 Offsets, refunds and conversions

- (a) Except as provided for in this Agreement, the Developer is not to take any action under SPA for the following:
 - (i) the application of an offset against a Financial Contribution required by the Council for an Infrastructure Contribution for the Proposed Development of the Application Land (**Infrastructure Offset**);
 - (ii) the payment of a refund or other monetary payment by the Council for the provision of an Infrastructure Contribution for the Proposed Development of the Application Land (**Infrastructure Refund**);
 - (iii) an Application to convert development infrastructure to be provided by the Developer for the Proposed Development of the Application Land from non-trunk infrastructure to trunk infrastructure.
- (b) The Developer is not to vest the benefit of the Development Application in any other person.

1.5 Connection of Work Contributions

- (a) The Development Obligations in this Special Condition 1.5 apply until such time as the Developer gives a Notice to Council under clause 2.4(c) that the owner of the Prescribed Land consents to the Development Obligations specified in this Agreement being attached to the Prescribed Land.
- (b) Despite anything in this Agreement to the contrary, the Developer is not to connect a Work Contribution identified in the Infrastructure Contributions Schedule in Schedule 3 to the boundary of the Prescribed Land if the owner of the Prescribed Land has not agreed with the Council by way of an infrastructure agreement to not take any action under SPA for the following (**the Prescribed Land Agreement**):
 - (i) the application of an offset against a Financial Contribution required by the Council for an Infrastructure Contribution for the development of the Prescribed Land provided for in the Development Approval;

- (ii) the payment of a refund or other monetary payment by the Council for the provision of an Infrastructure Contribution for the development of the Prescribed Land provided for in the Development Approval; and
 - (iii) an Application to convert development infrastructure to be provided for the development of the Prescribed Land provided for in the Development Approval from non-trunk infrastructure to trunk infrastructure.
- (c) If the Council gives a Notice to the Developer containing a copy of the Prescribed Land Agreement, the Developer is to as soon as reasonably practicable connect to the boundary of the Prescribed Land any Work Contribution that was not connected to the boundary of the Prescribed Land as a result of Special Condition 1.5(a).

2. Work Contribution for sewerage infrastructure

2.1 Tankering Operations

- (a) In this Special Condition 2.1 and the Infrastructure Contributions Schedule in Schedule 3:

Collection Point means the point for collection of sewerage from the Tankering Facility;

Equivalent Person (EP) means the demand placed on the sewerage infrastructure by one person;

Tankering Contractor means a licensed sewerage tankering contractor agreed in writing by the Council and the Developer acting reasonably;

Tankering Facility means the sewage collection and storage facility located on the Tankering Facility Land and includes all other works and facilities necessary to collect and store sewage from the Proposed Development;

Tankering Facility Land means the land within the Development Land, on which the Tankering Facility is to be located;

Tankering Management Plan means the tankering management plan approved by the Council under Special Condition 2.1(c);

Tankering Operations means all works, services or acts carried out in the operation of the Tankering Facility including the removal of sewage from the Tankering Facility by the Tankering Contractor;

- (b) The parties agree that the Proposed Development may be serviced by way of the Tankering Operations until the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 200th dwelling within the Development Land.
- (c) The Developer is to, prior to the commencement of the Tankering Operations, submit and obtain approval from the Council, which is not to be unreasonably withheld, for a tankering management plan for the Tankering Facility and the Tankering Operations, which identifies and addresses the following:
- (i) details of the Tankering Operations;
 - (ii) the location of the Tankering Facility;

- (iii) matters to be included in any contract with the Tankering Contractor for the carrying out of the Tankering Operations;
 - (iv) a tankering schedule for projected sewerage loads;
 - (v) design and storage capacity of the Tankering Facility and response times;
 - (vi) monitoring, warning systems and reporting of the Tankering Facility and the Tankering Operations;
 - (vii) environmental safeguards;
 - (viii) odour emission control measures;
 - (ix) emergency procedures;
 - (x) decommissioning of the Tankering Facility.
- (d) The Developer is to, in carrying out the Tankering Operations in item 1.3 of the Infrastructure Contributions Schedule in Schedule 3:
- (i) maintain the Tankering Facility and comply with the Tankering Management Plan;
 - (ii) ensure that all sewage is collected by the Tankering Contractor from the Collection Point and discharged at a licensed and approved sewage treatment facility;
 - (iii) meet all costs associated with the Tankering Facility and the Tankering Operations including any Claim or expenses associated with the disposal of sewage and any overflow incidents from the Tankering Facility or upstream sewer;
 - (iv) provide to the Council a security in the amount of \$928,920 in a form to the reasonable satisfaction of the Council to secure the connection of the Development Land to the Council's sewerage collection, treatment and disposal system in the event that item 1.5 of the Infrastructure Contributions Schedule in Schedule 3 is not provided in accordance with this Agreement;
 - (v) indemnify the Council from time to time against any Claim or the costs associated with the Tankering Facility and the Tankering Operations.
- (e) The Council is to:
- (i) accept sewage from the Tankering Operations at a Council sewage treatment facility for no charge;
 - (ii) release and return to the Developer the security provided to it under Special Condition 2.1(d)(v) within 30 Business Days after item 1.5 of the Infrastructure Contributions Schedule in Schedule 3 is provided.

2.2 Infrastructure to collect and treat sewage from the Proposed Development

The Council is to in relation to an Application for the infrastructure identified in items 1.5 and 1.6 of the Infrastructure Contributions Schedule in Schedule 3:

- (a) give to the Developer as soon as reasonably practicable any necessary owner's consent to the making of the Application in respect of land which is owned by the Council;
- (b) provide to the Developer any reasonable assistance to enable the Developer to make the Application.

Schedule 2 Development Details

1. Development Details

1.1 Development Application means:

Development Application Number, development type and description	Council Project Number	Date Approved
MCU013287 - Preliminary approval affecting the planning scheme for material change of use for mixed use development.	LCM5005	Not applicable.

1.2 Shoreline Land means the following land:

Address	Lot	Plan Number	Area (Ha)	Owner
156 Serpentine Creek Road, Redland Bay	8	R1291	3.237	HG Associates Pty Ltd Trustee under nomination E95643
170 Serpentine Creek Road, Redland Bay	69	S31102	10.092	HG Associates Pty Ltd Trustee under nomination E95643
194 Serpentine Creek Road, Redland Bay	70	S31102	9.105	HG Associates Pty Ltd Trustee under nomination E95643
218 Serpentine Creek Road, Redland Bay	71	S31102	7.993	HG Associates Pty Ltd Trustee under nomination E880975
238 Serpentine Creek Road, Redland Bay	72	S31102	8.498	Redland Bay South Park Corp Pty Ltd ACN 099 921 070
260 Serpentine Creek Road, Redland Bay	73	S31102	9.712	Wilcarn Pty Ltd ACN 101 566 385
304 Serpentine Creek Road, Redland Bay	1	RP133830	8.134	Rhondda Lenore Devin and Phillip John Devin
338 Serpentine Creek Road, Redland Bay	3	RP105915	4.165	Southern View Investments Pty Ltd ACN 125 770 229
326 Serpentine Creek Road, Redland Bay	4	RP105915	4.047	South Developments Pty Ltd ACN 095 767 776
275-325 Serpentine Creek Road, Redland Bay	11	SP268704	101.3839	Edgarange Pty Ltd ACN 010 272 849
47-91 Scenic Road, Redland Bay	2	SP226358	8.314	Alan Gordon Wilson

Address	Lot	Plan Number	Area (Ha)	Owner
91 Scenic Road, Redland Bay	83	S312432	8.579	Alan Gordon Wilson
422 Serpentine Creek Road, Redland Bay	84	S312432	8.223	HG Associates Pty Ltd ACN 009 806 697 Trustee under instrument 703214002
69 Orchard Road, Redland Bay	86	S312432	8.094	Alan Gordon Wilson
27 Orchard Road, Redland Bay	255	S312432	8.094	Alan Gordon Wilson
49 Orchard Road, Redland Bay	256	S312432	8.094	Alan Gordon Wilson
410 Serpentine Creek Road, Redland Bay	257	S312432	6.199	Alan Gordon Wilson
91 Orchard Road, Redland Bay	247	S312432	8.094	James White
444 Serpentine Creek Road, Redland Bay	259	S312432	8.223	HG Associates Pty Ltd ACN 009 806 697 Trustee under instrument 703214002

1.3 Other Land means the following land:

Address	Lot	Plan Number	Area (Ha)	Owner
148 Serpentine Creek Road, Redland Bay	2	RP 149309	1.518	Peter Alan Robb, Lucy-Lee Jillian Robb Benjamin Alan Robb
Corner of Serpentine Creek Road and Scenic Road, Redland Bay	1	RP 105915	4.044	Italia Cicelia Spensieri
94 Scenic Road, Redland Bay	1	RP 140163	0.2023	WJ Taylor LA Taylor
90 Scenic Road, Redland Bay	1	RP71630	0.2643	WA Taylor RJ Taylor
74 Scenic Road ,Redland Bay	1	RP103265	1.167	WJ Taylor KJ Taylor
74 Scenic Road, Redland Bay	2	RP 140163	12.58	WJ Taylor & KJ Taylor

Address	Lot	Plan Number	Area (Ha)	Owner
68 Scenic Road, Redland Bay	1	RP212251	2.286	Joseph Spagnolo
466 Serpentine Creek Road, Redland Bay	252	S312432	8.223	Gary Spink Jeanette Spink Terry Spink Mary-Anne Spink Richard Spink Joyce Spink

2. Indexation

Index	Base period	Later period
1. Financial Contribution under Special Condition 1.1		
The index stated in the Infrastructure Charging Instrument applicable to the relevant infrastructure.	Commencement Date.	The period in which the Financial Contribution is paid.
2. Other payment or Financial Contribution		
CPI	Commencement Date.	The period in which the payment or Financial Contribution is paid.
3. Other payment or Financial Contribution in Schedule 3, item 1.8		
7% (being the weighted average cost of capital)	Commencement Date.	The period in which the Financial Contribution is paid.

Schedule 3 Infrastructure Contributions Schedule

1. Sewerage infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Tankering of sewerage					
1.1	Work Contribution for sewerage infrastructure being a Tankering Facility.	The Work Contribution is to comprise of a Tankering Facility in accordance with a Tankering Management Plan.	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot.	Developer.	Not applicable.
1.2	Land Contribution for sewerage infrastructure being a Tankering Facility.	The Land Contribution is to comprise of an easement at no cost to the Council: (a) over the Tankering Facility Land and other area reasonably specified by the Council for access to the Tankering Facility Land; (b) for access and sewerage purposes.	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot.	Developer.	The Council is to surrender the easement once the Tankering Facility is decommissioned in accordance with item 1.4. The Developer is liable for all costs associated with the surrender of the easement.
1.3	Work Contribution for sewerage infrastructure being	The Work Contribution is to comprise of Tankering Operations to service the Proposed Development under an	As required to service the Proposed Development until the	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
	the Tankering Operations to service the Proposed Development.	effective Environmental Authority (ERA57).	Proposed Development is connected to sewerage infrastructure to collect and treat sewage from the Proposed Development.		
1.4	Work Contribution to decommission and remove the Tankering Facility.	The Work Contribution is to decommission and remove the Tankering Facility.	Within 60 Business Days after the Proposed Development is connected to sewage infrastructure to collect and treat sewage from the Proposed Development.	Developer.	Not applicable.
Infrastructure to collect and treat sewage from the Proposed Development					
1.5	Work Contribution for sewage infrastructure.	The Work Contribution is to comprise of the design and construction of a sewage collection, treatment and disposal system to service the Proposed Development to the reasonable satisfaction of the General Manager of Infrastructure and Operations of the Council.	(a) The design of the Work Contribution is to be completed and submitted to Council prior to the approval of the Plan of Subdivision creating the first lot. (b) The construction of the initial	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
			<p>configuration of the Work Contribution is to be completed prior to the Approval of a Plan of Subdivision or commencement of a use of a Developed Lot for the 200th dwelling.</p> <p>(c) The construction of the ultimate configuration of the Work Contribution may be staged in accordance with all necessary Approvals, provided that:</p> <p>(i) all Developed Lots are connected to the initial configuration of the Work Contribution from the time of the Approval of</p>		

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
1.6	Land Contribution for sewage infrastructure.	The Land Contribution is to be provided: (a) at no cost to the Council; (b) in fee simple for all land on which a sewage treatment plant or sewage pump station provided under item 1.5 is located; (c) as an easement for other sewage infrastructure provided under item 1.5 or as reasonably	a Plan of Subdivision or commencement of a use of a Developed Lot for the 200th dwelling; and (ii) the Work Contribution is appropriate to service the Application Land at all times.	Developer.	This item is only applicable if the sewage infrastructure is operated by the Council.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
1.7	Financial Contribution for the cost of operating the Work Contribution for sewage infrastructure.	<p>appropriate in order to access the sewage infrastructure if the infrastructure cannot be accessed from a public road;</p> <p>(c) to accommodate the Work Contribution,</p>	<p>Within 30 days of the Council giving a Notice to the Developer:</p> <p>(a) certifying the cost of operating the sewerage collection, treatment and disposal system to service the Proposed Development after each year of operation; and</p> <p>(b) requiring the payment of the Financial Contribution.</p>	Developer.	The Council is to reduce the Financial Contribution by the amount of utility charges for the sewerage collection, treatment and disposal system which it receives from the Proposed Development during a year of operation.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
1.8	Financial Contribution toward the whole of life cost of transportation and maintenance of the sewerage collection, treatment and disposal system to service the Proposed Development.	The Financial Contribution is \$1,884,475: (a) indexed in accordance with Schedule 2, item 2.2; (b) less the proportion of the utility charges for the sewerage collection, treatment and disposal system to service the Proposed Development.	Prior to the Approval of a Plan of Subdivision or commencement of a use of a Developed Lot for the 200th dwelling.	Developer.	This item is only applicable if the sewerage treatment system to which the sewerage collection and disposal system connects is operated by the Council and located more than 1 kilometre from the Development Land.

2. Water supply infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Connection to North Stradbroke Island water main					
2.1	Work Contribution for water supply infrastructure being a 375 mm nominal diameter water main.	<p>The Work Contribution is to:</p> <p>(a) comprise the design and construction of a 375 mm nominal diameter water main between the existing 750mm diameter water main in Lot 3 on RP222423 and within the Development Land along the alignment generally as shown on the Water Network Map;</p> <p>(b) be located within land dedicated as road, unless otherwise approved in writing by Council.</p>	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 1,200th dwelling in the Investigation Zone Land.	Developer.	Not applicable.
2.2	Financial Contribution to refund part of the Developer's costs of the design and construction of the water supply infrastructure in item 2.1.	<p>The Financial Contribution is the lesser of:</p> <p>(a) \$1,130,640; or</p> <p>(b) the Actual Cost of the water supply infrastructure specified in item 2.1.</p>	<p>Within 30 days of the Developer giving a Notice to the Council:</p> <p>(a) stating that the water supply infrastructure specified in item 2.1 has been accepted on maintenance;</p>	Council.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
2.3	Land Contribution for water supply infrastructure being the 375 mm nominal diameter water main in item 2.1.	The Land Contribution is to be: (a) provided at no cost to the Council; (b) comprised of an easement for the 375 mm nominal diameter water main for water supply purposes with a width of 10 metres if not provided in a road reserve or other land which is owned or under the control of the Council.	and (b) requiring the payment of the Financial Contribution.	Developer.	Not applicable.

3. Local roads infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Major collector road within the Development Land					
3.1	Work Contribution for local road infrastructure being the major collector road.	<p>The Infrastructure Contribution is to comprise the design and construction of a trunk collector street type 'C' along the alignment generally as shown as 'Conceptual Major Collector Road (trunk road)' on the Master Plan with:</p> <p>(a) the design in accordance with the requirements and standards of Planning Scheme Policy 9 (Infrastructure Works), including all traffic, public transport, cycling, parking and access requirements, as Approved by Council;</p> <p>(b) intersection works at the intersection with the Conceptual Minor Collector Road (esplanade road) shown on the Master Plan with:</p> <p>(i) additional approach lanes;</p>	The Work Contribution is to be made prior to the Approval of a Plan of Subdivision or the commencement of a use of the first Developed Lot	Developer.	The Work Contribution is to be maintained for a period of no less than 5 years following the Work Contribution being accepted by Council on maintenance, unless a different period is agreed in writing or the period is varied by an operational work Approval.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>(ii) traffic islands;</p> <p>(d) general road requirements:</p> <p>(i) trunk collector street type 'C' (PSP9 RSC Std Dwg 15) of two (2) through lanes with road reserve width 27m if road property access is to be provided;</p> <p>(ii) trunk collector street type 'C' (PSP9 RSC Std Dwg 15) of two (2) through lanes with road reserve width 19.0 m if road property access is not to be provided. Note: the provision of the 2.0m landscaping zones are dependent upon streetscape and noise management conditions and may not be required;</p> <p>(e) road topology provisions:</p> <p>(i) the road verge adjoining open space land on one side can be reduced to a minimum of one (1) metre to manage utility</p>			

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
3.2	Land Contribution for local road infrastructure being the major collector road.	<p>requirements. The in verge shared pathway can be redistributed to the open space land;</p> <p>(ii) the verge within the town centre can be adjusted to consider any additional streetscape requirements such as outdoor dining as generally complying with the Council's laws and policies.</p> <p>The Land Contribution is to be provided:</p> <p>(a) as land dedicated as road;</p> <p>(b) to accommodate the Work Contribution.</p>	At the same time as the provision of the Work Contribution to which the Land Contribution relates.	Developer.	Not applicable.

4. Cycleways infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
On-road cycleway					
4.1	Work Contribution for on-road cycleway infrastructure.	<p>The Work Contribution is to comprise of the design and construction in stages of a 2 lane 1.5 metre wide on-road cycleway along Scenic, Orchard and Lagoon View Roads in accordance with Schedule of Works Summary (Table 10.6.6) and shown on Cycleway Trunk Network map T8 of the Priority Infrastructure Plan with:</p> <p>(a) the value agreed to by the parties for the Works Contribution to be the lesser of:</p> <ul style="list-style-type: none"> (i) the Planned Cost of \$4.96 million; and (ii) the Actual Cost of the on-road cycleway infrastructure specified in this item 4.1. <p>(b) all works in accordance with the requirements and standards of Planning Scheme Policy 9 (Infrastructure Works).</p>	<p>(a) The Scenic Road section must be completed before the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 1,000th dwelling.</p> <p>(b) The Orchard Road section must be completed before the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 1,200th dwelling.</p> <p>(c) The Lagoon View Road section must be completed before the Approval</p>	Developer.	<p>The Work Contribution is to be maintained for a period of no less than 5 years following the final stage of the Work Contribution being accepted by Council on maintenance, unless a different period is agreed in writing or the period is varied by an operational work Approval.</p>

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
			of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 1,400th dwelling.		
Off-road shared cycleway and pedestrian path					
4.2	Work Contribution for off-road shared cycleway and pedestrian path infrastructure.	<p>The Work Contribution is to comprise the design and construction of a single lane off-road shared cycleway and pedestrian path:</p> <ul style="list-style-type: none"> (a) along Serpentine Creek Road, in the location marked 'Conceptual Off-Road Cycleway' on the Cycle & Path Network Plan; (b) in the location marked 'Conceptual Cycleway' within the community and destination recreation park on the Cycle & Path Network Plan; (c) the Schedule of Works Summary (Table 10.6.6) and the Cycleway Trunk Network map T8 of the Priority Infrastructure Plan; (d) where within the community and destination recreation park, a 2.35 km 3 metre wide reinforced 	For the 'Conceptual Off-Road Cycleway' along Serpentine Creek Road, at the same time as the road works along Serpentine Creek Road required by the Concurrence Agency Conditions. For the 'Conceptual Cycleway' within the community and destination recreation park at the earlier of: <ul style="list-style-type: none"> (a) at the same time as the provision of the community and destination recreation park required by Item 5.1 of this Schedule 3; 	Developer.	The Work Contribution is to be maintained for a period of no less than 5 years following the final stage of the Work Contribution being accepted by Council on maintenance, unless a different period is agreed in writing or the period is varied by an operational work Approval.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
4.3	Land Contribution for off-road shared cycleway and pedestrian path infrastructure.	<p>concrete shared path;</p> <p>(e) where along Serpentine Creek Road, a 3.42 km 2.5 metre wide reinforced concrete shared path;</p> <p>(f) all works in accordance with the requirements and standards of Planning Scheme Policy 9 (Infrastructure Works); and</p> <p>(g) lighting and signage in accordance with the relevant infrastructure works planning scheme policy.</p> <p>The Land Contribution is to be provided:</p> <p>(a) at no cost to the Council;</p> <p>(b) as land dedicated as park;</p> <p>(c) to accommodate the Work Contribution in item 4.2.</p>	<p>and</p> <p>(b) before the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 1,000th.</p>	Developer.	Not applicable.

5. Public parks infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Community and destination recreation park					
5.1	Land Contribution for public parks infrastructure being a community and destination recreation park.	<p>The Land Contribution is to be provided:</p> <ul style="list-style-type: none"> (a) at no cost to the Council; (b) as land dedicated as park; (c) in stages, with a total area when complete of at least 12.79 hectares; (d) in respect of the total area shown as foreshore open space on the Master Plan subject to any refinement of those areas as provided for in an Approval which is a development permit applying to a lot which is part of the Development Land; (e) so that: <ul style="list-style-type: none"> (i) the width is generally greater than 100 metres wide; (ii) the overland drainage functionality of the park is 	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot in the stage of the Proposed Development identified in an approved sport and recreation layout plan as required by the Development Approval.	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>minimal;</p> <ul style="list-style-type: none"> (iii) the majority of the park sits above the Q100; (iv) the levels are above 2.4 metres AHD; (v) the gradient is less than 20% (recreation parks); (vi) for foreshore areas (where it is appropriate) beach access to the water is provided; (vii) the road frontage is greater than 50% of the perimeter; (viii) there is minimal to no contaminated land; (ix) its location is not adjacent or close to noxious or noisy activities. 			
5.2	Work Contribution for public parks infrastructure being the embellishment to the community and destination recreation	The Work Contribution is to comprise of the design and construction of embellishments to the community and destination recreation park in accordance with an approved sport and recreation layout plan as required by the	At the same time as the provision of the Land Contribution to which the Work Contribution relates.	Developer.	The Work Contribution is to be maintained for a period of no less than 5 years following the relevant stage of the Work Contribution being accepted by Council on maintenance unless a

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
	park.	<p>Development Approval and comprising of the following:</p> <ul style="list-style-type: none"> (a) an all ability playground / activity area and soft fall; (b) a fully fenced dog off-leash area; (c) public amenities; (d) paths (pedestrian / cycle); (e) seating; (f) shade structures; (g) picnic pergolas and tables for large groups; (h) wedding / ceremony pergola; (i) commercial activity spaces; (j) tap / bubblers; (k) BBQ; (l) bins; (m) bicycle racks; (n) landscaping (including earthworks, irrigation and revegetation); 			different period is agreed in writing or the period is varied by an operational work Approval.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<ul style="list-style-type: none"> (o) fencing and bollards; (p) a minimum of 50 off street car parking spaces per park; (q) lighting; (r) signage. 			
District sport parks					
5.3	Land Contribution for public parks infrastructure being district sport parks.	<p>The Land Contribution is to be provided:</p> <ul style="list-style-type: none"> (a) at no cost to the Council; (b) as land dedicated as park; (c) in stages with a total area of 14.555 hectares; (d) a maximum of 2 separate district sports parks with each district sport park being between 5 and 10 hectares in size; (e) so that: <ul style="list-style-type: none"> (i) the width is greater than 100 metres wide; (ii) the overland drainage functionality of the park is 	<p>Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the:</p> <ul style="list-style-type: none"> (a) 1,500th dwelling, provide the first district sport park; (b) 3,000th dwelling, provide the second district sport park. 	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
5.4	Work Contribution for public parks infrastructure being the embellishment to	<p>minimal;</p> <ul style="list-style-type: none"> (iii) the majority of the park sits above the Q100; (iv) the levels are above 2.4 metres AHD; (v) it has greater than 60% flat to gentle slope (sports parks); (vi) the road frontage is greater than 50% of the perimeter; (vii) there is minimal to no contaminated land; (viii) its location is not adjacent or close to noxious or noisy activities; <p>(f) within the Application Land and may be included in the open space corridors shown on the Master Plan provided there is compliance with the above specification.</p>	At the same time as the provision of the Land Contribution to which the Work Contribution	Developer.	The Work Contribution is to be maintained for a period of no less than 5 years following the relevant stage of the

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
	the district sport parks.	<p>with an approved sport and recreation layout plan as required by the Development Approval and comprising any combination of the following:</p> <ul style="list-style-type: none"> (a) playground / activity area and soft fall; (b) sporting fields; (c) sporting courts; (d) spectator seating (basic); (e) public amenities; (f) paths (pedestrian / cycle); (g) bike racks; (h) seating; (i) shade structures; (j) picnic tables; (k) tap / bubblers; (l) BBQ; (m) bins; (n) landscaping (including earthworks, irrigation and revegetation); 	relates.		Work Contribution being accepted by Council on maintenance unless a different period is agreed in writing or the period is varied by an operational work Approval.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Neighbourhood recreation parks					
5.5	Land Contribution for public parks infrastructure being neighbourhood recreation parks.	<p>The Land Contribution is to be provided:</p> <ul style="list-style-type: none"> (a) at no cost to the Council; (b) as land dedicated as park; (c) in stages with a total area of 10.585 hectares; (d) with each local recreation park being between 0.5 and 2 hectares in size; (e) in locations required for parks in accordance with an approved 	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot in the stage of the Proposed Development identified in an approved sport and recreation layout plan as required by the Development Approval.	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>sport and recreation layout plan as required by the Development Approval;</p> <p>(f) so that:</p> <ul style="list-style-type: none"> (i) the width is generally greater than 40 metres wide; (ii) the overland drainage functionality of the park is minimal; (iii) the majority of the park sits above the Q100; (iv) the levels are above 2.4 metres AHD; (v) the gradient is less than 20% (recreation parks); (vi) for foreshore areas (where it is appropriate) beach access to the water is provided; (vii) the road frontage is greater than 50% of the perimeter; (viii) there is minimal to no contaminated land; 			

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
5.6	Work Contribution for public parks infrastructure being the embellishment to the neighbourhood recreation park.	<p>(ix) its location is not adjacent or close to noxious or noisy activities;</p> <p>(x) accessibility to park is no more than a 5 to 7 minute walk for 90% of residents within 500m of the park along local footpaths or other formed walkable routes;</p> <p>(g) within the Application Land and may be included in the open space corridors shown on the Master Plan provided there is compliance with the above specification.</p>	At the same time as the provision of the Land Contribution to which the Work Contribution relates.	Developer.	The Work Contribution is to be maintained for no less than 5 years following relevant stage of the Work Contribution being accepted by Council on maintenance unless a different period is agreed in writing or the period is varied by an operational work Approval.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		and soft fall; (b) teenage hangout places; (c) outdoor fitness equipment; (d) kick-about areas; (e) seating; (f) tap / bubblers; (g) landscaping (including earthworks, irrigation and revegetation); (h) fencing / bollards; and (i) signage.			
Open space corridors					
5.7	Land Contribution for open space and conservation park.	The Land Contribution is to be provided: (a) at no cost to the Council; (b) as land dedicated as park unless required as a drainage easement under an Approval; (c) in stages; (d) in the locations marked as open space corridors on the Master	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot in the stage of the Proposed Development identified in an approved open space layout plan as required by the Development Approval.	Developer	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>Plan subject to any refinement of those areas as provided for in an Approval which is a development permit applying to a lot which is part of the Development Land except those areas which are:</p> <ul style="list-style-type: none"> (i) the subject of another Land Contribution under the Special Conditions or the Infrastructure Contributions Schedule in Schedule 3; (ii) required for private open space under an Approval excluding land identified as conservation park on the Master Plan. 			

6. Land for community facilities infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Land for community facilities					
6.1	Land Contribution for community facilities infrastructure.	<p>The Land Contribution is to be provided:</p> <ul style="list-style-type: none"> (a) at no cost to the Council; (b) with a total area of 0.25 hectares; (c) in the open space corridors and foreshore open space shown on the Master Plan subject to any refinement of those areas as provided for in an Approval which is a development permit applying to a lot which is part of the Development Land; (d) with car parking commensurate with building size determined by an independent traffic study and as approved by Council in writing; (e) is located on public transport routes; (f) is located within comfortable walking distance to retail 	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 3,000 th dwelling in the Investigation Zone Land.	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
6.2	Work Contribution for community facilities infrastructure.	<p>facilities.</p> <p>The Work Contribution for the Land Contribution in Item 6.2 of this Schedule 3 is the design and construction of a community hall which:</p> <ul style="list-style-type: none"> (a) has a depreciated value agreed to by the parties on transfer to Council of at least \$1.745 million; (b) has a gross floor area of 250m² comprised of: <ul style="list-style-type: none"> (i) a reception / front office with a minimum area of 30m²; (ii) additional office space with an area of 20m²; (iii) a small meeting room for 15-20 people with a minimum area of 30m²; (iv) a large meeting room for 50 people with a minimum area of 150m²; (c) is a class 9b building (BCA); 	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 3,000th dwelling in the Investigation Zone Land.	Developer.	Not applicable.

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>(d) has an open plan office environment which maximises natural light;</p> <p>(e) has a commercial kitchen with servery to the large meeting room;</p> <p>(f) provides that meeting rooms are able to be accessed through reception, with at least one with external access;</p> <p>(g) has toilets complying with class 9b (BCA) requirements including disability access;</p> <p>(h) has electronic access;</p> <p>(i) applies ecologically sustainable design principles;</p> <p>(j) has a minimum design life of 50 years;</p> <p>(k) includes architectural features externally to enhance the building façade;</p> <p>(l) is constructed of building materials that are readily available and replaceable in the future (if required);</p>			

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>(m) is corrosion resistant and suitable for a highly corrosive environment;</p> <p>(n) is robust, durable and easily maintained;</p> <p>(o) has acoustic structural qualities appropriate to a community centre / multi-purpose hall;</p> <p>(p) has data and communication access to reception, offices and meeting rooms;</p> <p>(q) complies with (but is not limited to) the following regulation codes and policies:</p> <ul style="list-style-type: none"> (i) <i>Work Health and Safety Act 2011</i>, associated Regulations and current Codes of Practice; (ii) <i>Environmental Protection Act 1994</i> and associated Regulations; (iii) Standards Association of Australia codes and guidelines as applicable to the various components of 			

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<p>the work;</p> <ul style="list-style-type: none"> (iv) <i>Building Act 1975</i>, associated Regulations and Codes of Practice; (v) <i>Plumbing and Drainage Act 2002</i>; (vi) <i>Building Code of Australia</i> (including AS1428 Disability Codes); (vii) <i>Aboriginal Cultural Heritage Act 2003</i>; (viii) Redland City Council local laws, regulations and requirements; (ix) CPTED (Crime Prevention Through Environmental Design); and (x) Energex Standards and Guidelines relevant to intended works. 			

7. Stormwater infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Stormwater infrastructure					
7.1	Work Contribution for stormwater infrastructure.	The Work Contribution is the design and construction of stormwater infrastructure in accordance with Planning Scheme Policy 9 (Infrastructure Works) and approved Stormwater Management Plans for each internal catchment as required by the Development Approval.	Prior to the approval of the Plan of Subdivision or the commencement of a use of a Developed Lot which is serviced by the stormwater infrastructure.	Developer.	The Work Contribution is to be maintained for no less than 5 years following the final stage of the Work Contribution being accepted by Council on maintenance unless a different period is agreed in writing or the period is varied by an operational work Approval.
7.2	Land Contribution for stormwater infrastructure.	The Land Contribution is to be provided: (a) as land dedicated for drainage purposes; (b) to accommodate the Work Contribution.	At the same time as the provision of the Work Contribution in item 7.1 (or part thereof) to which the Land Contribution relates.	Developer.	Not applicable.

8. Marine infrastructure

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Public boat ramp					
8.1	Financial Contribution for a public boat ramp.	The Financial Contribution is \$924,000 (calculated as 22% of the estimated \$4.2 million cost of the boat ramp for 4,000 Developed Lots being \$231 per Developed Lot).	Prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the 400th dwelling.	Developer.	<p>The Developer may provide to the Council a security in the amount specified in column 3 prior to the time specified in column 4 to secure the performance of the Financial Contribution. If the Developer provides a security to the Council to secure the performance of the Financial Contribution, the Council may call on the security to reimburse itself for costs incurred by the Council in constructing the public boat ramp.</p> <p>If the Council has not commenced construction of a public boat ramp south of Redland Bay within 5 years of the Approval of the first Plan of Subdivision for a Developed Lot: (a) the Developer is no</p>

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
					<p>longer required to make the Financial Contribution;</p> <p>(b) the Council is to refund the Financial Contribution or release the security provided to it by the Developer;</p> <p>(c) the Developer is to spend an amount equivalent to the Financial Contribution on the provision of marine facilities within the Development Land.</p> <p>If the Council commences construction of a public boat ramp pursuant to this item within 5 years of the Approval of the first Plan of Subdivision for a Developed Lot, the Council is to complete the construction of the public boat ramp within 3 years of the commencement of construction.</p>

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
Kayak launch points					
8.2	Work Contribution for kayak launch points.	<p>The Work Contribution is to comprise the design and construction of 2 kayak launch points which:</p> <p>(a) is Disability Discrimination Act compliant including appropriate ramp and landing grading to AS1428;</p> <p>(b) has ramps where the seawall height is below 1m and the ramp does not protrude significantly outward from the shoreline are to be aligned perpendicular to the shoreline. The perpendicular option should also be considered for ramps that can be cut in to land side. Ramps that do not meet either of these criteria are to be aligned parallel to the shoreline;</p> <p>(c) allows access for non-powered recreational watercraft such as:</p> <p>(i) canoes;</p> <p>(ii) kayaks;</p>	<p>Subject to Column 6, prior to the Approval of a Plan of Subdivision or the commencement of a use of a Developed Lot for the:</p> <p>(a) 200th dwelling, provide the first kayak launch point;</p> <p>(b) 1,000th dwelling, provide the second kayak launch point.</p>	Developer.	<p>The provision of the kayak launch points is subject to the Developer obtaining the necessary Approvals for the kayak launch points.</p> <p>The Developer is to use its best endeavours to obtain the necessary Approvals for the kayak launch points.</p> <p>If the Developer has not commenced construction of the first kayak launching point in accordance with the timing of the Work Contribution in Column 4:</p> <p>(a) the Developer is no longer required to undertake this Work Contribution;</p> <p>(b) the Developer is to make a Financial Contribution to the Council of \$150,000; and</p>

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
		<ul style="list-style-type: none"> (iii) small sailing craft; (iv) wind surfers; (d) has timber bollards to be strategically placed to prevent ramp from being used by regular power boats and large vessels; (e) provides toe of ramp to finish 500mm nominal below beach level to ensure beach movement does not cause a step down to the beach; (f) has a concrete ramp design to suit marine environment; (g) provides a non-slip concrete surface finish; (h) has handrails where accessed to be required; (i) has a minimum clear ramp width of 2.5m; (j) has tactile paving; (k) uses grouted stone pitching in lieu of rock armour in smaller areas where rock armour is not 			<p>(c) the Council is to spend an amount equivalent to the Financial Contribution on the provision of marine facilities south of Redland Bay.</p>

Column 1 Item	Column 2 Infrastructure Contribution	Column 3 Specification of the Infrastructure Contribution	Column 4 Timing of the Infrastructure Contribution	Column 5 Party responsible for the Infrastructure Contribution	Column 6 Other requirements
8.3	Land Contribution for kayak launch points.	<p>suitable;</p> <p>(l) extends stormwater pipes and install new headwalls where necessary;</p> <p>(m) has a seawall constructed either side of the ramp. The extent of the seawall is to be determined by a Registered Professional Engineer Queensland to protect either side of the access ramp from shoreline erosion.</p>	At the same time as the provision of the Work Contribution to which the Land Contribution relates.	Developer.	Not applicable.

Schedule 4 Prescribed Approval Conditions



Schedule 4 Prescribed Approval Conditions

<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 generally 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
Precinct Plan – Shoreline (as amended in red by Council)	14009_SK015 [20]	Lat27	22 October 2015
Cycleway and Path Network Plan	Map CT9 Revision G	Civil Dimensions Pty Ltd	28 October 2015
Overall Bushfire Management Plan “Redland Shoreline Development”	14-006	The Consultancy Bureay	June 2014

Table 1: Approved Plans and Documents

<u>Infrastructure Agreement</u>	
3. Comply with the Infrastructure Agreement relating to the subject land	Ongoing
<u>Updated Plans</u>	
4. Submit to Council, and have approved, an updated Plan of Development (Version E.3) incorporating the amendments listed in appendix 1, and rename it Version F. <i>Note: This should include the full Plan of Development, including all appended and updated codes.</i>	Prior to the lodgement of a development application on the subject land
5. Comply with the approved Plan of Development (Version F)	Ongoing
6. Submit to Council, and have approved, an updated Precinct Plan (14009_SK015 [20]) incorporating the following amendments, and rename it Precinct Plan (14009_SK015 [21]) :- <ul style="list-style-type: none"> • Remove all Conceptual Land for District Sports Parks; • Remove all Land for Local / District / Citywide Community Facilities; • Remove the Town Centre Frame Precinct on Lot 1 on RP133830 and identify the land as Open Space Precinct; • Identify sub-area 1 on Lot 74 on S31102 in accordance with the updated description in the Plan of Development, being 	Prior to the lodgement of a development application on the subject land

	<p>100m north of the northern boundary of Lot 1 on RP133830 and 100m south of the southern boundary of Lot 1 on RP133830; and</p> <ul style="list-style-type: none"> Identify the development free buffer on Lots 86 and 247 on S312432 in accordance with the conditions of this approval. 	
7.	Comply with the approved Precinct Plan (14009_SK015 [21])	Ongoing
8.	<p>Submit to Council, and have approved, an updated Master Plan (14009_SK013 [23]) incorporating the following amendments, and rename it Master Plan (14009_SK013 [24]) :-</p> <ul style="list-style-type: none"> Remove all Conceptual Land for District Sports Parks; Remove all Land for Local / District / Citywide Community Facilities; Amend the legend to remove "(Neighbourhood Recreation Park and District Sports Park)" from Open Space Corridor Remove the Conceptual Minor Collector Road from Lot 1 on RP133830, Lot 3 on RP105915 and Lot 4 on RP105915; Remove the Urban Development layer from Lot 1 on RP133830 and identify the entire lot as Conservation Park; Include the land on Lot 74 on S31102, identified as red in appendix 2, in the Conservation Park; and Identify the development free buffer on Lots 86 and 247 on S312432 in accordance with the conditions of this approval. 	Prior to the lodgement of a development application on the subject land
9.	Comply with the approved Master Plan (14009_SK013 [24])	Ongoing
10.	Submit to Council, and have approved, an updated Shoreline Open Space Landscape Strategy (0345-003 Version 2) incorporating the amendments listed in appendix 3, and rename it Shoreline Open Space Landscape Strategy (0345-003 Version 3).	Prior to the lodgement of a development application on the subject land
11.	Comply with the approved Shoreline Open Space Landscape Strategy (0345-003 Version 3).	Ongoing
12.	Submit to Council, and have approved, an updated Shoreline Biting Insect Management Plan (140906iv) incorporating the amendments listed in appendix 4, and rename it Shoreline Biting Insect Management Plan (140906v).	Prior to the lodgement of a development application on the subject land
13.	Comply with the approved Shoreline Biting Insect Management Plan (140906v)	Ongoing
14.	<p>Submit to Council, and have approved, an updated Shoreline, Redlands Water Sensitive Urban Design Preliminary Advice (Version 5 – 19 June 2014) prepared by DesignFlow incorporating the following amendments, and rename it Shoreline, Redlands Water Sensitive Urban Design Preliminary Advice (Version 6):-</p> <ul style="list-style-type: none"> Remove the Dams and Waterways map; Add a note to the Catchments Plan identifying it is 'Preliminary only - subject to change'; 	Prior to the lodgement of a development application on the subject land

<ul style="list-style-type: none"> • Amend the WSUD Strategy plan – Focus areas 1, 2 and 3 are to be crossed out and the detailed plans removed; • Add a note to the WSUD Strategy Plan to indicate that the size and location of the WSUD devices are approximate only and is subject to change upon the completion of a detailed stormwater management plan for each catchment; and • Appendix III refers to QDUM, amend to QUDM (Queensland Urban Drainage Manual). 	
<p>15. Comply with the approved Shoreline, Redlands Water Sensitive Urban Design Preliminary Advice (Version 6)</p>	<p>Ongoing</p>
<p><u>Roads and Cycleways</u></p>	
<p>16. Submit to Council, and have approved, the design for an upgraded signalised intersection at Heinemann Road and Double Jump Road. The proposed design must be named "Heinemann/Double Jump Intersection Plan" and must be designed with two stand up lanes on each approach and be in accordance with the Department of Main Roads Road Planning and Design Manual (as amended) and the Manual of Uniform Traffic Control Devices (as amended). The design must include, but not be limited to, any associated land requirements, pedestrian facilities, road widening/works (including street lighting) and adjustments and/or relocations to existing services and is to be at no cost to Council.</p>	<p>Prior to the lodgement of a development application on the subject land</p>
<p>17. Construct a signalised intersection at Heinemann Road and Double Jump Road generally in accordance with the approved "Heinemann/Double Jump Intersection Plan". The intersection must include associated pedestrian facilities, road widening/works (including street lighting) and adjustments and/or relocations to existing services and is to be at no cost to Council</p>	<p>Prior to the sealing of the first lot, or commencement of any use, on the subject land.</p>
<p>18. Submit to Council, and have approved, a detailed Road and Cycleway Plan for each road catchment that is generally in accordance with the approved Cycleway & Path Network Plan (Map CT9 Revision G) and the conceptual road layout identified on the approved Shoreline Master Plan (14009_SK013[24]).</p> <p>The plan must be supported by a traffic assessment that rationalises the proposed layout and is prepared by a Registered Professional Engineer of Queensland (RPEQ). The layout must:</p> <ul style="list-style-type: none"> • Enable the efficient movement of vehicles; • Provide a high level of internal accessibility and external connectivity; • Be based on the functional road classification of Council's adopted Road Hierarchy <p>The plan must also incorporate the layout amendments required by the conditions of this approval and be prepared in consideration of:</p> <ul style="list-style-type: none"> • Anticipated land uses • The Open Space Layout Plan (particularly where roads are proposed to cross open space corridors); • The Sport and Recreation Layout Plan (particularly the location of district sports parks); and • The need for esplanade roads to adjoin all Open Space Corridors and the Foreshore Open Space 	<p>Prior to the lodgement of the first development application on the parent lot for each catchment.</p>

The road catchments are:

Road catchment A: Land west of Serpentine Creek Road

- Lot 11 on SP268704

Road catchment B: Land east of Serpentine Creek Road

- Lot 1 on RP133830
- Lot 74 on S31102
- Lot 73 on S31102
- Lot 72 on S31102
- Lot 71 on S31102
- Lot 70 on S31102
- Lot 69 on S31102
- Lot 8 on R1291
- Lot 2 on RP149309

Road catchment C: Land north of Scenic Road

- Lot 4 on RP105915
- Lot 3 on RP105915
- Lot 1 on RP105915
- Lot 1 on RP212251
- Lot 1 on RP103265
- Lot 2 on RP140163
- Lot 1 on RP71630
- Lot 1 on RP140163

Road catchment D: Land south of Scenic Road

- Lot 2 on SP226358
- Lot 83 on S312432
- Lot 257 on S312432
- Lot 255 on S312432
- Lot 84 on S312432
- Lot 256 on S312432
- Lot 259 on S312432
- Lot 86 on S312432
- Lot 252 on S312432
- Lot 247 on S312432

Stormwater Management

19. Submit to Council, and have approved, a Stormwater Management Plan for each stormwater catchment that addresses both quality and quantity in accordance with the following:
- The approved Shoreline, Redlands Water Sensitive Urban Design Strategy, prepared by Design Flow (Shoreline, Redlands Water Sensitive Urban Design Preliminary Advice (Version 6)
 - The amended Stormwater Management Code within the approved Plan of Development;
 - The approved Shoreline Biting Insect Management Plan (140906v) prepared by FRC Environmental
 - The Shoreline Open Space Landscape Strategy (0345-003 Version 3)
 - Redlands Planning Scheme Policy 9 Chapter 6 – Stormwater Management; and
 - Water Sensitive Urban Design Technical Design Guidelines for South East Queensland (as amended), prepared by Healthy Waterways.

As part of the lodgement of the first development application affecting each catchment.

The Stormwater Management Plan for each catchment must also

<p>provide details of public utility easements for stormwater drainage purposes which must be provided in favour of and at no cost to Council.</p>	
<p>20. Remove all dams within the development site and provide Council with details of the proposed earthworks and rehabilitation works as part of the Stormwater Management Plan for each catchment.</p>	<p>As part of the lodgement of the first development application affecting each catchment.</p>
<p><u>Open Space and Recreation</u></p>	
<p>21. Submit to Council, and have approved, an Open Space Layout Plan for each open space corridor and the foreshore open space identified on the approved Master Plan (14009_SK013 [24]), that demonstrates:-</p> <ul style="list-style-type: none"> • <ul style="list-style-type: none"> i. The vegetation areas that will be retained; ii. The areas of vegetation that will be cleared; iii. The plans for rehabilitation and revegetation (weed removal and planting); iv. Compliance with the following approved documents: <ul style="list-style-type: none"> 1. Shoreline Open Space Landscape Strategy (0345-003 Version 3); 2. Shoreline Biting Insect Management Plan (140906v); and 3. Stormwater Management Plan for each catchment; and v. A detailed staging plan for the dedication of the open space corridors and foreshore open space. • Where relating to the open space corridor on Lot 11 on SP268704, this must be supported by a detailed assessment of possible Wallum Froglet (<i>crinia tinnula</i>) habitat, undertaken by a suitably qualified professional. <p><i>Note: If evidence of Wallum Froglet habitat is confirmed, demonstrate how the design of the waterway and corridor (including proposed infrastructure, particularly stormwater management/treatment facilities) has considered this.</i></p>	<p>For a), with the lodgement of the first development application on the parent lot that contains the proposed corridor</p> <p>For b), prior to the lodgement of an application on Lot 11 on SP268704</p>
<p>22. Submit to Council, and have approved, a Sport and Recreation Layout Plan that demonstrates compliance with the requirements of the Infrastructure Agreement, the approved Shoreline Open Space Landscape Strategy (0345-003 Version 3), the approved Shoreline Biting Insect Management Plan (140906v) and the approved Open Space Layout Plan, for:</p> <ul style="list-style-type: none"> • The Community and Destination Recreation Park; • Each District Sports Park; and • Each Neighbourhood recreation park; <p>And must include:</p> <ul style="list-style-type: none"> • A detailed staging plan for the dedication of all the recreation parks in accordance with the Infrastructure Agreement requirements. 	<p>Prior to the lodgement of a development application on the subject land</p>

Environmental	
<p>23. Submit to Council, and have approved, a detailed environmental assessment of high tide roosts and low tide feeding areas for listed species of migratory shorebirds, undertaken by a suitably qualified professional. If any roosts or low tide feeding areas are identified, the assessment must consider the likely impact of potential development on these areas, and provide a recommended strategy to address these impacts.</p>	Prior to the lodgement of a development application on the subject land
<p>24. Dedicate Lot 1 on RP133830 to the State, with Council as trustee, as Public Use Land for conservation purposes</p> <p><i>Note: The area to be dedicated may be reviewed pending further detailed ecological assessment of the habitat value of the Lot. (NB: Habitat value not only refers to koala habitat)</i></p>	
Koala Habitat Trees	
<p>25. Site design must not result in the clearing of non-juvenile koala habitat trees in areas of bushland habitat as identified in the South East Queensland Koala Conservation State Planning Regulatory Provision</p> <p><i>Note: The habitat value types are varied by this Preliminary Approval in accordance with the request under Division 9 of the SEQ Koala Conservation SPRP detailed in the "Koala Habitat Mapping Amendment Request – Division 9 SEQ Koala State Planning Regulatory Provisions" report drafted by Biodiversity Assessment and Management Pty Ltd (BAAM), dated 11 June 2015</i></p>	Ongoing
<p>26. Site design must avoid clearing non-juvenile koala habitat trees in areas of high value rehabilitation habitat and medium value rehabilitation habitat (as identified in the South East Queensland Koala Conservation State Planning Regulatory Provision), with any unavoidable clearing minimised and offset in accordance with the <i>Environmental Offsets Act 2014</i>.</p> <p><i>Note: The habitat value types are varied by this Preliminary Approval in accordance with the request under Division 9 of the SEQ Koala Conservation SPRP detailed in the "Koala Habitat Mapping Amendment Request – Division 9 SEQ Koala State Planning Regulatory Provisions" report drafted by Biodiversity Assessment and Management Pty Ltd (BAAM), dated 11 June 2015</i></p>	Ongoing
Development Staging	
<p>27. Development of lots 3 and 4 on RP105915 must not proceed until vehicular access can be obtained from Scenic Road</p>	Ongoing
<p>28. Submit to Council either:</p> <ul style="list-style-type: none"> Confirmation from the Department of Education and Training that a new state primary school to service the proposed Shoreline community has been planned; or 	Prior to the lodgement of an application seeking approval for a subdivision plan that creates the 1000 th lot

- Evidence that a non-state primary school has the appropriate approvals to be delivered within the subject land.

Biting Insect Management

29. Maintain a development free buffer of at least 80m wide along the eastern boundaries of Lots 86 and 247 on S312432.

Ongoing

Note: This requirement may be reviewed pending further investigations into the required 100m separation to mosquito roosting habitat, particularly in relation to the elevated public health risk in this location and the advice of Council's independent Entomologist.

Lot 74 on S31102

30. Lot 74 on S31102 must be serviced, including road access, from Lot 73 on S31102.

Prior to the sealing of the first lot, or commencement of any use, on Lot 74 on S31102.

Prescribed Period

31. For the purposes of section 343(3)(a) of the *Sustainable Planning Act 2009* (Qld) the development which is the subject of this approval must be completed within fifteen (15) years from the date the approval takes effect (Prescribed Period)

This approval lapses at the end of the Prescribed Period if development, or an aspect of development, to which the approval relates is started but not completed with the Prescribed Period.

ADDITIONAL APPROVALS

This preliminary approval does not authorise development to occur.

Further Development Permits and/or Compliance Permits are necessary to allow development to be carried out, being any development listed as assessable development in the Tables of Assessment in the Shoreline Plan of Development or a local planning instrument (where not varied by the Plan of Development).

REFERRAL AGENCY CONDITIONS

- Queensland Department of Infrastructure, Local Government and Planning (DILGP)
Refer to the attached correspondence from the DILGP dated 28 October 2015 (DILGP reference SDA-0714-012691 (F14/12027)).

ASSESSMENT MANAGER ADVICE

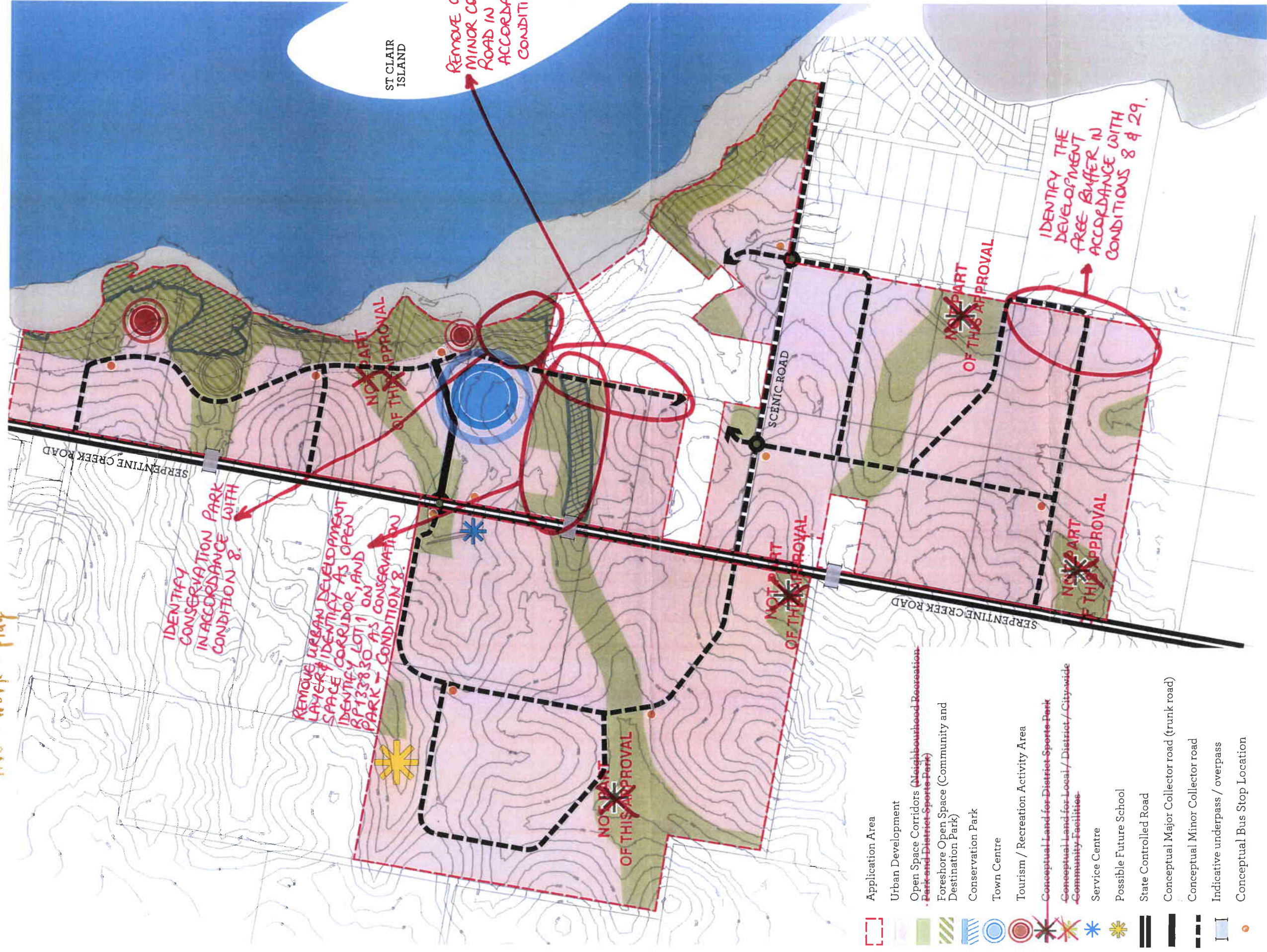
- Infrastructure Charges
Infrastructure charges apply to the development in accordance with the State Planning Regulatory Provisions (adopted charges) these are detailed in the Infrastructure Agreement.

-
- **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.
-

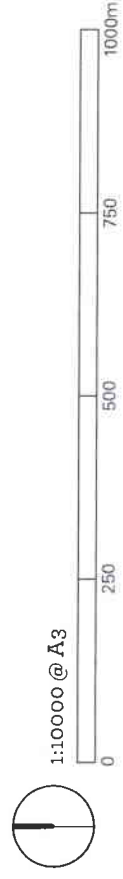
- **Environment Protection and Biodiversity Conservation Act**
Under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act* (the EPBC Act), a person must not take an action that is likely to have a significant impact on a matter of national environmental significance without Commonwealth approval. It is noted that the Shoreline Ecological Assessment prepared by Biodiversity Assessment and Management Pty Ltd and lodged as part of this preliminary approval recommends the submission of an EPBC Act referral.
 - Please be aware that the listing of the Koala (*Phascolarctos Cinereus*), Queensland Nut (*Macadamia integrifolia*) and Grey-headed Flying-fox (*Pteropus poliocephalus*) as vulnerable (as well as the likely presence of threatened migratory shorebird species) under this Act may affect your proposal. You should therefore consider where an EPBC Act referral is necessary. 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
 - In accordance with the Shoreline Ecological Assessment prepared by Biodiversity Assessment and Management Pty Ltd and lodged as part of this preliminary approval, the subject site is immediately adjacent to the Moreton Bay Ramsar wetland. Actions that will, or are likely to, have a significant impact on Ramsar wetlands will be subject to assessment and approval under the EPBC Act. It is anticipated that the EPBC Act referral will need to include details of the development, and the proposed management of stormwater and water quality and other indirect impacts on the Moreton Bay Ramsar wetland.

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

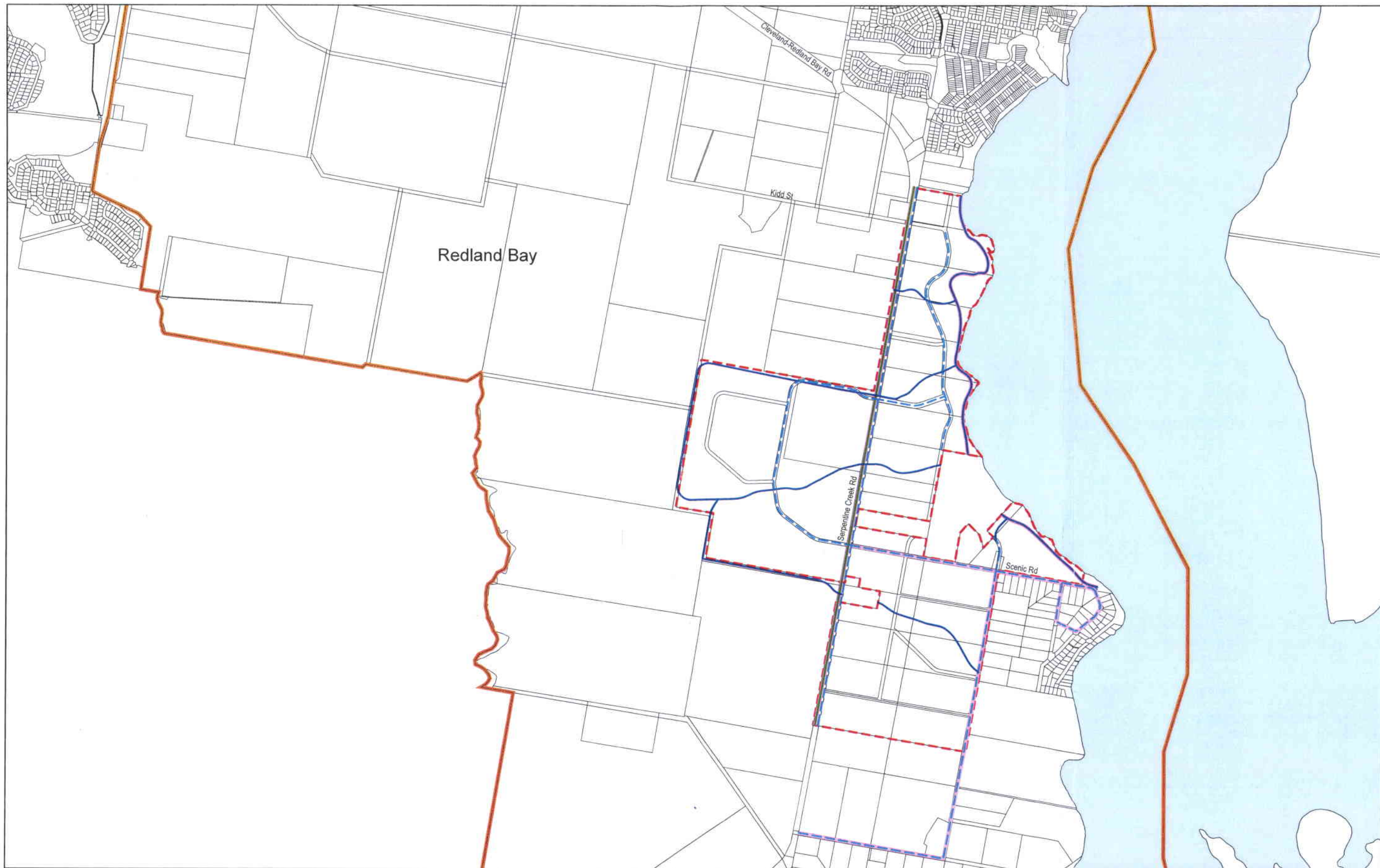
- **Cultural Heritage**
Should any aboriginal, archaeological or historic sites, items or places be identified, located or exposed during the course or construction or operation of the development, the *Aboriginal and Cultural Heritage Act 2003* requires all activities to cease. For indigenous cultural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



- Application Area
- Urban Development
- Open Space Corridors (Neighbourhood Recreation Park and District Sports Park)
- Foreshore Open Space (Community and Destination Park)
- Conservation Park
- Town Centre
- Tourism / Recreation Activity Area
- Conceptual Land for District Sports Park
- Conceptual Land for Local / District / City-wide Community Facilities
- Service Centre
- Possible Future School
- State Controlled Road
- Conceptual Major Collector road (trunk road)
- Conceptual Minor Collector road
- Indicative underpass / overpass
- Conceptual Bus Stop Location







MAP CT9

	Catchment Boundaries	Future Network		Conceptual Off Road Path
	Development Boundary		Conceptual On Road Cycle Lane	
Existing Network			Conceptual Off Road Cycleway to be offset against V6.1 Map T8 2012 PIP Infrastructure Charges	
	Off Road Path		Conceptual Cycleway - Path to be offset against Shoreline Redlands Pty Ltd IA Infrastructure Charges	
	On Road Cycle Lane		Conceptual On Road Cycle Lane to be offset against V6.1 Map T8 2012 PIP Infrastructure Charges	

CYCLEWAY & PATH NETWORK

DISCLAIMER:
 "Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing. This Drawing shall not be reproduced either in part or full without Redland City Council Approval".

Produced : 11/06/2015



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Rev	Amendment Details	Date
G	Conceptual Off Road Path and Cycle Lane amendments	28/10/2015





THE CONSULTANCY BUREAU

**OVERALL
BUSHFIRE MANAGEMENT PLAN
“REDLAND SHORELINE DEVELOPMENT”
FOR
THE FOX AND BELL GROUP
AND FITENI HOMES**

by

**L.S. Hawkes, B.Sc.(For), M.I.F.A., FRFAQ
R.E. Pegg, M.Sc., B.Sc.For, Dip.For. M.I.F.A., FRFAQ
B. Trembath, G.C. App Mgt, FRFAQ
The Consultancy Bureau Pty Ltd
June 2014**

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Executive Summary

The development of a new village on the shores of Southern Moreton Bay requires the assessment of the potential for bushfire as one of the planning considerations.

This proposed “Shoreline” development enjoys a maritime climate influence and most of the proposed development area is subject to some form of existing development.

Vegetation clearing, water storage, infrastructure and residences are all existing features of the site.

The site is dissected by the north/south Serpentine Creek Road. The eastern section is further sub-divided by Scenic Road. The north-eastern section has small remnants of vegetation. These will require some separation from development but are not more than a low level risk from unplanned fires.

The south-eastern section has medium to high risk vegetation to the west and south-east with existing road separations.

The proposed open space link joining existing remnant through from west to east will require access and separations from any development. Again, this section is not a high risk area but the potential for some unplanned fires causing ember attack does exist and will require attention during the planning stage.

The entire eastern area can be designed with perimeter roading, manicured separations and the use of walking tracks, sporting and recreational facilities to ensure the safety of people and property.

The section west of Serpentine Creek Road, while a fully cleared area and of low risk itself, has medium to high risk lands to the west and south.

These retained vegetation areas are extensive and are sited such that any unplanned fire from the north and north-west, could threaten this part of the development. These vegetated areas are in long term conservation tenure and to date there is little evidence of active fire management on these areas.



The development of this area will require a strong set of actions to ensure the inevitable unplanned fire from the west does not threaten people or property.

The actions will include:-

- The development of the 20 metre gazetted road for access and a suitable separation zone. This will require the clearing of the entire 20 metres with special attention to fire dangerous trees.
- The provision of water points along this interface for fire fighting purposes.
- Recognition that habitable buildings within 100 metres of the adjoining hazard will require Building Code assessment under AS3959-2009 at residence construction stage.
- The connecting open space corridor must be designed and managed recognising that this area will act as a “wick” for the hazardous vegetation to the west and south.
- The owners and management of the adjoining lands, while out of the control of this development, must recognise the risk that unplanned fires from these lands will threaten the development. This would be best dealt with by a Management Plan on these lands that includes periodic ecologically designed hazard reduction burns.
- The need for an awareness program for all residences along this risk interface.

Overall, bushfire will not be a limiting factor to this development. The mitigating actions in this Bushfire Management Plan must be designed into the development and followed through at the construction phase.

Management of the fuel in the hazardous adjoining vegetation should also be pursued with the landholders.



1. Introduction

A large, mostly cleared aggregation of land parcels totalling some 303ha is proposed for a discrete village development (see Aerial Overview and Master Plan). This includes a range of residential styles, open space, fauna corridors and public and private utilities.

The site has Moreton Bay as its eastern boundary with retained vegetation around the west, south and some south-eastern perimeters.

While the general area enjoys a maritime influence, sections of the native vegetation have the capacity to carry a threatening unplanned bushfire from time to time.

This Plan assesses these hazards and risks and provides direction via mitigating actions to ensure the safety of all people and property on the subject site.



2. Description of the Site

2.1 General

The Aerial Photograph shows the largely developed nature of the site including extensive grazing, plant nurseries, poultry farms and small cropping. These pursuits range from very active to abandoned and most of the current lands are seriously under-utilised.

The site is divided into eastern and western precincts by Serpentine Creek Road. Scenic Road divides the eastern precinct into northern and southern units.

2.2 Topography

The site and surrounds are gently undulating with a ridge line running from the north-west to the south-east dividing water flows from the west and those to the east into Moreton Bay (see Aerial Photograph). Many of these drainage lines have dams constructed for various rural pursuits. Several are large and are topographical features in their own right.

It is proposed for two corridors (minimum of 100m width) to traverse east to west. These are fauna corridors and not catchment corridors.

2.3 Vegetation and Fauna

The Regional Ecosystem Map shows only one internal unit of vegetation of Ecosystem 12.3.6. There is also a band of native vegetation along the water frontage. This is largely mangroves and other mixtures not normally associated with bushfire considerations.

The Koala Habitat Values Map shows some Koala Bushland fringing the RE 12.3.6. The Aerial Photograph and site inspection confirms this band of vegetation (some regrowth) has the potential to carry an unplanned fire in a dry time.

There is also a small unit of regrowth in the south-eastern precinct that could carry an unplanned fire.

The current position of vegetation will change with the inclusion of rehabilitation and enhancement of the proposed open space corridors (see Master Plan).



2.4 Surrounding Lands

2.4.1 East

Moreton Bay is fringed by vegetation that will be protected and enhanced as per the Master Plan.

2.4.2 North

This property, while partly vegetated, is largely managed with understorey slashing etc. with a mapped section of open dry sclerophyll forest (see Regional Ecosystem Map).

2.4.3 West, South and South-East

These lands are heavily vegetated with mature and regrowth areas. Most, upon inspection, are unmanaged from a bushfire perspective. It appears that the Regional Ecosystem mapping in the bulk of this area may be inaccurate. While this does not affect the bushfire hazard assessment, these vegetation associations should be correctly mapped.

The Koala Habitat Map also confirms they are rated as High Value Bushland which places their tenure as long term vegetation retention.

There is an existing residential development in the eastern and southern sections off Scenic Road and while this has normal landscaping and garden plantings, this is a bushfire safe area.



3. Potential Bushfire Hazard Assessment

3.1 General

In December 2013, a new State Planning Policy (SPP) was released, however this SPP is incomplete when it comes to determining the potential bushfire hazard for a site. The Department of State Development, Infrastructure and Planning have advised the Rural Fires Association of Queensland that the old SPP 1/03 should be used for this purpose until more appropriate hazard calculation methodology is produced. Thus SPP 1/03 provides a suitable methodology for assessing sites for their potential Bushfire Hazard status in this case. This system uses slope, aspect and vegetation type to rate any area (see Appendix 1).

Redlands Planning Scheme – Version 3 provides a Bushfire Hazard Overlay Map which shows three units of medium bushfire hazard and the remainder of the site as low hazard.

3.2 Subject Site

An onsite assessment confirmed that all the cleared pasture, farming and horticultural areas on the site have a low hazard status.

The three units of medium hazard on the overlay are also correctly rated with the most northern area of a much lower risk because of its size, position and proximity to the water.

Overall, the subject site has little bushfire hazard issues at present. The proposed open space links do provide some additional potential hazard as it is largely proposed to develop these back to pre-existing Regional Ecosystem status.

The three open space areas that basically dead-end at Serpentine Creek Road are not expected to rise above low hazard status but some separation may be prudent.

The two areas that connect from east to west will be of medium hazard status and they will require some mitigating actions to render them safe.



The three small areas on parts of the southern boundary and the two on the northern boundary (of the western area) have some potential from adjoining hazardous vegetation and this will require some design considerations.

3.3 Surrounding Areas

The Council's Overlay Map shows the adjoining vegetation to the north and west and along the south-east side as medium hazard status. Site inspection confirms the medium status of all these areas. Some of these areas have the potential to carry high intensity fires if fuel loads are not managed, especially on the extensive units of vegetation to the west.

3.3.1 West of Serpentine Creek Road

This unit has extensive regrowth forest to the south with high fuel loads (20 tonnes/ha) (see Photographs 1 & 2). This area has not been burnt for many years and would carry a high intensity fire.

There is a 20 metre gazetted road along this boundary and along the western edge. The vegetation along the west is more open and the fuel loads are lower; this area appears to have a more recent fire regime. It is still in the high range of medium hazard and without ongoing regular fire management will always pose a risk to the adjoining development.

The strip to the north is of much lower hazard status but requires recognition for the potential for a nuisance fire.

This external large expanse of hazardous vegetation will be provided with an internal wick by the rehabilitation of the gully system through to Serpentine Creek Road. It has to be assumed that these areas will burn infrequently and the severity of this fire will depend largely on the management of these lands over time i.e. if fuel loads are allowed to build up to where some parts are now, fires will be an issue for the proposed development.



3.3.2 East of Serpentine Creek Road

- **North of Scenic Road**

There will be a need to determine the exact purpose and use of the three dead end open space units. It is not envisaged that these will be any threat to the proposed development. There may be a need to recognise that these gully enhancements could have some hazard potential depending on extent of replantings, species used and proposed adjoining development style. The existing external vegetation to attach to these units is largely fire proof, narrow and will have separation in the form of walkways etc.

- **South of Scenic Road**

There is vegetation along the western, southern and half of the eastern boundaries.

The western area has been identified as in the high range medium hazard category and while there is a road separation, any construction along this edge will be subject to Australian Standard 3959-2009 standards.

The southern boundary is a mixture of medium hazard and low hazard with two small gully retention units. It will be necessary to recognise these constraints.

The vegetation to the east is separated by a road and will attract similar requirements to the western section.

Overall, the bushfire hazard status of the subject site is low but a large external section in the west and south has the potential to impact on the proposed development.



4. Bushfire Risk Analysis

The bushfire hazard status of any area is a measure of the physical attributes of the site. The risk of these hazards starting and developing into a threatening bushfire are about sources of ignition, prevailing climate, management of hazards etc.

The risk of a fire starting and developing on the subject sites is low to very low and restricted to small isolated units of retained vegetation, regrowth, and revegetated areas.

Externally, the risk from a large area of vegetation to the west and south (see Hazard Map) is medium to high. This is because our bad bushfire weather is often associated with NW to W winds which, when blowing across a large area containing an unbroken mass of fuel, gives the fire scope to intensify and threaten the entire proposed development with an ember attack. This ember attack could expand to direct fire front involvement in areas directly adjoining this vegetation.

This assessment applies to the western and southern boundaries of the west of the Serpentine Creek Road unit.

Overall, there is a low risk east of Serpentine Creek Road and a medium to high risk west of Serpentine Creek Road. The proposed development, including the linear units of open space protruding from these high risk areas, has the potential to introduce a risk into the residential areas.



5. Mitigating Actions

5.1 Policy and Principles

Redland City Council Planning Scheme provides a Bushfire Hazard Purpose Statement which confirms the need to ensure uses and development are sited, designed and managed to minimise the risk of bushfire to people and property.

Section 1.6 (d) lists the aspects to be addressed to recommend actions for any proposed development (Appendix 2).

They include:-

- Roading and lot layout.
- Fire trails and fire breaks.
- Fuel reduction areas and buffers.
- Water supply.
- Environmental considerations and landscaping.
- Education and awareness programs.

For a proposed development of the subject area's size and nature, the following principles should apply:-

5.1.1 Roading (Access and Separation)

- In all areas adjoining medium hazard vegetation, a perimeter road with a total of 20m fuel reduction area. It will be essential to ensure this road is connected to the trafficable tracks that exist through the expanse of adjoining forest.
- Where the hazardous adjoining vegetation is a small area, narrow, riparian and generally a lower risk situation, a 5m cleared zone with a compacted 3m trail will be provided. This will be strengthened by an appropriate slashed zone either side of the trail.
- All roads and fire trails adjoining hazardous vegetation are to have access at either end i.e. no dead ends or cul-de-sacs.
- Where cul-de-sac designs are used internally, they should not exceed 200m in length when they are within 50m of medium hazard areas.



5.1.2 Fuel Reduction Areas and Buffers

These fuel reduction zones provide separation from adjoining hazardous vegetation. They also provide low fuel levels to allow fire fighters the capacity to effect suppression activities. Table 1, page 14, of the Bushfire Hazard Overlay provides the acceptable requirements.

Some tree retention is allowed in these zones but these retained trees **cannot** be fire dangerous species i.e. fibrous barked species.

5.1.3 Water Supply

- All habitable buildings will be connected to a reticulated water supply with a minimum pressure and flow of 10 litres/sec at 200kpa.
- Provision of water points will be required at 400m intervals on external roads or firebreaks adjoining major areas of medium hazard. If reticulated water is not available, tanks, dams, swimming pools etc. should be detailed and marked on maps in the Bushfire Management Plan.

5.1.4 Environmental and Landscaping

- Fuel reduction areas will maximise the use of existing roads, tracks and natural breaks (e.g. fireproof riparian vegetation).
- Use of walking and cycling tracks as firebreaks along with landscaping, parks, stormwater retention and strategically located sporting fields to strengthen access and separation from hazardous vegetation.

5.1.5 Community Awareness

All residents within 100m of medium hazard areas should be provided with copies of the Bushfire Management Plan and other necessary requirements e.g. AS3959-2009.



5.2 Specific Requirements for Shoreline Development

5.2.1 Roading

Western Precinct

- The entire precinct needs an external 20m separation including a constructed road with access to Serpentine Creek Road at each end (as per Type 1 Fuel Reduction Area (FRA), page 8 of the Code). This would be best located on the existing gazetted road where available and on best location along the northern boundary (some reductions to Type 2 FRA can be considered against low hazard sections).
- The small retained area in the south-east could be incorporated in the vegetation to the south by locating the road on the edge of this retained zone. This should apply to the two small retention areas to the north.
- The open space connecting the western vegetation to the east will require access and separation as per Type 2 FRA, page 8 of the Code i.e. 10m slashed with access and 5m of fuel managed zone.
- For other small areas of open space, a Type 5 FRA will suffice.

Eastern Precinct

- The southern boundary including retained wetland areas should have a minimum of Type 2 FRA separation including a road.
- The two proposed open space corridors that join to the west should also have Type 2 FRA separation with access. The access could be a road or walking/cycling track which is wide enough for a 4x4 rural fire fighting appliance in cases of emergency.
- The remainder of the open space including the entire foreshore zone will need a Type 4 separation and would benefit from some access along each side where possible.
- The foreshore zone should receive treatment similar to the existing sub-division to the north (see Photographs 3, 4 & 5 and Figure 1). This is not a bushfire problem except in a couple of locations where forest species exist.
- The section in the south-east corner adjoining hazardous vegetation enjoys a road separation and provided this is a total of 20m, no further action is needed.



- For other small areas of open space, a Type 5 FRA will suffice.
- Any fire trails or other use access to be incorporated into the bushfire access system must have access at each end. These can be restricted access but available for emergency use (e.g. locked gates or bollards).

The location of the recommended FRA Types is illustrated in Figure 2.

5.2.2 Fuel Reduction Areas and Buffers

These zones must be slashed grass and not in private ownership i.e. they must form part of the managed open space and roading network.

Maximum use should be made of existing cleared areas for recreational uses to provide buffers from hazards.

Retained mature trees or replacement plantings must be of low flammability species i.e. non fibrous bark species will not increase the potential for ember attack. This is especially important along the western and southern interface where the risk is the highest.

5.2.3 Water Supply

The entire area will have reticulated water. Provision of water points with fittings compatible with the local Rural Fire Brigade should be located as per the draft Master Plan (i.e. 7 in total).

5.2.4 Vegetation Management and Environmental Considerations

The retained open space and proposed enhanced open space corridors should have management that minimises the bushfire risk to adjoining areas of development. This should include planting of low flammability plant species and include fuel load management in the design e.g. the riparian strip could be aimed to achieve canopy closure with low ground fuel loads.

These significant areas of vegetation to the west and south on lands in private ownership and reserves need a Fire Management Plan developed that desirably includes a long term recognition of fuel reduction across these areas.



They currently have poor access and little or no management. Fuel loads are already very high and it is inevitable that a high intensity wildfire will have the potential to cause enormous biodiversity damage including fauna losses.

The use of aerial ignition techniques should not be ruled out, but with proper planning these areas can be burnt on a rotational basis to create a mosaic of recovery times with little or no harm to the ecological biodiversity.

5.2.5 Construction Standards under AS3959-2009

The best possible planning outcome should be implemented during the development stage to minimise the impact of any unplanned fires. However, it is inevitable with such a large expanse of hazardous vegetation to the north-west, west and south that some threat will always be present.

All proposed habitable structures within 100m of these assessable sections of vegetation will require a Bushfire Attack Level (BAL) assessment to be conducted at the residence construction stage. This will provide the owner, builder and certifier with the appropriate construction standard required to deal with any assessed bushfire threat.



6. Conclusion

The subject site enjoys a maritime climatic influence and the area east of Serpentine Creek Road has a low risk of bushfire impact. Simple precautions providing access, separation and isolation of vegetated areas will provide a safe outcome.

The area west of Serpentine Creek Road has the potential for long term bushfire threat from the outside vegetation.

It is essential that high quality external access, fuel separation and water supply, combined with long term management of this external hazard, be implemented to provide a safe environment for people and property.

All this can be achieved, but it is recognised that the management of the adjoining lands is out of the control of the developer and future residents, therefore planning must anticipate the worst case scenario unless the proposed management can be negotiated.

It will be necessary to provide Stage Plans as the design of the development proceeds.

Submitted for your consideration and adaptation for particular units of development.



L.S. Hawkes, B.Sc.(For) M.I.F.A., FRFAQ

Senior Associate

for L.S. Hawkes, R.E. Pegg & B. Trembath

CVs attached



Photograph No. 1



Photograph No. 2

Photograph No. 3



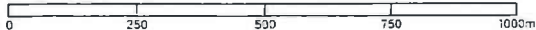
Photograph No. 4

Photograph No. 5





1:10000 @ A3



Unit 1, 26 Wyandra Street, Newstead Q 4006
07 3852 8270
info@lat.com.au
EXCEPT WHERE SHOWN OTHERWISE

Aerial Photograph

Redlands Planning Scheme - Version 3
BUSHFIRE HAZARD OVERLAY
 SHEET 1/2

- LEGEND**
- High Bushfire Hazard
 - Medium Bushfire Hazard
 - Cadastral Properties
 - Outline of RCC
 - Local Authorities Outside RCC

Notation

Land identified within the 'High Bushfire Hazard' and 'Southern Western Bay Islands Bushfire Hazard' is designated as a bushfire prone area and the medium category bushfire protection provisions of the Building Code Australia apply for the purposes of Section 32 of the Standard Building Regulations 1993.

Produced by
 Land Use Planning
 REDLAND CITY COUNCIL

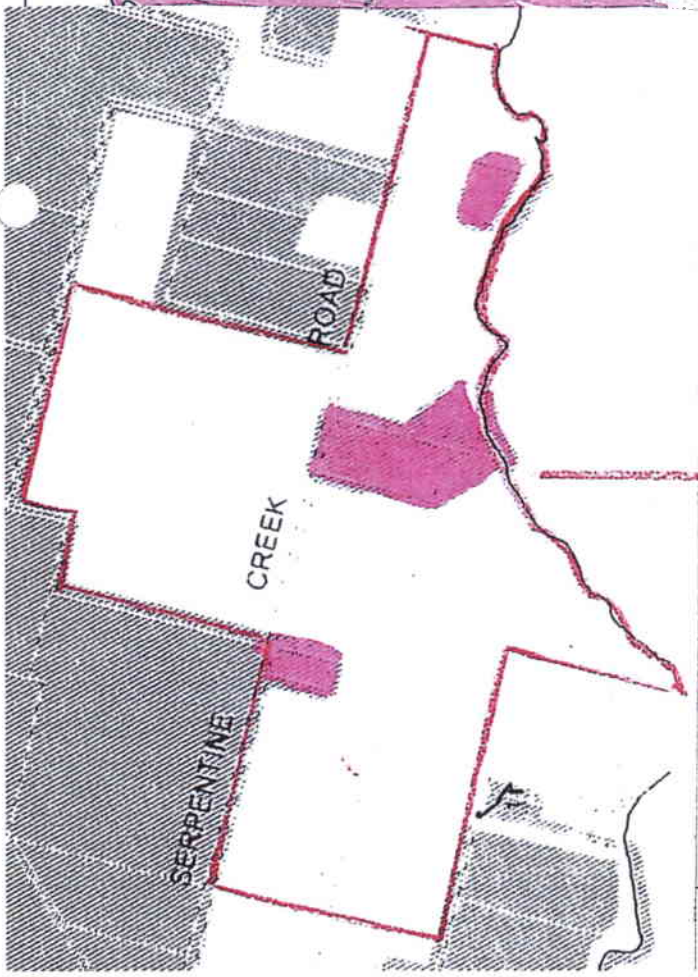
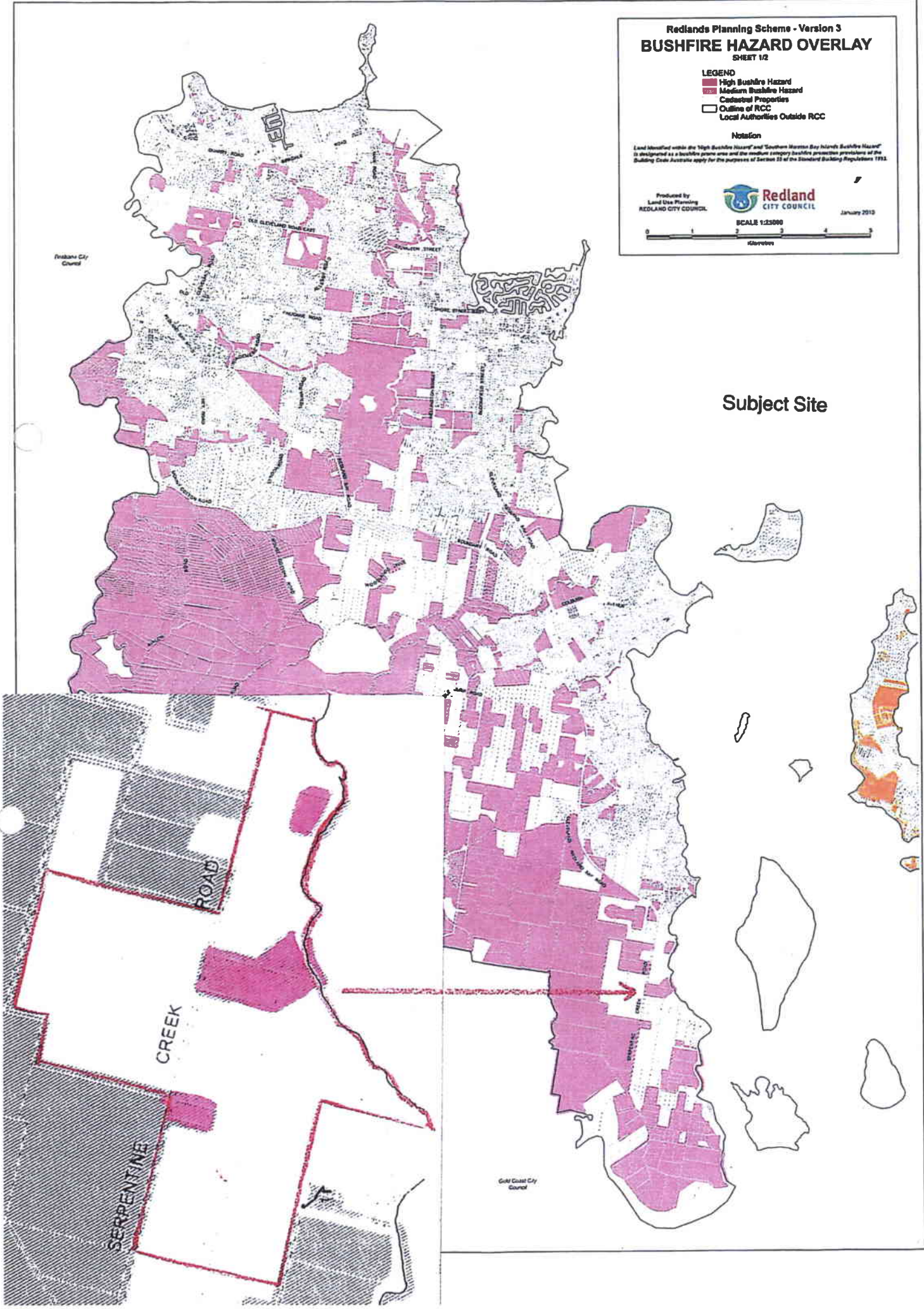


January 2010

SCALE 1:25000









Subject Site



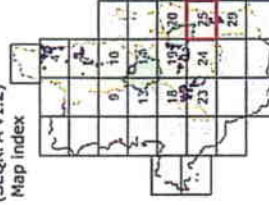
**South East Queensland
Koala Conservation,
State Planning Regulatory
Provisions,
Assessable Development
Area Koala Habitat Values.**

Map Legend

-  Priority koala assessable development area (PKADA)
-  koala assessable development area (KADA)
-  Koala Habitat Value Category
-  Bushland Habitat
-  High Value Bushland
-  Medium Value Bushland
-  Low Value Bushland
-  Suitable for Rehabilitation
-  High Value Rehabilitation
-  Medium Value Rehabilitation
-  Low Value Rehabilitation
-  Other Areas of Value
-  High Value Other
-  Medium Value Other
-  Low Value Other
-  Generally not suitable
-  Water
-  Urban Footprint
-  Cadastre (January 2010)
-  Major Roads
-  SPRP Does not apply

map SPRP_KHV/25
May 31, 2010.
(SEQKPA v1.2)

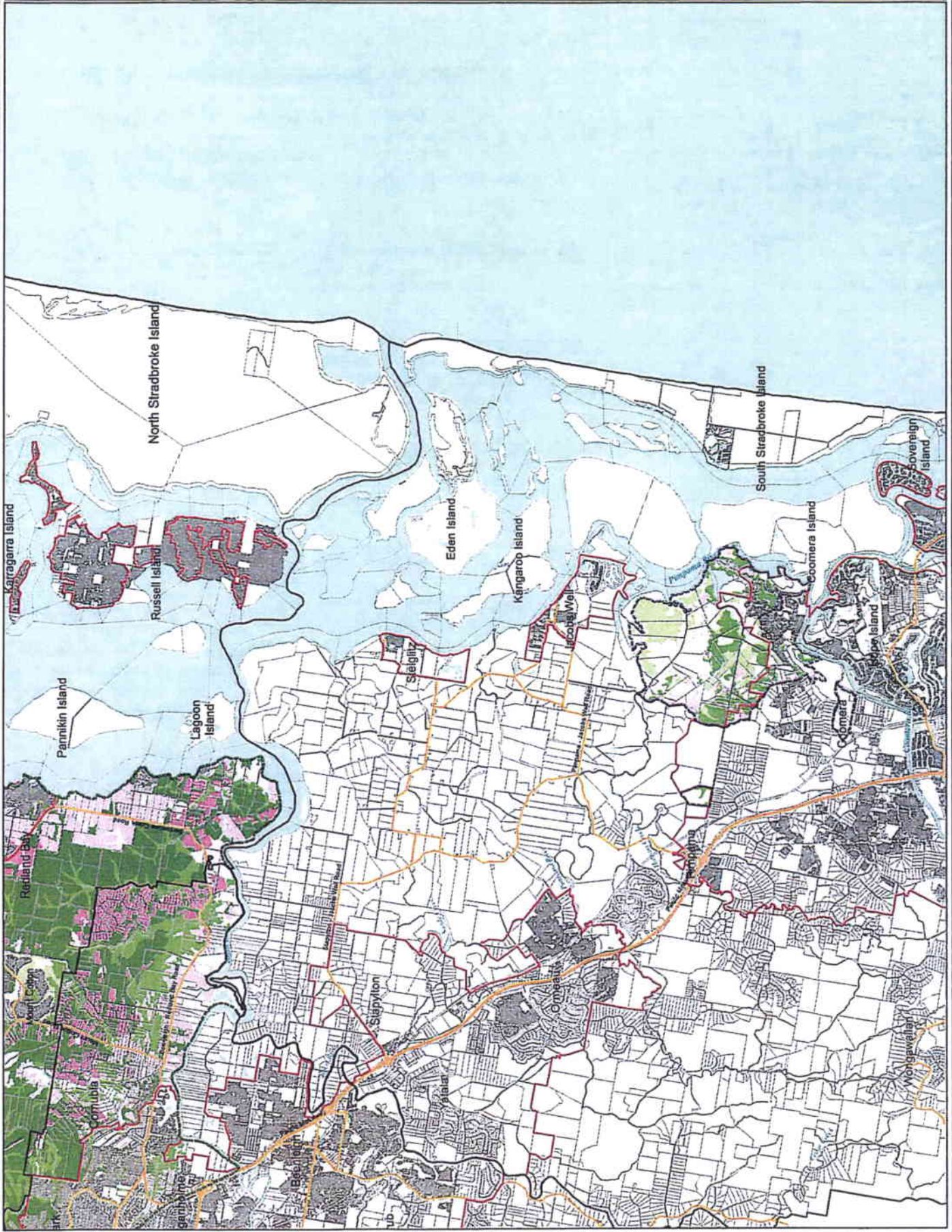
Map Index



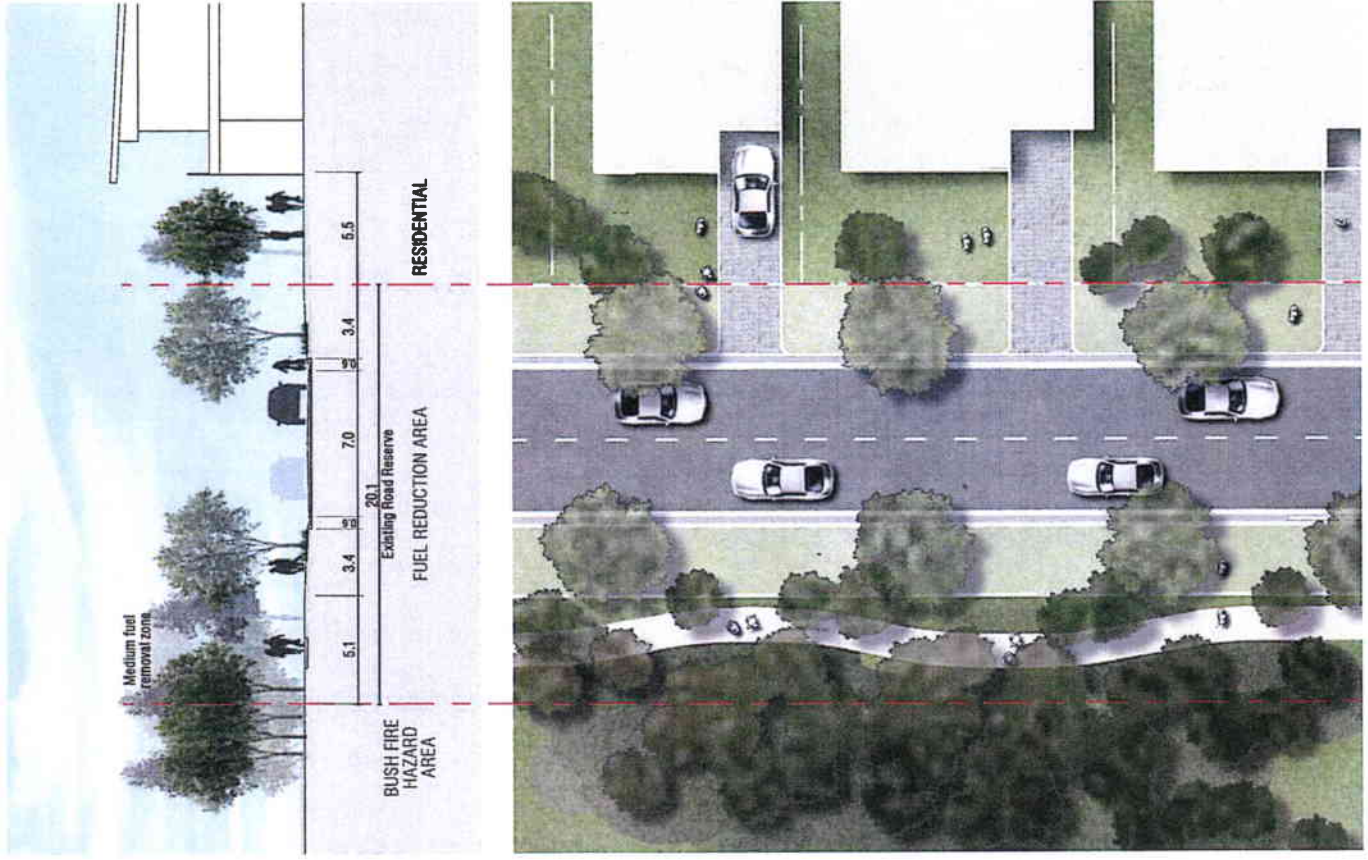
GDA94, MGA56
Scale 1 : 50,000 at A1



© Queensland Government 2010
This map is a reproduction of the map of the South East Queensland Koala Conservation, State Planning Regulatory Provisions, Assessable Development Area Koala Habitat Values, prepared by the Queensland Department of Environment and Heritage Protection, Brisbane, Queensland, Australia, in 2010. The map is published under the Creative Commons Attribution-NonCommercial-ShareAlike license. The map is available for use under the terms of the license. The map is published under the Creative Commons Attribution-NonCommercial-ShareAlike license. The map is available for use under the terms of the license.



Medium / High Fire Risk Residential Interface



Sample Imagery

Figure 1

Proposed Typical Street Cross Sections. Shoreline Master Plan

Figure 2. Specification of FRA Types on Shoreline (FRA as per Planning Scheme).

Area/Boundary	FRA Type	Fuel Reduction Zone (m)	Road, Track or Path (m)
A	1	15	5
B	2	10	5
C	4	5	3
Unmarked areas of revegetation	5	3	2

APPENDIX 3: UNDERTAKING NATURAL HAZARD ASSESSMENT – BUSHFIRE

What is a bushfire?

- A3.1** A bushfire is an uncontrolled fire burning in forest, scrub or grassland vegetation, also referred to as a wildfire.
- A3.2** Bushfire may occur on most vegetation and topography types in Queensland where there is a fuel path of sufficient dryness to be flammable.

Natural hazard management area (bushfire)

- A3.3** A natural hazard management area (bushfire) is described in Annex 3 of the SPP as follows:
- a) 'an area identified by a local government in its planning scheme consistent with the conclusions of a bushfire hazard assessment prepared in accordance with Appendix 3 of the SPP Guideline or other methodology approved by the Queensland Fire and Rescue Service (QFRS); or
 - b) where such a study has not been undertaken, an area identified by a local government in its planning scheme, reflecting the Medium and High hazard area of the Bushfire Risk Analysis maps produced by QFRS, suitably modified following a visual assessment of the accuracy of the maps; or
 - c) where an area has not been identified by a local government, the Medium and High hazard areas on the Bushfire Risk Analysis maps produced by QFRS.'
- A3.4** Outcome 4 of the SPP requires natural hazard management areas (bushfire) to be identified in planning schemes (except for those local government areas to which the SPP does not apply in relation to bushfires – refer to Annex 2 of the SPP). Natural hazard management areas (bushfire) trigger the development outcomes and development assessment requirements specified in Outcome 1 of the SPP, and are also required to enable the development of the planning strategies and detailed measures required by Outcomes 5 and 6 of the SPP.
- A3.5** The following methodology has been developed to assist local governments and developers to identify natural hazard management areas (bushfire). It is an appropriate method for land use planning purposes and is suitable for use by local governments when identifying natural hazard management areas (bushfire) as part of the plan making or amending process and also for site-specific bushfire hazard assessments.
- A3.6** However, other methodologies may also be appropriate. Local governments or their consultants should contact the QFRS to discuss alternative methodologies and ensure that they are acceptable.

Climate change impacts

- A3.7** Climate change is expected to cause a gradual change in vegetation health and vigour, and some species and vegetation communities will be advantaged over others. Climate change impacts will be reflected over time through changes to vegetation communities and fuel characteristics. These changes are difficult to predict and are likely to occur very gradually over a long timeframe. The changes to bushfire hazard associated with climate change impacts will generally be outweighed by changes caused by human activity in the short term. For these reasons it is not practicable to consider the impacts of climate change in bushfire hazard assessment studies at present.

Methodology for assessing bushfire hazard⁴³

- A3.8** The methodology involves quantitative and qualitative assessments. The quantitative element requires an assessment of three key characteristics of land that have been found to be the main determinants of the severity of bushfire hazard. These factors are vegetation communities, slope and aspect.
- A3.9** The area to be assessed should be disaggregated into sub-units according to vegetation communities, slope and aspect characteristics. Tables A3.1 to A3.3 provide the ranges that should be applied for the analysis of each of the three factors. These ranges will also help to determine the sub-units that should be used to conduct the assessment. The size of the sub-units, and level of accuracy of the resultant bushfire hazard map, may vary with the extent of the area being assessed, the characteristics of the land and vegetation communities, and the accuracy of the base information being used.
- A3.10** Each sub-unit is allocated a score for each of the three factors. The total score for each sub-unit determines the severity of bushfire hazard for that sub-unit. A qualitative review of these findings should then be undertaken to verify the results of the quantitative assessment.
- A3.11** The qualitative review should consider the known bushfire behaviour.
- A3.12** Finally, a safety buffer of land in close proximity to identified bushfire hazard areas needs to be included within the natural hazard management area (bushfire). The safety buffer is required because bushfires can affect unvegetated land in close proximity, particularly due to winds fanning flames, smoke, embers and radiant heat.

Step 1: Assessment of vegetation communities

- A3.13** The different types of vegetation communities determine the rate at which dry fuel accumulates. Some vegetation communities protect fuel from drying out in all but extreme bushfire seasons and can then be susceptible to very destructive bushfires. Alternatively, vegetation communities may expose fuels to drying and therefore be frequently available for burning. Frequent bushfires can result in the development of bushfire-tolerant grassy woodlands or grasslands and less destructive bushfire behaviour. The characteristics of different vegetation communities are reflected in Table A3.1. This

⁴³ Alternative methodologies may also be acceptable but should be referred to the QFRS for assessment and approval prior to implementation.

table also presents the hazard scores for a range of vegetation communities. Vegetation community data is available in digital map form from the Queensland Herbarium, Environmental Protection Agency, at a scale of 1:100,000.

Table A3.1: Hazard scores and associated fire behaviours for various vegetation communities

Vegetation communities ¹	Fire behaviour	Hazard score
Wet sclerophyll forest, tall eucalypts (>30 m), with grass and mixed shrub understorey.	Infrequent fires under severe conditions, flame lengths may exceed 40 m, floating embers attack structures for 1 hour, radiant heat and direct flame are destructive for 30 minutes.	10
Paperbark heath and swamps, eucalypt forest with dry-shrub ladder fuels.	Fire intensity depends on fuel accumulation, but can be severe, with flame lengths to 20 m, spot fires frequent across firebreaks, radiant heat and direct flame for 15 minutes.	8
Grassy eucalypt and acacia forest, exotic pine plantations, cypress pine forests, wallum heath.	Fire intensity may be severe with flame lengths to 20 m, but less attack from embers.	6
Native grasslands (ungrazed), open woodlands, canefields.	Fast moving fires, available to fire annually to 4 years. Usually no ember attack, radiant heat for >10 m, duration <2 minutes.	5
Intact acacia forests, with light grass to leaf litter, disturbed rainforest.	Fires infrequent, usually burn only under severe conditions, relatively slow fires, usually little ember attack.	4
Orchards, farmlands, kikuyu pastures.	Fires very infrequent, slow moving, may be difficult to extinguish, frequent fire breaks.	2
Grazed grasslands, slashed grass.	Grazing reduces intensity and rate of spread of fire, duration <2 minutes.	2
Desert lands (sparse fuels), mowed grass.	Gaps in fuel, usually slow fire spread.	1
Intact rainforest, mangrove forest, intact riverine rainforest.	Virtually fireproof.	0

Note 1: Vegetation assessment should be based upon examination of the vegetation on the subject site and surrounding the subject site. Narrow strips of vegetation may be flammable; however, bushfires will not generally reach their full intensity where bushfire fronts are less than 100 metres wide. For this reason the following examples may be viewed as having the next lower hazard score (i.e. paperbark heath would have a score of 6 not 8, cypress pine forest 5 not 6):

- areas with a linear shape (e.g. roadside vegetation beside a cleared paddock); and
- units of vegetation less than 50 hectares in area and more than one kilometre from the nearest extensive vegetation.

A3.14 Where the vegetation community is assessed as having a vegetation community hazard score of zero, no other factors need to be taken into account and the relevant sub-units should be given a Low severity of overall bushfire hazard. No further action is required.

Step 2: Assessment of slope⁴⁴

- A3.15** Studies have shown that fires burn more quickly and with greater intensity up slopes, generally doubling every 10 degrees of slope. Also, the steeper the slope the more difficult it is to construct ring roads, firebreaks and provide access for emergency crews. Trees situated downhill from structures will have their crowns close to the structures. This presents bushfire hazards particularly for exposed structures such as timber decks. Table A3.2 presents the hazard scores for different categories of slope.

Table A3.2: Hazard scores for slope

Slope	Hazard score
Gorges and mountains (>30%)	5
Steep Hills (>20% to 30%)	4
Rolling Hills (>10% to 20%)	3
Undulating (>5% to 10%)	2
Plain (0% to 5%)	1

[Note: For site-specific assessment of bushfire hazard, if the site is downhill from the hazard, the slope effect may be taken as zero as the fire intensity will be less. However, burning heavy fuels may roll downhill and trees may fall down, so recommended setbacks from the hazard still need to be observed.]

Step 3: Assessment of aspect

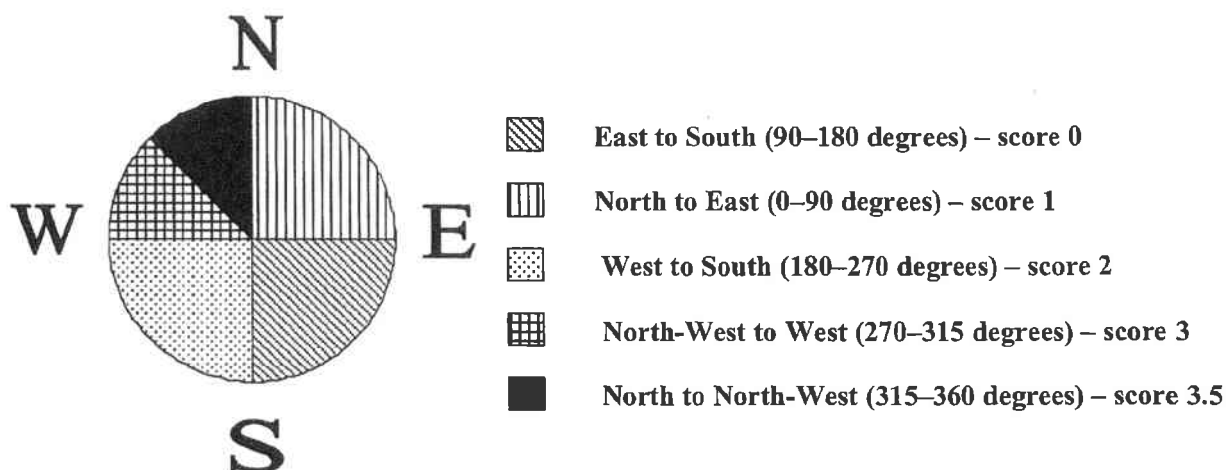
- A3.16** Aspect affects bushfire hazard due to the effects that exposure to direct sunlight has on different vegetation communities, including the drying rates of fuels. Aspect also correlates closely with exposure to low humidity winds that increase bushfire intensity. In extremely broken country where there is a variety of aspects, the predominant aspect should be used.
- A3.17** As aspect has only a minor influence on flatter land, aspect is not considered to be significant on land with a slope less than 5%. Table A3.2 lists the hazard score for different aspects and Figure A3.1 illustrates the compass degree ranges for each aspect category.

Table A3.2: Hazard score for aspect

Aspect	Hazard score
North to North-West	3.5
North-West to West	3
West to South	2
North to East	1
East to South and all land under 5% slope	0

⁴⁴ See Appendix 10 for the methodology for calculating slope.

Figure A3.1: Compass degree ranges for each aspect category



Step 4: Combining scores to identify the severity of bushfire hazard

A3.18 The scores for the individual factors determined for vegetation communities, slope and aspect are added together to give a total for each sub-unit as follows:

$$\text{Total hazard score} = \text{vegetation community hazard score} + \text{slope hazard score} + \text{aspect hazard score.}$$

A3.19 The total hazard score determines the severity of bushfire hazard for each sub-unit as set out in Table A3.4.

Table A3.4: Hazard score ranges to identify the severity of bushfire hazard

Total hazard score	Severity of bushfire hazard
13 or greater	High ⁴⁵
6 to 12.5	Medium
1 to 5.5	Low

⁴⁵ Buildings in High severity bushfire hazard areas should be constructed in accordance with the Level 1 requirements of AS 3959:1999 ‘Construction of Buildings in Bushfire-Prone Areas’.

Step 5: Field verification

A3.20 Preliminary bushfire hazard maps should be prepared based on the results of Step 4 above by aggregating all sub-units with similar levels of bushfire hazard severity into High and Medium severity classifications.⁴⁶ Field verification or 'ground truthing' of these preliminary results should then be undertaken. A number of sample areas should be evaluated to test the accuracy of the preliminary bushfire hazard findings.

Step 6: Qualitative assessment

A3.21 Known bushfire behaviour complements the quantitative assessment and should be considered as part of the qualitative review.

A3.22 Known bushfire behaviour is extremely difficult to use as a quantitative planning tool. This is because the absence of bushfire, even for an extended period of time, does not mean that an area will not burn and may lead to massive fuel accumulation with dangerous bushfire behaviour if it does ignite. Known bushfire behaviour may identify sites where combinations of slope and wind have led to severe bushfire behaviour in the past, and where extra precautions to protect assets might be required. The reliability of known bushfire behaviour may be difficult to assess and QFRS should be consulted if problems are indicated.

Step 7: Safety buffers

A3.23 The final step in identifying bushfire hazard areas is to add a safety buffer, as land adjacent to bushfire hazard areas is vulnerable to bushfire attack from these areas.

A3.24 Any land within 100 metres of an area identified as having a High bushfire severity classification should be included in the High bushfire hazard area and any land within 50 metres of an area identified as having a Medium bushfire severity classification should be included in the Medium bushfire hazard area.⁴⁷ The safety buffers should be integrated into the preparation of maps identifying bushfire hazard areas. Table A3.5 shows the width of the safety buffers that apply to the various bushfire hazard severity classifications.

Table A3.5: Total hazard score and severity of bushfire hazard with safety buffers

Total hazard score	Severity of bushfire hazard	Width of safety buffer
13 or greater	High	100 metres
6 to 12.5	Medium	50 metres
1 to 5.5	Low	Not applicable

⁴⁶ Areas of Low bushfire hazard severity may also be mapped, but the natural hazard management area (bushfire) for the purposes of the SPP comprises only areas identified as being of High or Medium severity.

⁴⁷ Safety buffer areas on the boundary between High and Medium bushfire severity areas should be included in the High bushfire severity area.

Part 11 - Planning Scheme Policies

Planning Scheme Policy 1 - Bushfire Hazard

1.1 Purpose

- (1) The purpose of this policy is to set out requirements for the preparation and submission of development applications, including technical reports, for premises subject to bushfire hazard to -
 - (a) minimise the density of uses or other development at risk from bushfire hazard so as to reduce the number of people and properties subject to the risk;
 - (b) ensure uses and other development are sited, designed and managed to minimise the risk of bushfire to people and property.

1.2 Applicability

This policy applies when a proposed development is situated on premises affected by the Bushfire Hazard Overlay Map and Code.

1.3 Formulating a Development Proposal

- (1) Bushfire hazard assessment and reporting should be undertaken before determination of a potential development scenario.
- (2) Recommendations of the reports are required to ensure the resulting development is compatible with the risk of bushfire and is fully understood by the applicant and premises operator/occupier.
- (3) It is strongly recommended that applicants arrange a pre-lodgement meeting to discuss matters to be included in any reports and the timing of lodgement of the report.

1.4 Bushfire Hazard Mapping

- (1) The Bushfire Hazard Overlay Map is based on hazard mapping developed for the mainland and Southern Moreton Bay Islands by the local government and the Queensland Fire and Rescue Service (QFRS).
- (2) The methodologies used for determination of the hazard is based on Appendix 3 of *SPP 1/03 - Guidelines - Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* and has been modified in accordance with QFRS recommendations for the local area.
- (3) The hazard mapping for North Stradbroke Island is based on mapping produced by the State Government.

1.5 Bushfire Hazard Assessment

- (1) In accordance with the Bushfire Hazard Overlay Code site specific bushfire hazard assessment is required when the premises is affected by medium or Southern Moreton Bay Islands bushfire hazard to ensure the proposal is located on land with the least risk and where management of the hazard is achievable.

- (2) Bushfire hazard assessment is conducted in accordance with the methodology described in Appendix 3 of *SPP 1/03 Guidelines - Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*.
- (3) The assessment manager should be consulted prior to undertaking any study using alternative methodologies.

1.6 Bushfire Management Plans

- (1) In accordance with the Bushfire Hazard Overlay Code site specific bushfire hazard assessment and a management plan is required when the premises is affected by -
 - (a) high bushfire hazard; or
 - (b) medium or Southern Moreton Bay Islands bushfire hazard and is for the purposes of community infrastructure; or
 - (c) high, medium or Southern Moreton Bay Islands bushfire hazard and involves the manufacture or storage of hazardous materials in bulk; or
 - (d) high bushfire hazard and for the purpose of reconfiguration or uses that involve numerous buildings.
- (2) The Bushfire Management Plan (BMP) identifies strategies for mitigating the impacts of bushfire on life, property and the environment. This includes identifying specific risk factors associated with the development, planning for the separation of at-risk elements and potential hazards and providing access and treatments to facilitate an effective response to bushfire.
- (3) Mitigation measures need to consider the four main factors of bushfire attack as detailed in *Protecting your Home Against Bushfire Attack* (DLGPS&R, 2000) -
 - (a) burning debris;
 - (b) radiant heat;
 - (c) direct flame contact;
 - (d) wind.
- (4) The BMP is prepared by a suitably qualified professional with technical expertise in the identification and mitigation of bushfire hazard. Suitable professionals may include those in the environmental management, landscape architecture, architecture, town planning and civil engineering fields.
- (5) Consultation with the local government, responsible Rural and/or Urban Fire Brigade, and managers of adjacent parks or reserves is necessary in the preparation of a BMP.
- (6) It is also desirable to consult other agencies or individuals, such as previous owners of the site or neighbours, who may have local knowledge of the severity and nature of the bushfire hazard.
- (7) A comprehensive BMP -
 - (a) includes an assessment of the nature and severity of the bushfire hazard affecting the site. This should comprise a detailed site specific bushfire hazard assessment using methodology set out in Appendix 3 of *SPP 1/03 Guideline Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*;
 - (b) addresses other site specific factors that are important in devising suitable bushfire mitigation strategies. These factors could include matters such as -
 - (i) likely direction of bushfire attack;
 - (ii) environmental values that may limit mitigation options;
 - (iii) locations of evacuation routes and/or safety zones;



- (c) assesses the specific risk factors associated with the development proposal, including matters such as -
 - (i) the nature of activities and materials to be conducted/stored on the premises;
 - (ii) numbers and types of persons likely to be present;
 - (iii) warning and/or evacuation requirements;
- (d) addresses each of the specific outcomes and associated probable solutions in the Bushfire Hazard Overlay Code and recommends mitigation actions for the proposed development including -
 - (i) road and lot layout for reconfiguration;
 - (ii) fire trails and fire breaks;
 - (iii) accessways, driveways and evacuation routes;
 - (iv) land uses;
 - (v) site layout;
 - (vi) fuel reduction areas and buffers;
 - (vii) water supply;
 - (viii) landscaping;
 - (ix) fire fighting requirements including infrastructure;
 - (x) any other specific measures such as external sprinkler systems and alarms;
 - (xi) purchaser/resident education and awareness programs;
 - (xii) ongoing maintenance and response awareness programs.

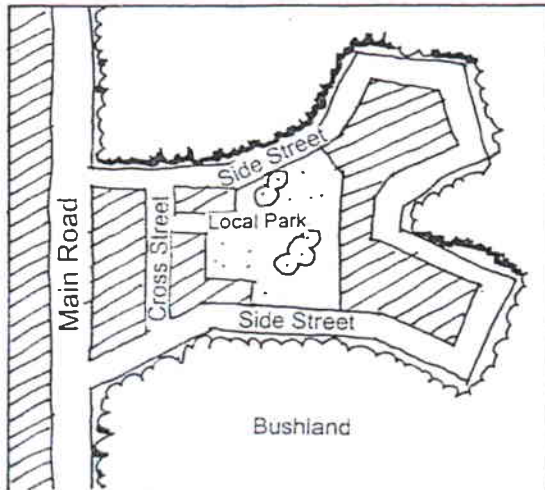
1.7 Development Involving Hazardous Materials Manufactured or Stored in Bulk

- (1) Hazardous materials in bulk for the purposes of bushfire hazard are those detailed in SPP 1/03 as being hazardous materials defined in the *Dangerous Goods Safety Management Act 2001*, in quantities that -
 - (a) would be equivalent to or exceed the minimum quantities set out to determine a Large Dangerous Goods Location in the *Dangerous Goods Safety Management Regulation*; or
 - (b) would require a licence for a magazine for the shortage of an explosive under the *Explosives Regulation 1955*.
- (2) Radioactive substances and infectious substances are excluded from the definition of hazardous materials for the purposes of the SPP.
- (3) Development involving hazardous materials manufactured or stored in bulk has the potential to -
 - (a) be significantly affected by bushfire hazard;
 - (b) significantly assist the progression of bushfire.
- (4) Where a development requires a Flammable and Combustible Licence under the *Dangerous Goods Act 2001*, it is recommended that application for that licence be made at the same time as the development application to ensure all relevant issues are addressed in an integrated manner.
- (5) Depending on design or production capacity chemical manufacture and/or storage may constitute an Environmentally Relevant Activity as defined under the *Environmental Protection Act 1994*. This use or component of a use is required to be assessed for environmental impacts in accordance with the *Environmental Protection Act 1994* and the *Redland City Council Operator's Compliance Guidelines*. Further advice on this matter can be provided at the time of the pre-lodgement meeting.



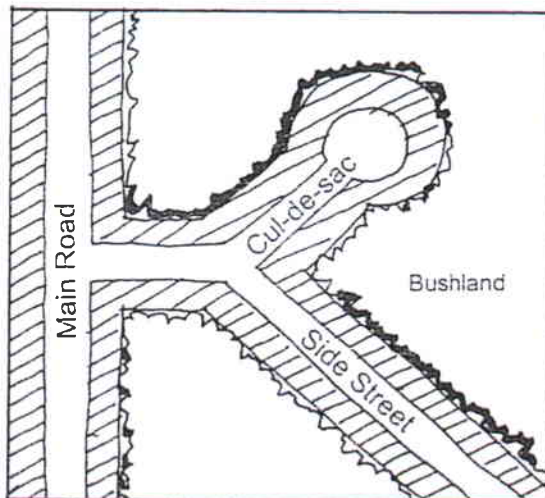
1.8 Road and Lot Layout

Diagram 1 - Preferred road layout in and adjoining bushfire hazard areas



Acceptable – perimeter road system provides separation between hazard and assets; access for fire fighters, and provides two directions for evacuation.

Diagram 2 - Unacceptable road layout in and adjoining bushfire hazard areas



Unacceptable – closed road system congregates evacuation and response traffic, access for fire response restricted.

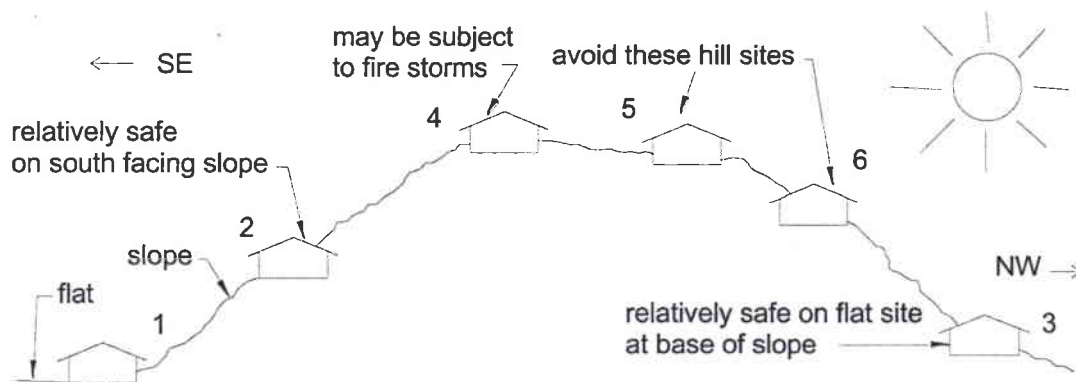
1.9 Building Siting and Development Envelopes

- (1) The way a building is sited on land is a basic factor influencing the ability to protect people and property. As the pattern of fires is predictable, it is possible to determine the most favourable areas to minimise impacts. For example -
 - (a) check data about previous fires in the area to determine the possible directions a fire would travel;
 - (b) be aware most bushfires occur during dry conditions, particularly in times of hot temperatures and low humidity, and are often accompanied by strong winds;
 - (c) remember fires accelerate going up hill and decrease in speed traveling down hill.
 - (d) hanging a building out over the hazard will increase the risk such as a pole house with timber decks will be much more exposed than one set into the slope;
 - (e) siting the structures downhill from the hazard reduces the risk, and this is reflected in the site-specific assessment method. Setbacks are still necessary to avoid falling trees and debris rolling down hill.



- (2) There are two key principles to be considered in siting a building in a bushfire hazard area -
 - (a) avoiding higher risk situations, particularly locations with a combination of slope and certain aspects;
 - (b) maximising the setbacks from hazardous vegetation (refer fuel reduction areas above).
- (3) On larger lots it may be possible to site buildings in an area depicted on bushfire hazard assessment maps as lower bushfire risk.
- (4) Irrespective of the severity of hazard in any bushfire hazard assessment, combinations of slope and aspect on individual sites should be considered. Diagram 3 illustrates the relative bushfire safety of building site locations based on slope and aspect considerations.
- (5) The order of preference is low flat sites, sites set into Southerly or South East slopes, sites at the bottom of more exposed West and North West slopes. The most dangerous sites are on or at the top of West or North West slopes. Building sites should also avoid the head of gullies with Westerly aspects, because fire winds funnel up such sites.
- (6) Although fires may tend to come from a particular direction, local variations are always likely and protection for the southern and eastern side of developments must never be overlooked.

Diagram 3 - Bushfire safety based on slope and orientation



Note -

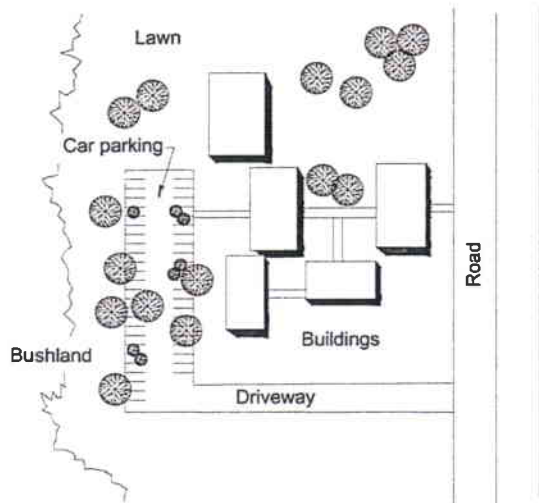
House sites numbered in order of degree of fire safety - 1 being the safest and 6 being the most hazardous.

- (7) Siting should also -
 - (a) avoid ridge tops;
 - (b) avoid steep slopes, particularly upper slopes and narrow ridge crests;
 - (c) avoid locations where adequate fuel reduction areas and buffers can not be provided within the property;
 - (d) locate buildings where vehicular access from two directions can be provided away from identified hazard areas wherever possible;
 - (e) build on level ground wherever possible;
 - (f) where buildings must be constructed on sloping land, incorporate cut-in benches rather than elevated or above fill;
 - (g) avoid raised floors in preference to concrete slabs;



- (h) locate the building near the property entrance for easier access/egress, refer to Diagram 4;
 - (i) keep services underground, particularly electricity;
 - (j) locate on-site water storage near buildings.
- (8) Development envelopes should be sited in the same manner to the above. Development envelope size and shape is designed to allow for the allocation of fuel reduction areas and buffers to assets within the building envelopes.

Diagram 4 - Preferred Site Layout



Consideration should be given to placing least susceptible land uses closer to the likely direction of fire attack than more susceptible land uses.

1.10 Construction of Buildings in Bushfire Hazard Areas

- (1) Building design can have a significant impact on the likelihood of damage occurring due to bushfire.
- (2) Compliance with *Australian Standard 3959:1999 - Construction of Buildings in Bushfire Prone Areas* is required when a premises is affected by Southern Moreton Bay Islands Bushfire Hazard and fuel reduction opportunities are limited due to lot size.
- (3) Incorporation of principles contained in the above standard are encouraged for all buildings within high, medium and SMBI bushfire hazard affected premises.
- (4) The document *Protecting your home against bushfire attack* (DLGPS&R, 2000) provides further guidance on how a building should be designed.
- (5) In addition, it is recommended that -
 - (a) external gas cylinders are shielded from possible exposure to radiant heat by the construction of a masonry shield;
 - (b) building elevation and roof pitches are minimised;
 - (c) all external gaps are less than 2mm;
 - (d) timber decking is kept to a minimum.



1.11 Landscaping

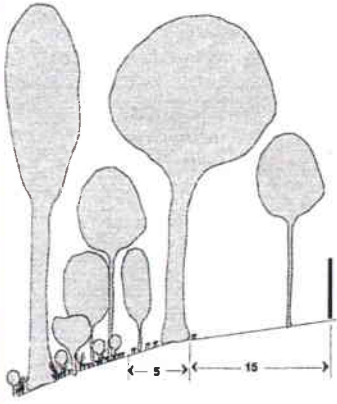
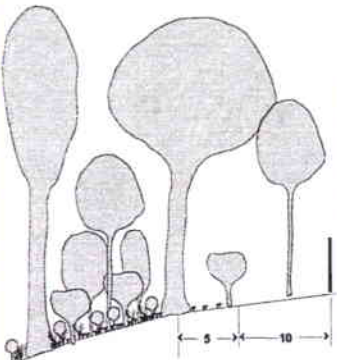
- (1) Landscaping should be designed to assist in creation of buffers and fuel reduction areas.
- (2) Consideration should be given to surround isolated buildings with a wide driveway or paths of gravel, concrete, pavers etc or mown areas.
- (3) Landscaping, particularly using mulch, adjacent to buildings can facilitate spot fires.
- (4) Low flammability plant species indigenous to the local government area should be used and are identified within Table 2 of the Bushfire Hazard Overlay Code.

1.12 Fuel Reduction Areas

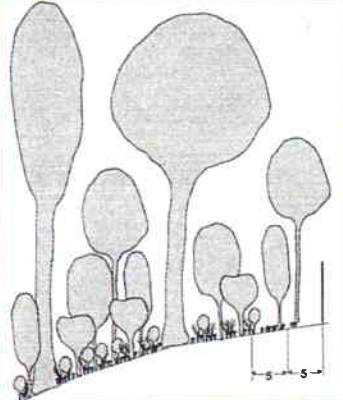
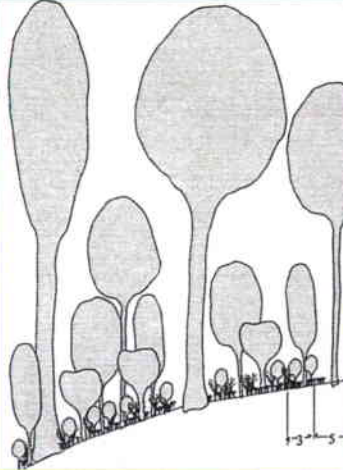
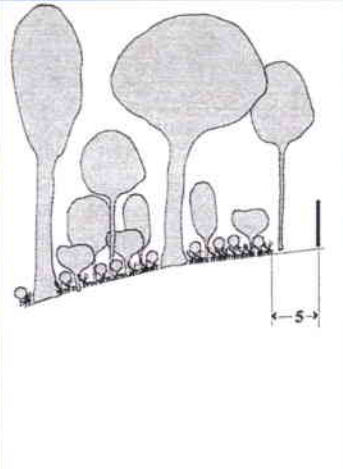
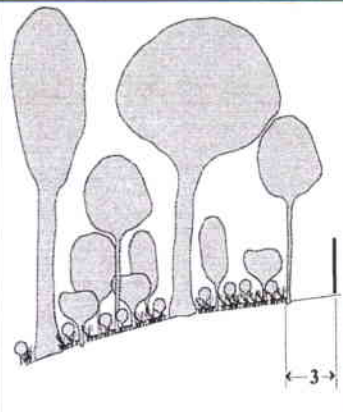
- (1) Fuel reduction areas (FRA) require the gradual removal of fuel between development and a hazard and are located to provide -
 - (a) areas of reduced fuel to slow advancing fire;
 - (b) adequate access for fire fighting and other emergency vehicles;
 - (c) for the retention of environmental values.
- (2) FRA types for the local government area were developed over time as land management agencies and the community addressed the separation of bushland from private and public assets with regard to bushfire risk management.
- (3) FRA types have been classified and are used to demonstrate the flexibility required by a land manager in balancing the built environment with the natural environment.
- (4) A FRA consists of varying widths of a slashed zone, and a medium fuel removal zone.
- (5) General characteristics of these FRA include -
 - (a) in the slashed zone -
 - (i) removal of all understorey plants and ground covers;
 - (ii) retention of trees with a trunk diameter at the base of greater than 15cm;
 - (iii) allowance for the movement of fire tender within the FRA in all situations;
 - (b) in the medium fuel removal zones (MFR) -
 - (i) retention of trees and groundcovers;
 - (ii) selective removal of plants that will be less than 1.5 metres in height on maturity.
- (6) Minimum FRA's are specified in Table 1 of the Bushfire Hazard Overlay Code.
- (7) Additional types may be appropriate as determined by a bushfire management plan for the development and are set out in Table 1 of this policy.
- (8) Distances and treatments should be -
 - (a) used as a guide and may be varied at the discretion of the local government in consideration of site specific hazards and significant environmental features. For this reason all 7 types of fuel reduction areas are detailed;
 - (b) measured from any buildings or structures associated with the development.
- (9) On lots greater than 2500m², buildings should be sited so that the minimum setbacks from hazardous vegetation detailed for the FRA can be achieved.



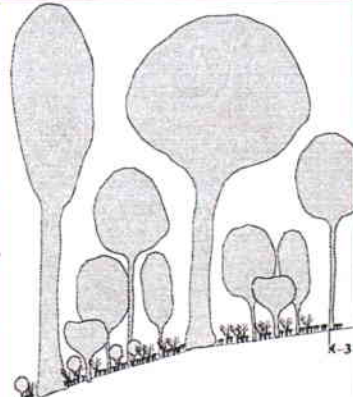
Table 1 - Fuel Reduction Area Descriptions

FRA Type	Representation	Description
1		<p>Requires the removal of canopy, understorey and groundcover and installation of measures to minimise the erosion of the bare soil and direct stormwater run-off.</p> <p>Is only necessary where the fire risk is very high due to highly combustible fuel and the slope of the land would allow for a high rate of spread and a high flame height in periods of high fire danger, and where the risk to life and infrastructure is high.</p> <p>Zone widths -</p> <ul style="list-style-type: none"> ■ Slashed - 15 metres ■ MFR - 5 metres <p>It is noted that this type of FRA results in substantial impact on environmental values and allows for increased opportunities for environmental weeds, soil erosion and other impacts. Erosion control measures should be constructed and maintained in all situations.</p>
2		<p>Requires the removal of the understorey and ground cover but retains some of the canopy. This will depend on the slope, vegetation structure and the type of available fuel.</p> <p>The FRA is used in locations of medium slope with combustible material and where the risk to people and property is high.</p> <p>The slashed zone allows for the easy movement of a fire tender within the FRA in all situations and allows for the re-growth of grasses that need regular slashing or mowing particularly during the fire season.</p> <p>Zone widths -</p> <ul style="list-style-type: none"> ■ Slashed - 10 metres ■ MFR - 5 metres <p>It is noted that this type of FRA results in substantial impact on environmental values and allows for increased opportunities for environmental weeds, soil erosion and other impacts. Erosion control measures should be constructed and maintained in all situations.</p>



FRA Type	Representation	Description
3		<p>Requires the removal of the understorey and ground cover but retains canopy vegetation. This FRA is used in locations of medium to low slope, with combustible material and where the risk to people and property medium to low.</p> <p>The slashed zone allows for the easy movement of a fire tender within the FRA in all situations and allows for the re-growth of grasses that need regular slashing or mowing particularly during the fire season.</p> <p>Zone widths -</p> <ul style="list-style-type: none"> ■ Slashed - 5 metres ■ MFR - 5 metres <p>Erosion control measures are required.</p>
4		<p>Requires the removal of the understorey and the slashing of the ground cover.</p> <p>This FRA is used in locations of minimal slope with low fire risk to people or property.</p> <p>It may form internal FRAs within bushland areas where vehicle access is required.</p> <p>Access is provided for fire tenders around the canopy trees within this FRA.</p> <p>Zone widths -</p> <ul style="list-style-type: none"> ■ Slashed - 5 metres ■ MFR - 3 metres <p>Natural drainage lines are maintained and the grasses regularly mowed.</p>
5		<p>Requires the removal of understorey and fire fuels with the slashing of the groundcovers.</p> <p>This FRA type is used in locations of minimal slope and no risk to property. Fire prevention activities are conducted from this FRA, such as prescribed burns, and access is required for fire tenders within the FRA.</p> <p>This FRA is used in areas with environmental values such as riparian areas, where minimal disturbance to values is required.</p> <p>Zone widths -</p> <ul style="list-style-type: none"> ■ Slashed - 3 metres ■ MFR - 2 metres <p>This FRA may provide access in bushland areas such as walking tracks, bikeways, horse trails.</p>
6		<p>Requires the slashing of the groundcovers and the thinning of the understorey to form a FRA of 3 metres. This FRA would receive regular maintenance.</p> <p>This FRA is used in areas of no or minimal slope or where there is no fire risk and the FRA is used for fire prevention, such as prescribed burns.</p> <p>This FRA is used in areas of environmental value or cultural significance, where minimal disturbance is required. Vehicle access is not required.</p>

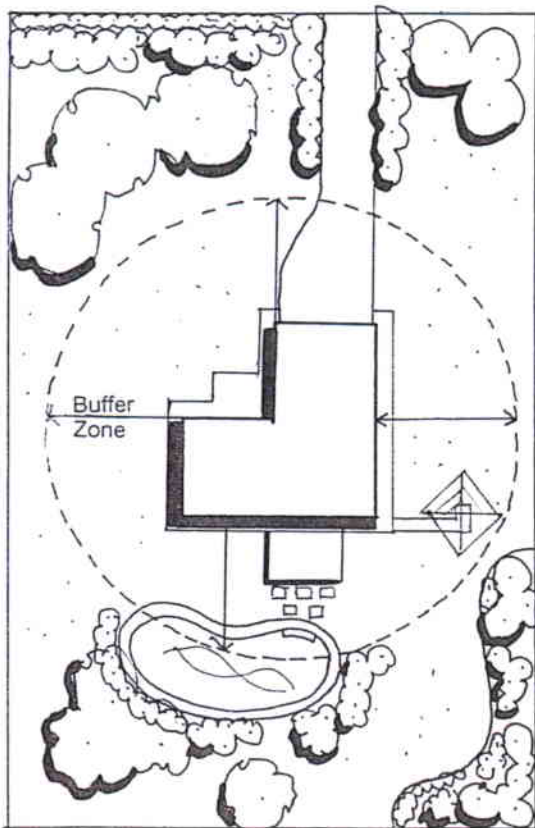


FRA Type	Representation	Description
7		<p>Allows for the thinning of the understorey and the minimal slashing/mowing of the groundcovers. The nominal width of this thinned area would be up to 3 metres.</p> <p>This FRA is used in areas of no or minimal slope or where there is no fire risk and the FRA is used for fire prevention such as prescribed burns, purposes.</p> <p>This FRA is used in areas where the adjacent land has a cleared well maintained open area between the hazard and any building or structure.</p>

1.13 Buffer Zones

- (1) Barriers and buffer zones around buildings will assist in slowing bushfire. Barriers may include planting suitable trees, vegetation and building permanent barriers such as low stone or masonry walls. These barriers or buffers assist in protecting buildings from possible attack by burning debris, heat radiation and direct flame contact.
- (2) Between the barriers and buildings, a 'buffer zone' is created by reducing the number of combustible items near, refer to Diagram 5. This means that if burning debris passes through the barriers, there is minimal opportunity to create further outbreaks and provides an opportunity to put out spot fires.
- (3) Consideration should be given to providing a grassed area or gravel, concrete or paved driveway in proximity to isolated buildings or mown areas.

Diagram 5 - Creation of buffer zones between buildings and hazardous vegetation



Division 3 - Bushfire Hazard Overlay

5.3.1 Introduction

- (1) This division contains the provisions for the Bushfire Hazard Overlay. They are -
- (a) The Bushfire Hazard Overlay Tables of Assessment, that incorporates -
 - (i) Levels of assessment for development in the Bushfire Hazard Overlay (section 5.3.2);
 - (ii) Assessment criteria for development in the Bushfire Hazard Overlay (section 5.3.3);
 - (iii) Bushfire Hazard Overlay - Table of Assessment for Material Change of Use of Premises (section 5.3.4);
 - (iv) Bushfire Hazard Overlay - Table of Assessment for Other Development not associated with a Material Change of Use of Premises (section 5.3.5).
 - (b) The Bushfire Hazard Overlay Code, that incorporates -
 - (i) Compliance with the Bushfire Hazard Overlay Code (section 5.3.6);
 - (ii) Overall Outcomes for the Bushfire Hazard Overlay Code (section 5.3.7);
 - (iii) Acceptable Solutions applicable to Self-Assessable Development (section 5.3.8);
 - (iv) Specific Outcomes and Probable Solutions applicable to Assessable Development (section 5.3.9).

5.3.2 Levels of assessment for development affected by the Bushfire Hazard Overlay

- (1) Sections 5.3.4 and 5.3.5 identify the level of assessment for development affected by the Bushfire Hazard Overlay, as follows -
- (a) Section 5.3.4 Bushfire Hazard Overlay - Table of Assessment for Making a Material Change of Use of Premises -
 - (i) column 1 identifies uses that are exempt, self-assessable or assessable;
 - (ii) column 2 identifies the level of assessment for the uses listed in column 1;
 - (iii) where the use is defined in Schedule 3 - Dictionary, Division 1 - Uses and is not listed in column 1 it is exempt;
 - (iv) where the use is not defined in Schedule 3 - Dictionary, Division 1 - Uses and is not listed in column 1 it is code assessable.
 - (b) Section 5.3.5 Bushfire Hazard Overlay - Table of Assessment for Other Development not associated with a Material Change of Use of Premises -
 - (i) column 1 identifies other development that is exempt, self-assessable or assessable;
 - (ii) column 2 identifies the level of assessment for other development listed in column 1;
 - (iii) where the other development is not listed in column 1 it is exempt.
- (2) Other Overlays may alter the level of assessment identified in 1(a) and (b)^{5.10}.

Note -

Land identified within the High Bushfire Hazard and Southern Moreton Bay Islands Bushfire Hazard is designated as a bushfire prone area and the medium category bushfire protection provisions of the *Building Code of Australia* apply for the purposes of section 55 of the *Standard Building Regulations 1993*.

^{5.10} Refer to Part 5 - Overlays to determine the level of assessment for the use or other development where another Overlay affects the lot and Part 1, section 1.2.5(10)(f) that explains how the highest level of assessment applies.

5.3.3 Assessment criteria for development in the Bushfire Hazard Overlay

- (1) Development affected by the Bushfire Hazard Overlay is assessed against the assessment criteria listed in column 3 of sections 5.3.4 and 5.3.5, as follows -
 - (a) acceptable solutions in section 5.3.8 of the Bushfire Hazard Overlay Code for self-assessable development; or
 - (b) specific outcomes in section 5.3.9 of the Bushfire Hazard Overlay Code for assessable development.
- (2) Self-assessable development that does not comply with all the acceptable solutions in section 5.3.8 of the Bushfire Hazard Overlay Code is assessable development.

5.3.4 Bushfire Hazard Overlay - Table of Assessment for Material Change of Use of Premises

Bushfire Hazard Overlay - Table of Assessment for Material Change of Use of Premises

column 1	column 2	column 3
Use ^{5.11}	Level of Assessment ^{5.12}	Assessment Criteria
<ul style="list-style-type: none"> ■ Aged Persons and Special Needs Housing ■ Agriculture ■ Airport ■ Animal Keeping ■ Apartment Building ■ Bed and Breakfast ■ Brothel ■ Bulky Goods Showroom ■ Car Wash Facility ■ Caretakers Dwelling ■ Child Care Centre ■ Commercial Office ■ Community Facility ■ Display and Sale Activity ■ Drive Through Restaurant ■ Dual Occupancy ■ Dwelling House ■ Education Facility ■ Emergency Services ■ Estate Sales Office ■ Extractive Industry ■ Forestry ■ Funeral Parlour ■ Garden Centre ■ General Industry ■ Health Care Centre ■ Heavy Industry ■ Home Business ■ Hospital ■ Hotel ■ Indoor Recreation Facility ■ Institution ■ Intensive Agriculture ■ Landscape Supply Depot ■ Marine Services ■ Minor Utility ■ Mobile Home Park ■ Multiple Dwelling ■ Night Club ■ Outdoor Dining ■ Outdoor Recreation Facility ■ Passenger Terminal ■ Place of Worship 	<p><u>Self-Assessable</u> If complying with the assessment criteria being the acceptable solutions listed in column 3</p> <p><u>Code Assessable</u> If not self-assessable</p>	<ul style="list-style-type: none"> ■ Acceptable Solutions in section 5.3.8 of the Bushfire Hazard Overlay Code ■ Bushfire Hazard Overlay Code

^{5.11} See Schedule 3 - Dictionary, Division 1 - Uses for defined uses.

^{5.12} See Schedule 3 - Dictionary, Division 2 - Administrative Terms for a definition of level of assessment.

Bushfire Hazard Overlay - Table of Assessment for Material Change of Use of Premises

column 1	column 2	column 3
Use ^{5.11}	Level of Assessment ^{5.12}	Assessment Criteria
<p>Continued -</p> <ul style="list-style-type: none"> ■ Produce Store ■ Refreshment Establishment ■ Retail Warehouse ■ Roadside Stall ■ Rural Enterprise ■ Service Industry ■ Service Station ■ Shop ■ Telecommunications Facility ■ Temporary Use ■ Tourist Accommodation ■ Tourist Park ■ Utility Installation ■ Vehicle Depot ■ Vehicle Parking Station ■ Vehicle Repair Premises ■ Veterinary Surgery ■ Warehouse 	<p><u>Self-Assessable</u> If complying with the assessment criteria being the acceptable solutions listed in column 3</p> <p><u>Code Assessable</u> If not self-assessable</p>	<ul style="list-style-type: none"> ■ Acceptable Solutions in section 5.3.8 of the Bushfire Hazard Overlay Code ■ Bushfire Hazard Overlay Code
<p>Defined uses not listed in column 1</p>	<p><u>Exempt</u></p>	
<p>Uses not defined in Part 9 - Schedule 3 - Dictionary, Division 1 - Uses</p>	<p><u>Code Assessable</u></p>	<ul style="list-style-type: none"> ■ Bushfire Hazard Overlay Code

5.3.5 Bushfire Hazard Overlay - Table of Assessment for Other Development not associated with a Material Change of Use of Premises

· Bushfire Hazard Overlay - Table of Assessment for Other Development

column 1	column 2	column 3
Other Development	Level of Assessment ^{5.13}	Assessment Criteria
Reconfiguration for -		
Creating lots by subdividing another lot by Standard Format Plan ^{5.14}	<u>Code Assessable</u>	<ul style="list-style-type: none"> ■ Bushfire Hazard Overlay Code
Rearranging the boundaries of a lot by registering a plan of subdivision	<u>Code Assessable</u>	<ul style="list-style-type: none"> ■ Bushfire Hazard Overlay Code
Building Work for -		
<ul style="list-style-type: none"> ■ Domestic Outbuilding ■ On-site raising or relocation of an existing dwelling unit 	<p><u>Self-Assessable</u> If complying with the assessment criteria being the acceptable solutions listed in column 3</p> <p><u>Code Assessable</u> If not self-assessable</p>	<ul style="list-style-type: none"> ■ Acceptable Solutions in section 5.3.8 of the Bushfire Hazard Overlay Code ■ Bushfire Hazard Overlay Code
Operational Work for -		
Operational Work for Reconfiguring a Lot (by Standard Format Plan)	<u>Code Assessable</u>	<ul style="list-style-type: none"> ■ Bushfire Hazard Overlay Code
All other development not listed in column 1	<u>Exempt</u>	

^{5.13} See Schedule 3 - Dictionary, Division 2 - Administrative Terms for a definition of level of assessment.

^{5.14} Whether or not having a Community Management Statement.

5.3.6 Compliance with the Bushfire Hazard Overlay Code

- (1) Development that is consistent with the following complies with the Bushfire Hazard Overlay Code -
 - (a) acceptable solutions in section 5.3.8 where self-assessable development; or
 - (b) specific outcomes in section 5.3.9 where assessable development.

Note -

- Planning Scheme Policy 1 - Bushfire Hazard will assist in achieving the requirements of the Bushfire Hazard Overlay Code.
- Land identified within the high bushfire hazard and Southern Moreton Bay Islands bushfire hazard is designated as a bushfire prone area and the medium category bushfire protection provisions of the *Building Code of Australia* apply for the purposes of section 55 of the *Standard Building Regulations 1993*.

5.3.7 Overall Outcomes of the Bushfire Hazard Overlay Code

- (1) The overall outcomes are the purpose of the Bushfire Hazard Overlay Code.
- (2) The overall outcomes sought for the Bushfire Hazard Code are the following -
 - (a) to minimise the density of uses and other development at risk from bushfire hazard so as to reduce the number of people and properties subject to that risk;
 - (b) to ensure uses and other development are sited, designed and managed to minimise the risk of bushfire to people and property.

5.3.8 Acceptable Solutions applicable to Self-Assessable Development

Self-Assessable Development	
Acceptable Solutions	
A1.	<p>(1) Where on the mainland and on a lot or premises identified as medium or high bushfire hazard on this overlay map, uses and other development are located outside the area shown on the overlay map; or</p> <p>(2) Uses and other development are located within an approved development envelope.</p>

5.3.9 Specific Outcomes and Probable Solutions applicable to Assessable Development

Assessable Development			
Specific Outcomes		Probable Solutions	
S1.	<p><u>General -</u></p> <p>(1) Where on the mainland and on a lot or premises identified as medium or high bushfire hazard on this overlay map, uses and other development are located outside the area shown on the overlay map; or</p> <p>Note -</p> <p>Compliance with specific outcome S1.(1) achieves compliance with this Code.</p> <p>(2) Uses and other development maintain the safety of people and property by -</p> <p>(a) avoiding areas shown on this overlay map as -</p> <p>(i) high bushfire hazard; or</p> <p>(ii) medium bushfire hazard; or</p> <p>(iii) Southern Moreton Bay Islands (SMBI) bushfire hazard;</p>	P1.	<p>(1) No probable solution identified.</p> <p>(2) Uses and other development -</p> <p>(a) locate on land that is not shown on this overlay map as -</p> <p>(i) high bushfire hazard; or</p> <p>(ii) medium bushfire hazard; or</p> <p>(iii) Southern Moreton Bay Islands (SMBI) bushfire hazard; or</p> <p>(b) where shown as medium or SMBI bushfire hazard on this overlay map -</p> <p>(i) determine that the hazard on that part of the lot or premises where the development is proposed is low through a bushfire hazard assessment; or</p> <p>(ii) comply with the recommendations of a bushfire management plan previously prepared for the specific premises; or</p> <p>(c) where shown as high bushfire hazard on this overlay map, all uses and other development, excluding dwelling houses on existing lots, comply with the</p>

Bushfire Hazard Overlay

Assessable Development	
Specific Outcomes	Probable Solutions
<p>(3) Buildings and structures mitigate risk from bushfire hazard through siting, setback and design;</p>	<p>recommendations of a comprehensive bushfire management plan for the premises;</p> <p>Note -</p> <p>To assist in achieving P1.(2)(b) and (c) refer to Part 11 - Planning Scheme Policy 1 - Bushfire Hazard for requirements of a bushfire hazard assessment or bushfire management plan.</p> <p>(3) Buildings and structures -</p> <p>(a) on a lot or premises greater than 2500m² -</p> <p>(i) are located on that part of the lot or premises with the lowest bushfire hazard;</p> <p>(ii) where shown in medium or high bushfire hazard areas on this overlay map, are provided with a fuel reduction area that is a minimum of 1.5 times the predominant mature canopy height; or</p> <p>(iii) where shown in SMBI bushfire hazard areas on this overlay map, provide a fuel reduction area that complies with Table 1 - Type 2; or</p> <p>(b) on a lot or premises less than 2500m² -</p> <p>(i) maximise setbacks from the bushfire hazard; or</p> <p>(ii) where shown as SMBI bushfire hazard on this overlay map -</p> <p>a. provide a fuel reduction area that complies with Table 1 - Type 2; or</p> <p>b. provide a fuel reduction area that complies with Table 1 - Type 4 and buildings are constructed in accordance with <i>Australian Standard 3959:1999 - Construction of Buildings in a Bushfire Prone Area</i>;</p>
<p>(4) Reconfiguration and uses that involve numerous buildings, such as tourist accommodation, aged person and special needs housing</p>	<p>(4) Reconfiguration that creates lots or uses that will involve numerous buildings -</p> <p>(a) where shown as high bushfire</p>

Assessable Development	
Specific Outcomes	Probable Solutions
<p>or the like, mitigate risk from bushfire hazard through lot design and roads and firebreaks that provide adequate access for fire fighting and other emergency vehicles and safe evacuation routes;</p>	<p>hazard on this overlay, comply with a bushfire management plan for the premises; or</p> <p>(b) where shown as medium or SMBI bushfire hazard, identify an area, in the form of development envelope, that is of sufficient size to -</p> <p>(i) comply with setbacks detailed in P1.(3)(a) and (b) depending on the hazard that is shown on the lot or premises where the development envelope is proposed;</p> <p>(ii) contain all expected uses and associated activities, including buildings, structures, open space, infrastructure and access;</p> <p>(c) provides efficient emergency access for fire fighting purposes by -</p> <p>(i) limiting long narrow lots and accessways;</p> <p>(ii) providing an alternative evacuation route by -</p> <p>a. through roads; or</p> <p>b. where culs-de-sac are used, alternative vehicle access connects the culs-de-sac to the through roads;</p> <p>(iii) providing a perimeter road to separate the development from the hazard that is designed -</p> <p>a. with a minimum cleared width of 20 metres,</p> <p>b. a maximum gradient of 12.5 percent;</p> <p>c. a maximum crossfall of 7 percent; or</p> <p>(iv) where the provision of a perimeter road is not achievable, fire trails are located within the site and comply with the following -</p> <p>a. separate development from the hazard;</p> <p>b. where in the SMBI bushfire hazard have a minimum cleared width of 3 metres that is supported by a slashed zone that complies with Table 1, Type 2 either side of the trail; or</p>

Bushfire Hazard Overlay

Assessable Development	
Specific Outcomes	Probable Solutions
<p>(5) Uses and other development mitigate risk from bushfire hazard through providing an adequate and accessible water supply for fire fighting purposes.</p>	<p>c. where in the medium bushfire hazard have a minimum cleared width of 6 metres that is supported by a 10 metre slashed zone either side of the trail;</p> <p>d. where in the high bushfire hazard have a minimum cleared width of 6 metres that is supported by a 15 metre slashed zone either side of the trail;</p> <p>e. have a maximum gradient of 12.5 percent,</p> <p>f. have a maximum crossfall of 7 percent;</p> <p>g. are a constructed finish of 50mm deep decomposed granite;</p> <p>h. have vehicle access at each end;</p> <p>i. include passing bays and turning areas for fire fighting trucks;</p> <p>j. are ultimately dedicated to the local government or provided with an access easement in favour of the local government and Queensland Fire and Rescue Service;</p> <p>Note -</p> <p>Fire trails will only be accepted if it is not practicable to provide the firebreak in the form of a perimeter road due to -</p> <ul style="list-style-type: none"> ■ topographical or remnant or significant vegetation constraints; or ■ access to the proposed lots being provided from an existing road and it would be unreasonable to require the construction of a new road. <p>(5) Uses involving proposed or existing buildings with a gross floor area greater than 50m² are provided with a reliable on-site water supply by -</p> <p>(a) being connected to a reticulated water supply with a minimum pressure and flow of 10 litres per second at 200kPa;</p> <p>or</p>

Assessable Development	
Specific Outcomes	Probable Solutions
	<p>(b) provision of a storage system that is capable of holding a minimum of 5000 litres in the form of a -</p> <ul style="list-style-type: none"> (i) dam; (ii) swimming pool; or (iii) tank storage system; <p>(c) where a storage system is used it is -</p> <ul style="list-style-type: none"> (i) fireproof; (ii) fitted with necessary fire hose connections; (iii) accessible for fire fighting vehicles; (iv) provided with a hard stand area within 6 metres of the water supply; (v) connected to a pump that is independent of mains electricity supply; (vi) capable of retaining 5000 litres solely for fire fighting purposes. <p>Notes -</p> <ul style="list-style-type: none"> ■ Where the use incorporates roof sprinkler systems it is advised that the water supply be increased to 22,000 litres. ■ Communal bushfire water supply is encouraged and will be determined on an individual development basis.
<p>S2.</p> <p><u>Environmental Values -</u></p> <ul style="list-style-type: none"> (1) Bushfire risk is managed in conjunction with the conservation of the ecological and scenic values of the lot or premises and surrounding landscape; (2) Minimise adverse impacts of visual scarring due to vegetation clearance on hillsides and ridgelines; (3) Fuel reduction areas maximise the use of existing or natural fire breaks and minimise the need to clear additional native plants; (4) Bushland areas are segmented with fire breaks in the form of walking trails and infrastructure or the like to assist in fire management practices; (5) Landscaping incorporates species that are less likely to exacerbate a bushfire event. 	<p>P2.</p> <ul style="list-style-type: none"> (1) No probable solution identified; (2) Avoid locating uses and other development where it will extend beyond the canopy height of vegetation on a ridgeline or on slopes greater than 15 percent (1 in 7); (3) Fuel reduction areas, as detailed in P1.(3)(a) and (b) are - <ul style="list-style-type: none"> (a) measured from buildings and structures associated with the use and - <ul style="list-style-type: none"> (i) fully contained within the site; or (ii) where the lot contains a development envelope is within this defined area; or (iii) co-located with other facilities or infrastructure such as open space, stormwater management infrastructure, on-site wastewater treatment

Assessable Development			
Specific Outcomes		Probable Solutions	
			<p>areas or the like;</p> <p>(4) No probable solution identified;</p> <p>(5) Low flammability plant species identified in Table 2 are used for any planted landscaping within 10 metres of a building or structure.</p> <p>Note -</p> <p>Sites with an average slopes in excess of 15 percent (1 in 7) require a geotechnical analysis report. Refer to Part 11 - Planning Scheme Policy 9 - Infrastructure Works.</p>
S3.	<p><u>Hazardous Materials -</u></p> <p>Public safety and the environment are not adversely affected by the detrimental impacts of bushfire on hazardous materials manufactured or stored in bulk.</p>	P3.	<p>Development complies with the recommendations of a bushfire management plan.</p> <p>Note -</p> <p>Refer to Part 11 - Planning Scheme Policy 1 - Bushfire Hazard for further information on bushfire management plans.</p>
S4.	<p><u>Community Infrastructure</u></p> <p>(1) Community infrastructure is able to function effectively during and immediately after bushfire events.</p>	P4.	<p>(1) Community infrastructure -</p> <p>(a) is not located on land that is shown as having a high, medium or SMI bushfire hazard on this overlay map; or</p> <p>(b) does not result in any new building work other than an extension of less than 20m² gross floor area; or</p> <p>(c) is located where site assessment identifies that the use is able to function effectively during and immediately after a bushfire event.</p> <p>Note -</p> <ul style="list-style-type: none"> ■ If the proposal complies with P4.(1)(a) no further assessment is required in relation to bushfire hazard. ■ Where the use will be within a bushfire hazard, site-specific assessment is necessary to demonstrate that the bushfire hazard is low on the proposed site. ■ Refer to Part 11 - Planning Scheme Policy 1 - Bushfire Hazard for requirements of a bushfire

Assessable Development	
Specific Outcomes	Probable Solutions
	hazard assessment and management plan.

Table 1 - SMBI Bushfire Hazard Fuel Reduction Area Requirements

Fuel Reduction Area Type - See Note 1	Description			Applicable to -
	Slashed Zone See Note 2	Fuel Removal Zone See Note 3	Total Fuel Reduction Area See Note 4	
Type 2	10 metres	5 metres	15 metres	■ SMBI bushfire hazard
Type 4	5 metres	3 metres	8 metres	■ SMBI bushfire hazard if in conjunction with buildings constructed in accordance with <i>Australian Standard 3959:1999 - Construction of Buildings in Bushfire Prone Areas</i>

Note 1 - The Rural Fire Service identifies 7 types of fuel reduction areas. Of these only 2 and 4 are applicable to the planning scheme area.

Note 2 - Slashed Zone is the area where all understorey and ground cover is removed, trees greater than 15cm diameter at chest height are retained and provides for the easy movement of fire fighting vehicles along the Fuel Reduced Area in all situations.

Note 3 - Fuel Removal Zone is the area where trees and groundcovers are retained and vegetation that is not expected to exceed 1.5 metres in height on maturing is selectively removed.

Note 4 - Fuel Reduction Areas are measured from buildings and structures associated with the development. Refer to Planning Scheme Policy 1 - Bushfire Hazard, section 1.12 for further information.

Table 2 - Low Flammability Plant Species

Mainland		SMBI	
Species	Common Name	Species	Common Name
Acacia melanoxylon	Blackwood	Acacia melanoxylon	Blackwood
Acacia sophorae	Coastal Wattle	Acacia sophorae	Coastal Wattle
Acmena smithii	Lilly Pilly	Banksia integrifolia	Coastal Banksia
Banksia integrifolia	Coastal Banksia	Banksia spinulosa var collina	
Banksia spinulosa var collina		Casuarina glauca	Swamp Oak
Brachychiton acerifolius	Flame	Cupaniopsis anacardioides	Tuckeroo
Buckinghamia celcissima	Ivory Curl	Dodoneaea spp.	
Casuarina glauca	Swamp Oak	Elaeocarpus reticulatus	Blueberry Ash
Cupaniopsis anacardioides	Tuckeroo	Ficus macrophylla	Moreton Bay Fig
Dodoneaea spp.		Glochidion ferdinandii	Cheese Wood
Elaeocarpus reticulatus	Blueberry Ash	Hymenosporum flavum	Native Frangipani
Ficus macrophylla	Moreton Bay Fig	Jacksonia scoparia	Dog Wood
Glochidion ferdinandii	Cheese Wood	Lophostemon confertus	Brushbox
Guioa semiglaucula		Mallotus philippensis	Red Kamala
Hymenosporum flavum	Native Frangipani	Myoporum acuminatum	Boobiella
Jacksonia scoparia	Dog Wood	Pittosporum revolutum	Brisbane Laurel
Lophostemon confertus	Brushbox	Rapanea variabilis	
Mallotus philippensis	Red Kamala	Carpobrotus glaucescens	Pigs Face
Myoporum acuminatum	Boobiella	Hardenbergia violacea	
Pittosporum revolutum	Brisbane Laurel	Kennedia rubicunda	
Pittosporum rhombifolium		Lomandra longifolia	
Rapanea variabilis		Themeda triandra	
Stenocarpus sinuatus		Viola hederacea	
Carpobrotus glaucescens	Pigs Face	Chrysocephalum apiculatum	
Hardenbergia violacea			
Kennedia rubicunda			
Lomandra longifolia			
Themeda triandra			
Viola hederacea			
Chrysocephalum apiculatum			

Redlands Planning Scheme Fact Sheet



November 2010

Fact Sheet 13 - Hazard Overlays

What is the role of Hazard Overlays?

Hazard overlays show that a property is constrained by a risk that may affect the safety of people and property. Hazard overlays in the scheme are the -

- Acid Sulfate Soils Overlay
- Bushfire Hazard Overlay
- Flood Prone, Storm Tide and Drainage Constrained Land Overlay
- Landslide Hazard Overlay

What is the purpose of the Acid Sulfate Soils Overlay?

The purpose of the **Acid Sulfate Soils Overlay** is to ensure that development identifies and manages acid sulfate soils. The overlay protects the natural and built environments and human health from negative impacts that result from the exposure of acid and metal contaminants from the soil.

Acid sulfate soils (ASS) occur naturally over extensive low-lying coastal areas, mainly below 5 metres Australian Height Datum (AHD). Potential ASS only become a problem when they are exposed to air. Exposure is usually a result of excavation associated with development. The release of ASS may cause harm to the natural and built environment and human health.

The State Government manages ASS through *State Planning Policy 2102: Planning and Managing Development Involving Acid Sulfate Soils*. The overlay ensures development complies with the State Planning Policy.

What are the Acid Sulfate Soil Overlay Maps?

The **Acid Sulfate Soils Overlay Map** shows properties across the Redlands with a surface level -

- at or below 5 metres Australian Height Datum (AHD);
- between 5 metres AHD and 20 metres AHD.

These properties may contain acid sulfate soils. There is a map for the mainland and another for SMBI and North Stradbroke Island.

When will the Acid Sulfate Soils Overlay apply?

The Acid Sulfate Soils Overlay will apply depending on the quantity of filling and/or excavation that occurs in association with development. Often, development will be self-assessable because of limited excavation or fill.

For instance, development is self-assessable where -

- removing less than 100m³ of soil from below 5 metres AHD; or
- filling of land with less than 500m³ of material at an average depth of less than 500mm below 5 metres AHD.

Otherwise development is code assessable and will need to satisfy the assessment criteria of the code. Where development is code assessable ASS need to be identified and managed. This may involve -

- ensuring ASS are not removed;
- neutralizing existing acidity;
- preventing surface or groundwater flows containing ASS from release into the environment.

What is the purpose of the Bushfire Hazard Overlay?

The **Bushfire Hazard Overlay** shows land at risk from bushfire. The purpose of this overlay is to protect people and property from the risk of bushfire while maintaining environmental values.

The State Government manages bushfire hazard through *State Planning Policy 1103: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*. The overlay ensures development complies with the State Planning Policy.

What are the Bushfire Hazard Overlay Maps?

The **Bushfire Hazard Overlay Map** identifies properties affected by bushfire hazard, including properties that adjoin a hazard. Hazard levels affecting Redland City are -

- high hazard - small areas in Mount Cotton and on North Stradbroke Island (NSI);
- medium hazard - across the mainland and NSI;
- SMBI hazard - that is specific to the Southern Moreton Bay Islands.

There is a map for the mainland and another for SMBI and North Stradbroke Island.

When will the Bushfire Hazard Overlay apply?

Most development will need to satisfy the assessment criteria of the overlay code. Where development is located in an area outside the hazard it may be self-assessable.

When development is proposed to locate on land affected by a bushfire hazard, it is code assessable and will need to satisfy the assessment criteria of the overlay code. This means that development will need to avoid the identified bushfire hazards or mitigate bushfire risk through a combination of the following measures -



Fact Sheet 13 - Hazards Overlays - Continued

- locating where the hazard is the lowest;
- maximising setbacks from the hazard;
- designing buildings in accordance with *Australian Standard 3959:1999 Construction of Buildings in a Bushfire Prone Area*;
- providing fuel reduction areas;
- undertaking a bushfire hazard assessment or a bushfire management plan.

Part 11 of the planning scheme contains Planning Scheme Policy 1 - Bushfire Hazard that provides help on how to prepare a bushfire hazard assessment or bushfire management plan, among other matters.

NOTE: The SPA Regulations (Schedule 4) exempts development for residential purposes on lots under 2000m² where the only overlay affecting the land is the Bushfire Hazard Overlay. Please discuss with Council planning officers if you believe this to be your circumstance.

What is the purpose of the Flood Prone, Storm Tide and Drainage Constrained Land Overlay?

The **Flood Prone, Storm Tide and Drainage Constrained Land Overlay** identifies land subject to flooding, storm tide and drainage constraints. The overlay aims to protect the safety of people and property from the risk of flooding. To avoid risks, development should locate outside flood, storm tide and drainage affected areas.

What are the Flood Prone, Storm Tide and Drainage Constrained Land Overlay Maps?

The overlay map identifies land affected by flooding, or storm tide. This means the property is constrained by a -

- Storm Tide Area; or
- Flood Prone Area.

The storm tide area currently includes land below RL 2.4 metre Australian Height Datum (AHD) and the flood prone area includes land that may be affected by the 1percent AEP (1 in 100 year ARI).

The State Government manages the risk of flooding through *State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*. The overlay ensures development complies with the State Planning Policy.

The term used to describe this flood level is the 1 percent Annual Exceedance Probability (1% AEP) previously referred to as the 1 in 100 year Average Recurrence Interval (ARI). The 1% AEP describes a flood event that has a 1 percent chance of occurring in a 100 year period. Flood levels are generally based on historical rainfall data and extensive surveys and modelling.

The overlay map also shows properties on the Southern Moreton Bay Islands (SMBI) that have a drainage problem by identifying lots that, during extended wet weather, may have the following problems -

- are within a water overland flow path
- have a high water table
- has significant seepage problems
- there is flooding of the road reserve restricting vehicular access to the lot.

Where Council does not have extensive survey or flood analysis, a detailed flood investigation is required to identify the 1% AEP or specific drainage constraint.

The planning scheme contains a planning scheme policy, Planning Scheme Policy 7 - Flood Prone, Tidal Affected and Drainage Constrained Land, to provide help on what technical information is required in survey information and flood studies, among other matters. There is an overlay map for the mainland and another for SMBI and North Stradbroke Island.

When will the Flood Prone, Storm Tide and Drainage Constrained Overlay apply?

Development on land covered by the overlay map and listed in the overlay table of assessment is code assessable and will need to satisfy the assessment criteria of the overlay code.

What is the purpose of the Landslide Hazard Overlay?

The purpose of the **Landslide Hazard Overlay** is to ensure that development on steep slopes does not increase the risk of landslide through poor design, inappropriate excavation and fill or removal of vegetation.

It aims to:

- provide guidance relating to the identification of potential slope instability areas;
- set out the requirements for preparation and submission of development applications, including technical reports on land located within the designated Landslide Hazard Management Area; and
- provide information relating to good engineering practices for hillside development to assist applicants, engineers and planners in the design and application of appropriate type and form of developments that best reflects the capability of the land.

The State Government manages landslide hazard through *State Planning Policy 1/30: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*. The overlay ensures development complies with the State Planning Policy.

What are the Landslide Hazard Overlay Maps?

The **Landslide Hazard Overlay Map** identifies locations across the City with potential for landslide hazard.

Landslide Hazard Management Areas affecting Redland City are described as Very High, High, Moderate or Low. There is a map for the mainland and another for SMBI and North Stradbroke Island.

For further information on specific overlays refer to -

- Fact Sheet 12 - Overlays Overview
- Fact Sheet 14 - Value Overlays
- Fact Sheet 15 - Resource Overlays
- Fact Sheet 16 - Amenity Overlays

Disclaimer -

This fact sheet is intended to help people gain an understanding of the Redlands Planning Scheme and is a **GUIDE ONLY**. The content of this fact sheet is not intended to replace the provisions of the Redlands Planning Scheme.



APPENDIX 1 - CONDITIONED CHANGES TO THE PLAN OF DEVELOPMENT

CONTENTS

1. Precinct codes – delete introduction 4.1 and correct other subheadings accordingly

1. INTRODUCTION

2. Section 1.1, Page 4 – Insert updated Shoreline Master Plan (as required by the conditions of this approval)
3. Section 1.4, Page 6 – Insert reference to the Town Centre Frame (Reduced Density) sub-precinct (TCF1)
4. Section 1.4, Part 8, Page 7 – Insert reference to the *Building design code to reduce incidence of biting insects*
5. Section 1.3, Page 9 - Insert updated Precinct Plan (as required by the conditions of this approval)

1. PRECINCTS & TABLES OF ASSESSMENT

3.2 Shoreline Town Centre Core Precinct Table of Assessment

6. Remove Sections 3.2.1 and 3.2.2 and renumber the sections
7. Section 3.2, Page 13 – Insert (before section 3.2.3):

The Town Centre Core Precinct contains Sub-area 1 defined as the land between 100m north of the northern boundary of Lot 1 on RP133830 and 100m south of the southern boundary of Lot 1 on RP133830, as depicted on the Shoreline Precinct Plan
8. Section 3.2.3, Page 15 and 16, Aged Persons and Special Needs Housing and Child Care Centre, Assessment Criteria – Amend the title of the building design code to *Building design code to reduce incidence of biting insects*
9. Section 3.2.3 (Pages 15 - 22) add *Building design code to reduce incidence of biting insects (if in Sub-area 1)* to column 3 assessment criteria for the following uses (self-assessable and code assessable options):
 - Apartment Building
 - Caretakers Dwelling
 - Community Facility
 - Display Dwelling
 - Education Facility
 - Estate Sales Office
 - Health Care Centre
 - Home Business
 - Indoor Recreation Facility
 - Multiple Dwelling
 - Tourist Accommodation
10. Section 3.2.3, Page 20, Place of Worship – Delete impact assessable from column 2. Insert the levels of assessment and assessment criteria listed in the District Centre Code of the Redlands Planning Scheme v.6.2 (note – any codes listed in the assessment criteria should be the versions amended by this Preliminary Approval).

11. Section 3.2.3, Page 21 – Insert Telecommunications Facility and include the levels of assessment and assessment criteria listed in the District Centre Code of the Redlands Planning Scheme v.6.2 (note – any codes listed in the assessment criteria should be the versions amended by this Preliminary Approval).

3.3 Shoreline Town Centre Frame Precinct Table of Assessment

12. Remove Sections 3.3.1 and 3.3.2 and renumber the sections
13. Remove duplicate description of Sub-Area 1
14. Insert a description of the Town Centre Frame (Reduced Density) sub-precinct (TCF1) – above the description of Sub-area 1. It should read:

The Town Centre Frame (Reduced Density) sub-precinct (TCF1) is defined as the land on Lot 11 on SP268704 as depicted on the Shoreline Precinct Plan.

15. Amend the description of Sub-area 1 to:

The Town Centre Core Precinct contains Sub-area 1 defined as the land between 100m north of the northern boundary of Lot 1 on RP133830 and 100m south of the southern boundary of Lot 1 on RP133830, as depicted on the Shoreline Precinct Plan

16. Section 3.3.3, Pages 28-33 add *Building design code to reduce incidence of biting insects (if in Sub-area 1)* to column 3 assessment criteria for the following uses (self-assessable and code assessable options):

- Bed and Breakfast
- Caretakers Dwelling
- Display Dwelling
- Dual Occupancy
- Education Facility
- Estate Sales Office
- Health Care Centre
- Home Business
- Indoor Recreation Facility
- Multiple Dwelling
- Tourist Accommodation

17. Section 3.3.3, Page 28 –

- a. Aged Persons and Special Needs Housing, Assessment Criteria – Amend the title of the building design code to *Building design code to reduce incidence of biting insects*
- b. Amend Level of Assessment for Aged Persons and Special Needs Housing to:

Code Assessable

If –

- (1) *Not located in TCF1; and*
- (2) *The building height is 14m or less.*

Or

- (3) *Located in TCF1; and*
- (4) *The building height is 9.5m or less; and*

(5) 2 storeys or less.

Or

(6) Or Located in TCF1; and

(7) Within 100m of a public transport stop; and

(8) The building height is 14m or less.

Otherwise –

Impact Assessable

c. Amend the Level of Assessment and Assessment Criteria (for code assessable development) for Apartment Building to:

i. Code Assessable

If –

(1) Not located in TCF1; and

(2) The building height is 14m or less.

Or

(3) Located in TCF1; and

(4) Within 100m of a public transport stop; and

(5) The building height is 14m or less.

Otherwise

Impact Assessable

ii. *Assessment Criteria*

- *Shoreline Town Centre Frame Precinct Code*
- *Apartment Building Code*
- *Access and Parking Code*
- *Erosion Prevention and Sediment Control Code*
- *Excavation and Fill Code*
- *Infrastructure Works Code*
- *Landscape Code*
- *Stormwater Management Plan*
- *Building design code to reduce incidence of biting insects (if in Sub-area 1)*

d. Bed and Breakfast, Level of Assessment – add “*If not located in TCF1; and*” to the self-assessable development.

18. Section 3.3.3, Page 29 –

a. Commercial Office, Level of Assessment – Add “*If not located in TCF1; and*” to the self-assessable and code assessable development

- b. Dual Occupancy, Level of Assessment – Add “*If located in TCF1; and*” for code assessable development

19. Section 3.3.3, Page 30 –

- a. Dwelling House, Level of Assessment
- i. Delete exempt development option
 - ii. Amend self-assessable development to delete “*If in sub-area 1*” and insert “*If located in TCF1*”
 - iii. Amend the self-assessable Assessment Criteria to:
 - Acceptable Solutions in section 6.11.5 of the Dwelling House Code*
 - “*Building design code to reduce incidence of biting insects (if in Sub-area 1)*” and Dwelling
 - iv. Insert: Code Assessable if not self-assessable and list the following assessment criteria
 - *Shoreline Residential Precinct Code*
 - *Dwelling House Code**
 - *Domestic Driveway Crossover Code*
 - *Erosion Prevention and Sediment Control Code*
 - *Excavation and Fill Code*
 - *Infrastructure Works Code*
 - *Stormwater Management Code*
- b. Education Facility, Level of Assessment – Insert “*If not located in TCF1*” under code assessable development and insert:

Otherwise -

Impact Assessable

- c. Health Care Centre, Level of Assessment – Insert “*If not located in TCF1; and*” for both self-assessable and code assessable development.

20. Section 3.3.3, Page 31 –

- a. Indoor Recreation Facility, Level of Assessment – Insert “*If not located in TCF1; and*” for code assessable development
- b. Delete Mobile Home Park use from the Table of Assessment
- c. Multiple Dwelling, Level of Assessment – Replace with:

Code Assessable

If –

(1) *Not located in TCF1; and*

(2) *The building height is 14m or less.*

Or

- (3) Located in TCF1; and
- (4) Within 100m of a public transport stop; and
- (5) The building height is 14m or less.

d. Delete Outdoor Recreation use from the Table of Assessment

21. Section 3.3.3, Page 32 –

- a. Refreshment Establishment, Level of Assessment – Insert “*If not located in TCF1; and*” for self-assessable and code assessable development.
- b. Shop, Level of Assessment - Insert “*If not located in TCF1; and*” for self-assessable and code assessable development.

22. Section 3.3.3, Page 33 –

- a. Delete Telecommunications Facility use from the Table of Assessment
- b. Tourist Accommodation, Level of Assessment – Insert “*If not located in TCF1; and*” for code assessable development.

3.4 Shoreline Residential Precinct Table of Assessment

23. Remove Sections 3.4.1 and 3.4.2 and renumber the sections

24. Pages 28-33 add *Building design code to reduce incidence of biting insects (if in Sub-area 1)* to column 3 assessment criteria for the following uses (self-assessable and code assessable options):

- Apartment Building
- Bed and Breakfast
- Caretakers Dwelling
- Display Dwelling
- Dual Occupancy
- Estate Sales Office
- Home Business
- Multiple Dwelling

25. Section 3.4.3, Page 40 -

- a. Aged Persons and Special Needs Housing, Assessment Criteria –
 - i. Amend the title of the building design code to *Building design code to reduce incidence of biting insects*; and
 - ii. Amend the level of assessment to:
 - Code Assessable
 - If –*
 - (1) *The building height is 9.5m or less; and*
 - (2) *2 storeys or less.*
 - Or*
 - (3) *Located within 100m of a public transport stop; and*
 - (4) *The building height is 14m or less.*

*Otherwise –
Impact Assessable*

- b. Apartment Building, Level of Assessment – Amend code assessable development to:

Code Assessable

If within 250 metres of the Tourism and Recreation Activity Area, or within 100m of a public transport stop, and the building height is –

- (1) 14 metres or less above ground level; and
- (2) 3 storeys or less; and
- (3) The premises is –
 - a) 800m² or more in area; and
 - b) Has a frontage of 20 metres or more.

26. Section 3.4.3, Page 41 - Dwelling House, Level of Assessment

- v. Delete exempt development option
- vi. Amend self-assessable development to delete “*If in sub-area 1*”
- vii. Amend the self-assessable Assessment Criteria to:
 - Acceptable Solutions in section 6.11.5 of the Dwelling House Code*
 - “*Building design code to reduce incidence of biting insects (if in Sub-area 1)*” and Dwelling
- viii. Insert: Code Assessable if not self-assessable and list the following assessment criteria
 - *Shoreline Residential Precinct Code*
 - *Dwelling House Code**
 - *Domestic Driveway Crossover Code*
 - *Erosion Prevention and Sediment Control Code*
 - *Excavation and Fill Code*
 - *Infrastructure Works Code*
 - *Stormwater Management Code*

27. Section 3.4.3, Page 42 – Multiple Dwelling, Level of Assessment – Amend code assessable development to:

Code Assessable

If within 250 metres of the Tourism and Recreation Activity Area, or within 100m of a public transport stop, and the building height is –

- (4) 14 metres or less above ground level; and
- (5) 3 storeys or less; and
- (6) The premises is –
 - a) 800m² or more in area; and

b) *Has a frontage of 20 metres or more.*

28. Section 3.4.3, Page 43 – Delete Telecommunications Facility from the Table of Assessment.

3.5 Shoreline Open Space Precinct Table of Assessment

29. Remove Sections 3.5.1 and 3.5.2 and renumber the sections

30. Section 3.5.3, Page 49 –

a. Add *Building design code to reduce incidence of biting insects* to column 3 assessment criteria for Caretakers Dwelling and Community Facility for code assessable development.

b. Delete Estate Sales Office from the Table of Assessment

31. Section 3.5.3, Page 50 - Delete Telecommunications Facility use from the Table of Assessment

32. Section 3.5.3, Page 51 – Delete Tourist Park from the Table of Assessment

33. Section 3.5.4, Page 52 – Creating lots by subdividing another lot by Standard Format Plan, Level of Assessment - For code assessable development amend to:

Code Assessable

If –

(1) *Being undertaken by the local government; or*

(2) *All land within the Open Space Zone is contained within a single lot.*

4. PRECINCT CODES

4.1 Shoreline Town Centre Core Precinct

34. Rename Section 4.1 *Shoreline Town Centre Core Precinct Code*

35. Section 4.1.1, Page 55 – Delete the content of this section, including the table of variations, and insert:

The District Centre Zone Code in the RPS v6.2 has been varied to create the unique Shoreline Town Centre Core Precinct Code.

The Town Centre Core Precinct contains Sub-area 1 defined as the land between 100m north of the northern boundary of Lot 1 on RP133830 and 100m south of the southern boundary of Lot 1 on RP133830, as depicted on the Shoreline Precinct Plan

36. Section 4.1.4, Page 63 - Amend S4.1(1) to include (e) *where adjoining an Open Space Corridor or Conservation Area, edge effects, particularly from noise, light and bushfire clearance zones (these should be incorporated within the development site and should not result in vegetation clearing external to the site).*

37. Section 4.1.4, Page 63, Specific Outcome S5.3 (1)(f) – Add “(including the National Broadband Network)”.

38. Section 4.1.4, Page 66 – Add a new Specific Outcome S.5.9:

“Development is designed to minimise the risk to public health from arboviruses. In accordance with the Shoreline Biting Insect Management Plan, esplanade roads must adjoin all Open Space Corridors and Foreshore Open Space shown on the approved Shoreline Master Plan”

4.2 Town Centre Frame Precinct

39. Rename Section 4.2 *Shoreline Town Centre Frame Precinct Code*
40. Section 4.2.1, Page 67 – Delete the content of this section, including the table of variations and insert:
- The Medium Density Residential Zone Code in the RPS v6.2 has been amended to create the unique Shoreline Town Centre Frame Precinct Code.*
- The Town Centre Frame Precinct includes the Town Centre Frame (Reduced Density) Sub-precinct (TCF1)*
- The Town Centre Core Precinct contains Sub-area 1 defined as the land between 100m north of the northern boundary of Lot 1 on RP133830 and 100m south of the southern boundary of Lot 1 on RP133830, as depicted on the Shoreline Precinct Plan*
41. Section 4.2.3, Page 68 – Overall Outcomes for the Shoreline Town Centre Frame Precinct – Amend a) *Uses and Other Development* to:
- (a) *Uses and Other Development*
- Provide for a range of residential uses that-*
- a. *Is predominantly mid-rise housing on lot sizes that offer opportunities for medium density living, including other residential development such as temporary accommodation and retirement living;*
 - b. *In TCF1 contains predominantly low-rise housing, unless in the vicinity of a public transport stop, which may include higher density options;*
 - c. *accommodates opportunities for live and work dwellings and home based businesses;*
 - d. *provide a range of dwelling types that offer choice, affordability and adaptability;*
 - e. *maximise the supply of dwelling units in close proximity to centres and public transport, to the general exclusion of other less compact forms of housing;*
 - f. *encourages opportunities for working from home.*
42. Section 4.2.4, Page 71 – Built Form and Density
- a. Amend S2.1 (1) to - *The height of buildings and structures is equal to, or less than 14m and 3 storeys*
 - b. Amend P2.1 (1) to - *No probable solution identified*
 - c. Insert a new S2.1 (3) (and change the existing S2.1(3) to S2.1(4)) to –
(3)In TCF1 –
 - a) *the height of buildings and structures maintain a low-rise built form.*
 - b) *the height of buildings and structures within 100m of a public transport stop maintains a mid-rise built form.*
 - d. Insert a new P2.1(3) (and change the existing P2.1(3) to P2.1(4)) to –
(3)If in TCF1 -
 - (a) *Overall building height is 9.5m or less above ground level; or*

(b) Overall building height is 14m and 3 storeys, if within 100m of a public transport stop.

43. Section 4.2.4, Page 72 – Built Form and Density

a. Amend P2.4(1)(a) to:

a) Lots that are a minimum of 800m²

b. Amend P2.4(2)(b) to:

b) Residential uses achieve a density of 1 dwelling unit per 200m² of site area.

c. Amend S2.4(2)(b) to:

b) Within 100m of a public transport stop dwelling unit density is compatible with medium density living while providing land for private and communal open space, resident and visitor parking, landscaping and maintenance of a residential streetscape.

44. Section 4.2.4, Page 76 – Environment

a. Amend S4.1(1) to include *(e) where adjoining an Open Space Corridor or Conservation Area, edge effects, particularly from noise and light and bushfire clearance zones (these should be incorporated within the development site and should not result in vegetation clearing external to the site).*

b. Amend S4.4(2) as follows and move to S3.11 (under the Amenity heading):

Acoustic barriers along Serpentine Creek Road –

a) Are of a high visual quality, incorporating physical and visual breaks and articulation to create visual interest and break up the bulk of the structure, reducing its dominance in the streetscape; and

b) Are designed for longevity; and

c) Are provided with maintenance access; and

d) Provide for pedestrian and fauna permeability and protection; and

e) Comprise a mix of vegetated earth mounds, acoustic screens, and acoustic treatments incorporated into building design; and

f) Are screened from the road carriageway by a landscaping buffer no less than 5m in depth, that comprises screen planting to minimise the visual impact of the barrier, enhance visual amenity and create visual interest.

c. Insert a new specific outcome as S4.5, being –

“Landscaping activities provide food, shelter and movement opportunities for koalas consistent with the site design.”

d. Insert a new probable solution as P4.5, being - *No probable solution identified)*

45. Section 4.2.4, Page 77 – Infrastructure -

- a. Specific Outcome S5.1 (1)(f) – Add “(including the National Broadband Network)”.
- b. Insert new specific outcome S5.5 –
 - (1) *Uses and other development (excluding dwelling house, dual occupancy or reconfiguring a lot for a dwelling house or dual occupancy) –*
 - a) *Provide safe and efficient manoeuvring for waste collection vehicles;*
 - b) *Ensure all bulk waste and recycling containers are serviced off-street and not on roads with public access;*
 - c) *Ensure sufficient vertical clearance for container servicing; and*
 - d) *Ensure unobstructed access to containers by collection vehicles.*

46. Section 4.1.4, Page 66 – Add a new Specific Outcome S.5.6:

“Development is designed to minimise the risk to public health from arboviruses. In accordance with the Shoreline Biting Insect Management Plan, esplanade roads must adjoin all Open Space Corridors and Foreshore Open Space shown on the approved Shoreline Master Plan”

4.4 Shoreline Residential Precinct

- 47. Amend Section to 4.3 *Shoreline Residential Precinct Code*
- 48. Amend all sub-sections in this Section to commence with 4.3...
- 49. Section 4.4.1, Page 79/80 – Delete the content of this section, including the table of variations and insert:

The Urban Residential Zone Code in the RPS v6.2 has been amended to create the unique Shoreline Residential Precinct Code.

The Shoreline Residential Precinct contains Sub-area 1 defined as the land within 100m of the vegetation mapped as A2 on the DILGP Referral Agency Response (Vegetation) Plan SDA-0714-012691 dated 15 September 2014
- 50. Section 4.4.3, Page 80 – Amend (2)(a)e. to - *where in the vicinity of the Tourism/Recreation Activity Area or a public transport stop, as indicated on the Shoreline POD Precinct Plan, may include higher density development*
- 51. Section 4.4.3, Page 82 – Delete (2)(e)g.
- 52. Section 4.4.4, Page 83 – Uses and Other Development –
 - a. Amend S1.1(2) to – *Where within 250m of the Tourism/Recreation Activity Area or within 100m of a public transport stop, incorporates a greater range of medium and higher density residential uses.*
 - b. Amend P1.1(2) to – *Where within 250m of the Tourism/Recreation Activity Area or within 100m of a public transport stop, incorporates a range of housing types including apartment buildings and multiple dwellings*
- 53. Section 4.4.4, Page 84 – Built Form and Density

- a. Amend S2.1(2) to add *“or within 100m of a public transport stop”*
 - b. Delete P2.1(2) and inset *“Overall building height is 14m or less above ground level, where within 250m of a Tourism/Recreation Activity Area or within 100m of a public transport stop”*
54. Section 4.4.4, Page 85 – Built Form and Density – Amend S2.4(2)(b) to add *“or within 100m of a public transport stop”*
55. Section 4.4.4, Page 88 – Environment –
- a. Amend S4.1(1) to include *(e) where adjoining an Open Space Corridor or Conservation Area, edge effects, particularly from noise and light and bushfire clearance zones (these should be incorporated within the development site and should not result in vegetation clearing external to the site).*
 - b. Insert a new specific outcome as S4.4, being –
“Landscaping activities provide food, shelter and movement opportunities for koalas consistent with the site design.”
 - c. Insert a new probable solution as P4.4, being - *No probable solution identified)*
56. Section 4.4.4, Page 89 – Environment
- a. Amend S4.3(2) as follows and move to S3.11 (under the Amenity heading):
Acoustic barriers along Serpentine Creek Road –
 - a) *Are of a high visual quality, incorporating physical and visual breaks and articulation to create visual interest and break up the bulk of the structure, reducing its dominance in the streetscape; and*
 - b) *Are designed for longevity; and*
 - c) *Are provided with maintenance access; and*
 - d) *Provide for pedestrian and fauna permeability and protection; and*
 - e) *Comprise a mix of vegetated earth mounds, acoustic screens, and acoustic treatments incorporated into building design; and*
 - f) *Are screened from the road carriageway by a landscaping buffer no less than 5m in depth, that comprises screen planting to minimise the visual impact of the barrier, enhance visual amenity and create visual interest.*
57. Section 4.4.4, 89 – Infrastructure
- a. Delete S5.1(1)(c)
 - b. Amend S5.1(1)(g) to include *“(including the National Broadband Network)”*.
58. Section 4.4.4, Page 90 – Infrastructure – Insert a new specific outcome as S5.5 (amend all others accordingly):
Uses and other development (excluding dwelling house, dual occupancy or reconfiguring a lot for a dwelling house or dual occupancy) –

- a. *Provide safe and efficient manoeuvring for waste collection vehicles;*
- b. *Ensure all bulk waste and recycling containers are serviced off-street and not on roads with public access;*
- c. *Ensure sufficient vertical clearance for container servicing; and*
- d. *Ensure unobstructed access to containers by collection vehicles.*

59. Section 4.4.4, Page 91 – Infrastructure

- a. Amend S5.9 (to become S5.10 following amendment 55 above) to -
“Development is designed to minimise the risk to public health from arboviruses. In accordance with the Shoreline Biting Insect Management Plan, esplanade roads must adjoin all Open Space Corridors and Foreshore Open Space shown on the approved Shoreline Master Plan”
- b. Amend P5.9 (to become P5.10 following amendment 55 above) to *“No probable solution identified”*

4.5 Open Space Precinct

60. Amend Section to *4.4 Shoreline Open Space Precinct Code*

61. Amend all sub-sections in this Section to commence with *4.4...*

62. Section 4.5.1, Page 93 – Delete the content of this section, including the table of variations and insert:

The Open Space Zone Code in the RPS v6.2 has been amended to create the unique Shoreline Open Space Precinct Code.

63. Section 4.5.3, Page 94 – Overall Outcomes –

- a. Combine the first two paragraphs of (2)(a) and amend –

In the Foreshore Open Space Sub-precinct –

- a. *Comprises a community and destination park with opportunities to view Moreton Bay and engage with the water, whilst protecting and conserving remnant coastal vegetation; and*
- b. *Establishes a prominent meeting place and venue for community and private events, generally in the vicinity of the Tourism/Recreation Activity areas indicated on the Shoreline Precinct Plan, and may include a variety of leisure and recreation activities, including a restaurant/café/bar, sporting facilities, informal open spaces for picnics and barbeques and a playground.*

- b. Amend the third paragraph of (2)(a) -

Provide for a range of open space and recreational uses (except in areas identified as Conservation Park) that –

- a. *Meet the active or passive recreational needs of residents and visitors to the City;*
- b. *Provide for recreation activities on land in public or private ownership;*
- c. *May include land used for activities not involving access by the general public;*

- d. *Provide mixed use structures and uses for leisure and recreational facilities within the identified Tourism and Recreation Activity Areas; and*
- e. *Does not inhibit the environmental values of Open Space Corridors, the primary objective of which must be habitat connectivity.*

c. Amend (2)(b) –

Uses and other development are designed in a manner that complies with the Shoreline Open Space Landscape Strategy, Shoreline Biting Insect Management Plan, the Shoreline Infrastructure Agreement and –

- a. *Contributes to the legibility and character of the local area;*
- b. *Provides adequate facilities that meet community needs and expectations based on the population density and demographic structure expected in the area;*
- c. *Provides for a range of passive and active recreational opportunities;*
- d. *Enhances opportunities for community interaction;*
- e. *Complements the broader open space network;*
- f. *Forms links between existing open space areas.*

64. Section 4.5.3, Page 96 – Overall Outcome (2)(e) –

- a. Amend e. – *Add (except in Conservation Areas and the central habitat core of the Open Space Corridors where 100% of planting must be native species)*
- b. Amend f. – *“incorporating best practice stormwater management that minimises adverse impacts associated with excess run-off and contamination”*
- c. Delete (2)(ff).
- d. Amend (2)(fj). to include *“(including the National Broadband Network)”*.

65. Section 4.5.4, Page 97 – Uses and Other Development – Amend S1.1(1)(a) – *delete open air theatre*

66. Section 4.5.4, Page 98 – Open Space Design – Amend S2(1) – *“The design of open space sites complies with the Shoreline Open Space Landscape Strategy, the Shoreline Biting Insect Management Strategy and the Shoreline Infrastructure Agreement”*

67. Section 4.5.4, Page 103 – Environment –

- a. Amend S5.1(1) to include *“(e) artificial lighting, ensuring it is directed away from the central habitat core of the Open Space Corridors and the Conservation Areas”*
- b. Amend S5.2(1)(a) to – *“prevent the unnecessary removal of native plants through site design that accommodates plant retention, particularly bushfire clearance zones (these should be incorporated within the development site and should not result in vegetation clearing external to the site).”*

68. Section 4.5.4, Page 104 – Environment –

- a. Amend S5.3 – *“Infrastructure is co-located in accordance with the relevant standards to minimise the need to remove native plants and adversely impact upon the environmental values of the area”*
- b. Amend S5.4(2) as follows and move to S4.9 (under the Amenity heading):
 - Acoustic barriers along Serpentine Creek Road –*
 - a) *Are of a high visual quality, incorporating physical and visual breaks and articulation to create visual interest and break up the bulk of the structure, reducing its dominance in the streetscape; and*
 - b) *Are designed for longevity; and*
 - c) *Are provided with maintenance access; and*
 - d) *Provide for pedestrian and fauna permeability and protection; and*
 - e) *Comprise a mix of vegetated earth mounds, acoustic screens, and acoustic treatments incorporated into building design; and*
 - f) *Are screened from the road carriageway by a landscaping buffer no less than 5m in depth, that comprises screen planting to minimise the visual impact of the barrier, enhance visual amenity and create visual interest.*
- c. Amend S5.4(3) to – *“Incorporate landscaping as a component of the stormwater management system. Design to integrate with the central habitat core of the Open Space Corridors, Conservation Areas, pedestrian footpaths, cycleways and recreational uses and in accordance with the Shoreline Open Space Landscape Strategy and Shoreline Biting Insect Management Plan.”*

69. Section 4.5.4, Page 105 – Infrastructure –

- a. Delete S6.1(1)(c)
- b. Amend S6.1(1)(g) to include *“(including the National Broadband Network)”*.

5. OVERLAYS & OVERLAY CODES

70. Section 5.5.1 – Habitat Protection Overlay – (make the following amendments and update the code)-

- a. The Habitat Protection Overlay map in RPS v6.2 still applies to Lot 1 on RP133830
- b. Section 5.5.2 – The levels of assessment in the Habitat Protection Overlay map in RPS v6.2 still apply to Lot 1 on RP133830
- c. Section 5.5.3 -The Habitat Protection Overlay Code still applies to RPSv6.2 still applies to Lot 1 on RP133830

71. Section 5.7 – Protection of Poultry Industry Overlay - Amend this section - The removal of this overlay is not approved.

72. Section 5.10 – Landslide Hazard Overlay – (make the following amendments and update the code) - Only the removal of the low-landslide hazard components of the Overlay is approved.

6. USE CODES

73. Section 6.2, Page 112 (make the following amendments and update the relevant codes) -

- a. Aged Persons and Special Needs Housing – P3(1)(h) and P6(1)(g) - Amend the title of the building design code to *Building design code to reduce incidence of biting insects*
- b. Apartment building – P1(1) – Include (d) *within 100m of a public transport stop*
- c. Child Care Centre – P2(4) and P3(1)(c) - Amend the title of the building design code to *Building design code to reduce incidence of biting insects*
- d. Dual Occupancy – P1(1) – Amend (a) Shoreline Town Centre Frame Precinct to (a) *Shoreline Town Centre Frame (Reduced Density) Precinct*.

74. Section 6.2, Page 113 (make the following amendments and update the relevant codes) –

- a. Dwelling House Code
 - i. Section 6.11.5, Self-assessable development, A1 - Insert another alternative provision for building height (and amend other paragraph numbers accordingly) –

(4) Building height in the Town Centre Frame (Reduced Density) Sub-Precinct and Residential Precinct is 9.5m or less above ground level

Building Act, 1975 Alternative Provision to QDC MP1.1, MP1.2, A4
 - ii. Section 6.11.6, Assessable Development – The above alternative provision should also be inserted as P1(3) in the Assessable Development table
- b. Estate Sales Office – delete reuse for tourism or recreation facility
- c. Multiple Dwelling – P1(1) – Add to (c) *if within 250m of the Tourism/Recreation Activity Centre*
- d. Multiple Dwelling – P1(1) – Add to (b) *if located within TCF1 must be within 100m of a public transport stop.*
- e. Multiple Dwelling – P7(1)(b) – Amend to increase the trigger for communal open space from 10 dwelling units to 20 dwelling units.

8. GENERAL CODES

75. Section 8.2, Page 116 – Stormwater Management Code - (make the following amendments and update the code)-

- a. Insert a new Overall Outcome

(v) stormwater management facilities are designed and located to provide a regional stormwater solution (generally in accordance with the Shoreline, Redlands Water Sensitive Urban Design Strategy (as amended by the conditions of this approval)) and where possible minimises whole of life costs.

- b. S1(1)(a) should read:
 - (1)(a) *protects and preserves land below the 1 percent AEP flood level.*
- c. P1(1) should read:
 - (1) *Stormwater drainage design:*
 - (a) *maintains land below the 1 percent AEP in an undeveloped state*
 - (b) *complies with the WUSD objectives*
 - (c) *identifies and determines the 1 percent AEP of natural overland drainage lines where the lot or premises:*
 - a. *has an upstream catchment area greater than 5 hectares; or*
 - b. *is 2500m² or greater in area*
 - (d) *maximises the retention and use of natural overland drainage lines through their identification and minimises earthworks in these areas.*
- d. P2(1) should read:
 - (1) *Stormwater drainage design*
 - (a) *meets the stormwater flow capacity requirements of the relevant design storm event*
 - a. *where for the minor system – as detailed in Table 1 – Minor System Design Storm Event by Road Frontage Classification and Precinct:*
 - b. *where for the major system – 1 percent AEP*
 - (b) *ensures the major system caters for 50 percent blockage in the minor system with causing inundation of building floor levels.*
- e. P3(1) should read:
 - (1) *Stormwater management design*
 - (a) *for reconfiguration the will result in roofwater through adjoining properties –*
 - a. *for residential reconfiguration, a maximum of two lots are served by a pipe system that discharges roof water run off to the nearest downhill road reserve or lawful point of discharge; or*
 - b. *for other reconfiguration, an inter lot drainage system discharges roof and surface run off to the nearest available downhill road reserve or lawful point of discharge;*
 - c. *avoids the risk of flooding by ensuring that uses and other development are undertaken on land above the 1 percent AEP flood and storm tide level (2.4m AHD).*

76. Section 8.2, Page 117 – Building Design Code to Reduce Biting Insect Nuisance (make the following amendments and update the code)-

- a. Amend code name to *Building Design Code To Reduce the Incidence of Biting Insects*
- b. (2) - Delete the bullet point
- c. Amend (2) after the bullet point to *(i) In sub-area 1 or within the Open Space Precinct*

- d. Amend (2)(a) and (2)(ii) – insert the word “external” before “windows and doors”

77. Section 8.3.3, Page 118 – S1.1 Delete first paragraph and amend to:

(1) In sub-area 1 and the Open Space Precinct

- a) *Development and other uses must ensure all external windows and doors are equipped with insect screens with a mesh aperture of not more than 1mm; and*
- b) *Where a Child Care Centre must ensure outdoor play/entertainment areas are equipped with insect screens with a mesh aperture of not more than 1mm.*

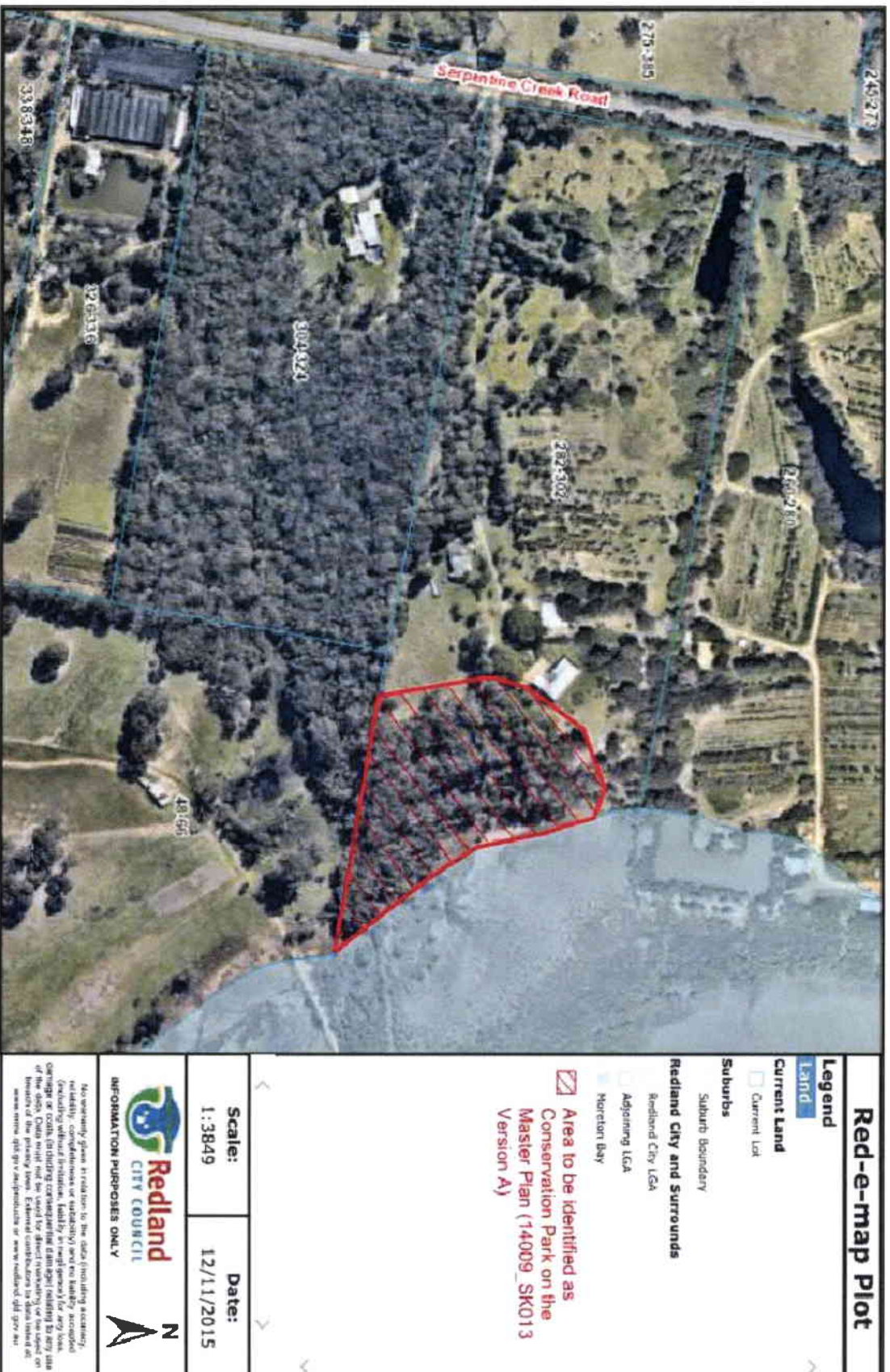
(2) Where an Aged Persons and Special Needs Housing or Child Care Centre use in any location, development ensures all external windows and doors are equipped with insect screens with a mesh aperture of not more than 1mm.

9. SCHEDULES

78. Section 9.2, Page 119 – Lot Sizes, Table 1 Use Lot Sizes (make the following amendments and update the relevant codes) –

- a. *Table 1 is amended so that the minimum lot size for Dual Occupancy use in the Urban Residential and Medium Density Residential Zones is 700m². For Multiple Dwellings, Apartment Buildings and Aged Persons and Special Needs Housing in the Urban Residential and Medium Density Residential Zones, the minimum lot size is 800m².*

APPENDIX 2: AREA TO BE IDENTIFIED AS CONSERVATION PARK ON THE APPROVED MASTER PLAN (14009_SK013 [24])



APPENDIX 3 - CONDITIONED CHANGES TO OPEN SPACE LANDSCAPE STRATEGY

1. Page 2 - Update the *Location of Management Areas and Stormwater Network Plan* to
 - a. Amend the Conservation Areas so they are consistent with the areas designated as Conservation Park on the approved Master Plan (14009_SK013 Version A)
 - b. Delete Private Open Space and Open Space Linkage and rename both areas as Open Space Corridor.
2. Remove all references in the document to Private Open Space and Open Space Linkages.

2.0 LAND USE PURPOSE AND STRATEGY

2.1 Foreshore Open Space Area

Purpose:

3. Page 3, Paragraph 2, last sentence – amend to “*The open space areas will generally provide a 100m setback between mosquito breeding or roosting habitat and properties*”
4. Page 3, Paragraph 3, amend the penultimate sentence to “*The edges of retained bushland areas will be densely planted with low-maintenance native grasses and low growing ground cover to prevent subsequent weed intrusions*”

Strategy (Page 3/4):

5. Replace the strategies with the following:
 - a. Ensure retained and planted trees and shrubs within the Foreshore Open Space (excluding the areas identified in the approved Shoreline Master Plan as Conservation Park) are sparsely planted, with an understorey of low maintenance native grasses to encourage sea breeze and reduce the incidence of mosquitoes and biting midges;
 - b. Design of the Foreshore Open Space does not result in the clearing of non-juvenile koala habitat trees in areas identified as bushland habitat in the South East Queensland Koala Conservation State Planning Regulatory Provision (or as varied by this Preliminary Approval);
 - c. Design of the Foreshore Open Space must avoid clearing non-juvenile koala habitat trees in areas of high value rehabilitation habitat, and medium value rehabilitation habitat in the South East Queensland Koala Conservation State Planning Regulatory Provision (or as varied by this Preliminary Approval), with any unavoidable clearing minimised and offset in accordance with the *Environmental Offsets Act 2014*;
 - d. Design and layout of the Foreshore Open Space Area provides for safe fauna movement opportunities (including koalas), ensuring that the siting and design of infrastructure in the Area does not inhibit fauna movement;
 - e. Design and layout of the Foreshore Open Space complies with the approved Shoreline Biting Insect Management Plan;
 - f. Design and layout of the Foreshore Open Space complies with the approved Overall Bushfire Management Plan “Redlands Shoreline Development”;

- g. Planting species are such that at least 70% are in accordance with the Vegetation Enhancement Strategy (RCC 2007 or equivalent future versions published by Council). Where exotic species are used for the balance 30% maximum, environmentally invasive species should be avoided;
- h. Strategic weed control and maintenance is undertaken along edges of retained bushland areas; and
- i. An esplanade road adjoins the western boundary of the Foreshore Open Space to increase the buffer to properties.

2.2 Open Space Corridors and Open Space Linkages

Purpose:

- 6. Page 4, Paragraph 1 – Amend the first sentence to read “*The purpose of the Open Space Corridors is to encourage and provide for safe wildlife movement between existing patches of vegetation through active revegetation. This strategy will allow vegetation from the eastern portions of the Shoreline development area to connect with bushland areas to the west*”
- 7. Page 4, Paragraph 2 – Amend the last sentence to read “*There will be opportunities through appropriate site design, to include recreation parkland facilities and stormwater devices within these areas, provided the higher objective of habitat connectivity is protected*”
- 8. Page 4, Paragraph 3 – Amend first three sentences to read “*The Open Space Corridors will consist of a mosaic of low-maintenance native grass areas and tall trees to provide a breezeway to minimise biting insect connectivity. The corridors will be a minimum of 100m wide, providing a 75m buffer to freshwater biting insect breeding habitat and 50m buffer to roosting habitat (including the road reserves). This open space area will consist of a central portion at least 50m wide (or as otherwise approved by Council), which facilitates provision of wildlife habitats that will be buffered by a 25m sparsely planted and low-maintenance grass area, with tall koala food trees.*”
- 9. Page 4, Paragraph 4 – delete paragraph (referring to open space linkages)
- 10. Page 5 – Indicative planting for open space corridor – Amend references to corridor widths so that the central habitat core is *at least 50m wide (or as otherwise approved by Council)*, with the outer corridor areas being *at least 25m wide each*.

Strategy (Page 6):

- 1. Replace the strategies with the following:
 - a. All Open Space Corridors are no less than 100m in width, with the central habitat core being at least 50m (*or as otherwise approved by Council*) and the two buffer areas at least 25m wide each.
 - b. All Open Space Corridors are designed and planted in accordance with the Biting Insect Management Plan, incorporating an outer frame of high canopy trees and low maintenance native grasses to provide a buffer between core habitat areas that provide roosting habitat for biting insects and properties. Recreational parks, footpaths/cycleways and water quality devices located in these areas will be subject to separate landscaping requirements.
 - c. Design and layout of the Open Space Corridors should provide continuity of core habitat and natural waterway channels that supports safe fauna movement opportunities and prevents fragmentation of habitat, ensuring that the siting and design of infrastructure (including recreation areas,

pathways/cycleways, stormwater facilities, maintenance access etc) in these areas does not inhibit safe fauna movement (e.g. road underpasses / overpasses);

- d. Planting design must incorporate a selection of replanting species in accordance with the Vegetation Enhancement Strategy (RCC 2007 or equivalent future versions published by Council). In the habitat core it must incorporate suitable plant species with appropriate forms to provide structural complexity and soil stability;
- e. Corridor design must avoid placement of pedestrian and cycle pathways through continuous habitat, with public use kept to areas within or immediately adjacent to roads, designated parks and stormwater facilities.
- f. Corridor design must avoid public and environmental risk, in accordance with CPTED principles;
- g. The design of road underpasses / overpasses and exclusion fencing for native fauna must be in accordance with the Koala-sensitive Design Guideline (A guide to koala-sensitive design measures for planning and development activities), November 2012, Department of Environment and Heritage Protection. A minimum standard for fauna crossings will be generally in accordance with Options C, D and E on pages 18 to 21 of the Guideline;
- h. Roads that dissect Open Space Corridors (excluding Serpentine Creek Road, Scenic Road and Orchard Road) must limit vehicle speed to 30km/hr
- i. Planting of wetland sedge and tufted species along rehabilitated waterways and water bodies must be substantially commenced before construction of upstream development is commenced;

2.3 Conservation Area

Purpose:

1. Page 6, Paragraph 1 – Amend the second sentence to “*Currently, there are two main Conservation Areas; one located at the north-eastern extent of the study area, and the other being Lot 1 on RP133830, which forms part of the Open Space Corridor stretching from the eastern boundary to the western boundary of the development site.*”
2. Page 6 , Paragraph 2 - Amend the first sentence as follows – “*These conservation areas will hold a higher likelihood of harbouring mosquitoes and in addition to the provision of the road buffers the nearby properties will be subject to specific design requirements in the Shoreline Plan of Development.*”
3. Page 7, Insert the following before the first paragraph –

Rehabilitation, management and maintenance of these areas is generally in accordance with the following sections of the *Redland City Council’s Conservation Land Management Strategy 2010: A plan for the next 10 years*

- *Section 5.4 Nature Belt (NB)*
- *Section 5.7 Conservation Coastal Foreshore (CCF)*
- *Section 7.13 Rehabilitation, Enhancement and Maintenance (Principles 1-14 for NB and CCF); and*
- *Section 7.2.1 Specific Management Zones (Principles 1-8, 10, 14 and 20 for NB and CCF)*

Strategy (Page 7) – Amend to:

1. Conservation Areas maintain, enhance and protect environmental values by ensuring
 - a. Degraded and cleared areas are restored and revegetated is planned, managed and implemented in accordance with best practice guidelines (for example, the SEQ Ecological Restoration Framework);
 - b. Revegetation of the conservation land to be dedicated to Council must include planting at 2/m² with a mix of ground covers/shrubs/mid canopy and canopy in accordance with the approved RE species list. Trees must be planted at 5m spacing and comply with the approved RE species list. Watering must be undertaken to ensure establishment. Maintenance must be undertaken at monthly intervals for the first 3 years and then scaled back to 8 visits per year (6 week intervals) for the remaining 2 years;
 - c. Retained Conservation Areas are protected and enhanced in accordance with best practice guidelines (including the Redland City Council's Conservation Land Management Strategy 2010);
 - d. Weed control incorporates monthly maintenance, including seed head removal to be undertaken for the first 3 years from dedication of the conservation land and then scaled back to 8 visits per year (6 week intervals) for the remaining 2 years.
 - e. No clearing of native vegetation is to be undertaken within Conservation areas unless required for safety, infrastructure maintenance or bushfire management;
 - f. The placement of clear signage that requires limiting disturbance of habitat areas and indicating specified access points;
 - g. Native animal movement through the premises is protected and supported;
 - h. Only endemic native species are planted within Conservation areas, in accordance with the relevant version of the Vegetation Enhancement Strategy or equivalent Council instrument;
 - i. The introduction of non-native plants or animals into the premises is avoided;
 - j. Stormwater runoff is managed and water quality enhanced;
 - k. Overland drainage systems and waterways are maintained in, or returned to, their natural state where possible;
 - l. Specific habitat for vulnerable species, such as the Glossy Black Cockatoo and the Koala, is retained and protected;
 - m. Noise, artificial light, and access by non-native animals is directed away from Conservation Areas ; and
 - n. Species with dense foliage are only planted as part of the edge-seal planting to reduce edge effects and increase buffers to core habitats.

3.0 REVEGETATION STRATEGIES

3.2 Open Space Corridor and Open Space Linkage Area

1. Page 8, Paragraph 2 – Amend the size of the central habitat core from 30m to 50m (or as otherwise approved by Council) and the outer buffer areas from 35m on either side to 25m on either side.

3.3 Conservation Area

1. Insert the following at the end of this section:

Revegetation is planned, managed and implemented in accordance with best practice guidelines (for example, the SEQ Ecological Restoration Framework and the Redland City Council's Conservation Land Management Strategy 2010)

Appendix 1 – Management Area Information

Table 3 – Open Space Corridor and Open Space Linkage Area Management Intent

1. Amend column 1 so that the size of the central habitat core from 30m to 50m (or as otherwise approved by Council) and the outer buffer areas from 35m on either side to 25m on either side.

Appendix 2 – indicative cross sections for vegetation management within open space areas

1. Update the Biting Insect Management Plan / Open Space Strategy (14009_SK034 [5]) to delete cross sections 1 and 6, and update in accordance with the amended Master Plan referenced above.
2. *Cross Section 4 – Open Space Multipurpose Corridor (Indicative Only) (14009.01.Sk032.[5])* – Add a note as follows:
Note: The location of the sports facilities does not form part of this approval
3. Delete *Cross Section 1.0 – Open Space Corridors (Indicative Only). Conservation Area (14009_SK037[4])*
4. Delete *Cross Section 6.0 – Development Adjacent to Conservation Park (Indicative Only). Conservation Area (14009_SK040 [3])*
5. *Open Space Corridors With Parks / Linkages (Indicative Only) (14009_SK030[5])*- Amend the width for the central habitat core from 30m to 50m (or as otherwise approved by Council) and the outer buffer areas from 35m on either side to 25m on either side.

Appendix 4 - Conditioned changes to the Shoreline Biting Insect Management Plan

4. THE IMPACT OF DEVELOPMENT

6. Section 4.2, Page 14 – On Roosting Habitat -

a. Amend the second paragraph to:

“Each Open Space Corridor is comprised of a core of riparian vegetation flanked by margins that are 25m wide of lightly treed low-maintenance grassland. A 20m road reserve augmented by a 6m building setback provides additional setback to properties. In aggregate, each Open Space Corridor will provide a 75m setback between properties and freshwater mosquito breeding habitat, and a 50m setback to roosting habitat (Figure 4.1)”

b. Amend Figure 4.1 so that the central habitat core is increased from 30m to 50m (or as otherwise approved by Council) and the lightly treed margins are decreased from 35m to 25m.

6. MANAGEMENT OF MOSQUITOES AND BITING MIDGE

7. Section 6.3.1, Page 20 – Siting and Design – Buffers

a. Delete the following sentence from the first paragraph - (*including public open space / playing fields*)

b. Delete the last sentence of the second paragraph – *The first 20-30m of any setback is likely to confer the greatest benefit.*

8. Section 6.3.1, Page 21 – Engineering and Landscape Design- Delete paragraph 4 *“Dense plantings of native groundcovers (e.g. Lomandra hystrix), low shrubs and small trees may act to trap mosquitoes and biting midges from adjacent breeding areas on the site.”*

9. Section 6.3.1, Page 22 – Building Design - second paragraph, amend to: *“Outdoor areas close to breeding grounds should incorporate screening.”*

10. Section 6.3.1, Page 22/23 – Buffers – Delete the last two sentences of the last paragraph so that it reads –

The foreshore buffer is constrained at two locations towards the north of the site (Figure 6.1). Densely wooded Conservation Areas reduces the open space buffer to approximately 10m and 40m wide. The establishment of Sub-area 1 in the Shoreline Plan of Development will ensure that development within 100m of potential roosting habitat must comply with the building design code attached at Appendix A.

11. Section 6.3.1, Page 23 – Buffers – Update the Biting Insect Management Plan / Open Space Strategy (Figure 6.1) to delete cross sections 1 and 6.

12. Section 6.3.1, Page 24 Buffers – Amend to:

Open Space Corridors and Linkages will be no less than 100m wide, comprised of a 50m wide (or as otherwise agreed by Council) core of riparian vegetation and 25m wide margins of lightly treed low-maintenance grassland, augmented by esplanade roads (road reserve 20m wide) and building setbacks (6m) (see Figure 4.1, 6.2 and 6.3). In aggregate, each corridor and linkage will provide approximately a 75m setback between freshwater mosquito breeding habitat and properties and 50m from

dense roosting habitat (sufficient to minimise the movement of mosquitoes such as Aedes procax and Verrallina funereal (McGinn (2013)) recommends a 30m wide buffer as sufficient to manage these species). These corridors will also serve as breezeways that discourage roosting of other species of mosquitoes and biting midge.

13. Section 6.3.1, Page 27 Buffers – Delete the second paragraph and insert –

The south-east of the site (Lots 86 and 247 on S312432) will incorporate a 80m development free buffer, which with the 20m road reserve (Orchard Road) will provide a 100m clearance to development on lots 80 and 81 on S31102. These lots are densely vegetated and extend to saltmarsh habitat on the coastline, and as such have the potential to harbour pestiferous numbers of mosquitoes.

14. Section 6.3.1, Page 28 – Building Design – Amend to:

The Shoreline Plan of Development implements a building design code to ensure that sensitive development (Aged Persons and Special Needs Housing and Child Care Centres) throughout the subject site, and other uses within 100m of potential mosquito roosting habitat, incorporate attenuation measures to reduce opportunities for mosquitoes and biting midge to enter buildings.

The code also includes additional design recommendations, including:

- *Windows on the windward side of buildings, rather than the leeward side;*
- *Ceiling and veranda fans;*
- *Full screening, including of some outdoor play areas; and*
- *Where rainwater tanks are installed, full screening of all entry and outlet points.*

The building design code is included at Appendix A.

7. BITING INSECT MANAGEMENT PLAN

15. Section 7.2, Page 34 – Goals – Third bullet point – delete “*and other stakeholders*”

16. Section 7.4, Page 35 – Responsibilities –

- a. Paragraph 1 – Delete the last sentence being “*The proponent will also establish and manage a biting insect complaints ‘hot-line’ for a period of 10 years*”
- b. Paragraph 2 – Delete the last sentence being “*As the site is developed, Council is expected to assume responsibility for mosquito management on land transferred to Council ownership, and lot owners will assume responsibility for individual lots*”
- c. Paragraph 3 – Delete (*Council currently manage mosquitoes across the Redlands on State and Council owned land.*)

17. Section 7.6, Page 37 – On-site Monitoring – Delete first two sentences, being – *Acknowledging the limitations to accurate interpretation of lighting trapping data (Ryan, et al. 2004; Kitron, 2000) adult mosquito incidence will be monitored in the first instance via the proxy of logged complaints. Shoreline will establish and manage*

a biting insect complaints 'hot-line' for a period of 10 years, and liaise with Queensland Health to determine the reported incidence of arboviruses.

Appendix A Building design to reduce exposure to mosquitoes

18. Update in accordance with the amended building design code in the Shoreline Plan of Development

Appendix B Shoreline plans 12 June 2015

19. Update the Master Plan (14009_SK013[21]) in accordance with the versions approved in the conditions of this Preliminary Approval (version [24])
20. Update the Biting Insect Management Plan / Open Space Strategy (14009_SK034 [5]) to delete cross sections 1 and 6, and update in accordance with the amended Master Plan referenced above.
21. *Open Space Corridors with Parks/Linkages (14009_SK030[5])* – Update to ensure the central habitat core is identified as 50m (or as otherwise approved by Council) (remove the term nominal) and the outer margins on either side are identified as 25m (remove the term nominal)
22. Delete *Cross Section 1.0 – Open Space Corridors (Indicative Only). Conservation Area (14009_SK037[4])*
23. *Cross Section 4 – Open Space Multipurpose Corridor (Indicative Only) (14009.01.Sk032.[5])* – Add a note as follows:

Note: The location of the sports facilities does not form part of this approval
24. *Cross Section 2 – Open Space Multipurpose Corridor (Indicative Only) (14009.01.Sk036.[5])* – Add a note as follows:

Note: The location of the sports facilities does not form part of this approval
25. Delete *Cross Section 6.0 – Development Adjacent to Conservation Park (Indicative Only). Conservation Area (14009_SK040 [3])*



Department of Infrastructure,
Local Government and Planning

Our reference: SDA-0714-012691 (F14/12027)
Your reference: MCU013287

28 October 2015

Chief Executive Officer
Redland City Council
PO Box 21
CLEVELAND QLD 4163

Dear Sir/Madam,

Amended concurrence agency response – with conditions

Preliminary approval under section 242 of SPA for a Material Change of Use to vary the effect of a local planning for a master planned residential community

148-154, 156-168, 194-214, 218-236, 238-258, 260-280, 275-385, 282-302, 304-324, 326-336, 338-348, 362-372, 422-442, 466-486 Serpentine Creek Road, 47-91, 68-74, 74A, 90-92, 94-96 Scenic Road and 91-111 Orchard Road, Redland Bay

(Given under Section 290(1)(b) of the *Sustainable Planning Act 2009*)

The Department of Infrastructure, Local Government and Planning issued an concurrence agency response on 18 February 2015 under Section 285 of the *Sustainable Planning Act 2009* (the Act). On 16 October 2015, the Department received advice from the applicant that the application had been changed under section 351(1) of the Act in response to further discussions with the Council. As a result, the Department has now changed its concurrence agency response, the details of which are attached.

If you require any further information, please contact Ashleigh Hayes, a/Principal Planning Officer, Regional Services, SEQ (South) on 07 5644 3218 or via e-mail GCSARA@dilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

A handwritten signature in black ink, appearing to read "Amanda Tzannes".

Amanda Tzannes
Manager – Planning

cc: Shoreline Redlands Pty Ltd, chris.barnes@shorelineredlands.com.au
enc: Attachment 1—Amended conditions to be imposed
Attachment 2—Amended reasons for decision to impose conditions
Attachment 3—Amended further advice
Attachment 4—Amended approved plans and specifications
Attachment 5—Applicant written agreement to amended concurrence agency response

Our reference: SDA-0714-012691 (F14/12027)

Your reference: MCU013287

Attachment 1—Amended conditions to be imposed

No.	Conditions	Condition timing
Preliminary approval under section 242 of SPA		
1.	<p>The development must be undertaken generally in accordance with the following plans, except as modified by these conditions:</p> <ul style="list-style-type: none"> • Precinct Plan [Draft]. Shoreline, prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK015 [20]; and • Access and Movement. Shoreline, prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK019 [9] (as amended in red, 28 October 2015). 	At all times.
2.	<p>The staging of the development must be undertaken in accordance with the Development Staging Plan. Shoreline, prepared by Lat 27, dated 10 December 2014 and plan reference 14009_SK027 [5].</p>	At all times.
<p>Schedule 7, Table 3, Item 1 & Schedule 7, Table 3, Item 2 (State Transport Infrastructure) — Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i>, the chief executive administering the Act nominates the Director-General of Department of Transport and Main Roads to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):</p>		
3.	<p>a) Road works comprising, the upgrade of Beenleigh-Redland Bay Road (Serpentine Creek Road) along the frontage of the subject site, for which approval under section 33 of the <i>Transport Infrastructure Act 1994</i> must be obtained, must be provided by the applicant.</p> <p>The road works must be designed and constructed to a four (4) lane urban cross section with a nominal width 40.0m wide road reserve, in accordance with the Department of Transport and Main Road's Road Planning and Design Manual and the Manual of Uniform Traffic Control Devices, including:</p> <ul style="list-style-type: none"> i. a 6.0m median; ii. 3.5m minimum traffic lanes; iii. 2.0m minimum outer shoulders to allow for on-road cyclists; iv. 5.0m minimum road verges to allow for an off-road shared use path, and services including pits, poles and street light supports; v. batters as required; and vi. tapering. <p>b) The design and construction of the works outlined in (a) above</p>	<p>(a)</p> <p>Prior to the commencement of any use or prior to submitting the Plan of Survey for the first lot to the local government for approval, whichever comes first.</p>

No.	Conditions	Condition timing
	(including, but not limited to, additional land requirements, all adjustments and/or relocations to existing services) is to be at no cost to the State of Queensland.	
4.	<p>a) Road works comprising intersection upgrades at locations identified as [A], [B], [C], [D], and [E] on the <i>Access and Movement. Shoreline</i>, prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK019 [9] (as amended in red, 28 October 2015), for which approval under section 33 of the <i>Transport Infrastructure Act 1994</i> must be obtained, must be provided by the applicant.</p> <p>The road works must be designed and constructed in accordance with the Department of Transport and Main Road's Road Planning and Design Manual and the Manual of Uniform Traffic Control Devices, to provide the following:</p> <ul style="list-style-type: none"> i. Location [A] - a four way all movement signalised intersection ii. Location [B] - an un-signalised T-intersection with movement restricted to left-in/left-out only iii. Location [C] - a four way all movement signalised intersection iv. Location [D] - a four way all movements signalised intersection v. Location [E] - a un-signalised T-intersection with movement restricted to left-in/left-out only <p>b) The design and construction of the works outlined in (a) above (including, but not limited to, additional land requirements, all adjustments and/or relocations to existing services) is to be at no cost to the State of Queensland.</p>	<p>(a)</p> <ul style="list-style-type: none"> i. Location [A] - Prior to submitting the Plan of Survey to the local government for approval of the first allotment of Stage 4 as shown on the <i>Development Staging Plan. Shoreline</i>, Lat 27, 10 December 2014, 14009_SK027 [5]. ii. Location [B] - Prior to the commencement of any use or prior to submitting the Plan of Survey to the local government for approval for the first allotment, whichever comes first. iii. Location [C] - Prior to the commencement of any use or prior to submitting the Plan of Survey to the local government for approval for the

No.	Conditions	Condition timing
		<p>first allotment, whichever comes first.</p> <p>iv. Location [D] - Prior to submitting the Plan of Survey to the local government for approval for the first allotment of Stage 2 as shown on the <i>Development Staging Plan. Shoreline</i>, Lat 27, 10 December 2014, 14009_SK027 [5].</p> <p>v. Location [E] - Prior to submitting the Plan of Survey to the local government for approval for the first allotment of Stage 3 as shown on the <i>Development Staging Plan. Shoreline</i>, Lat 27, 10 December 2014, 14009_SK027 [5].</p> <p>b) – at all times.</p>
5.	a) Road works comprising intersection upgrades at following intersections, for which approval under section 33 of the Transport Infrastructure Act 1994 must be obtained, must be provided by the applicant:	a) Prior to the commencement of any use or prior to submitting the Plan

No.	Conditions	Condition timing
	<p>i. Beenleigh-Redland Bay Road and Bryants Road;</p> <p>ii. Beenleigh-Redland Bay Road and California Creek Road;</p> <p>iii. Beenleigh-Redland Bay Road, Mt Cotton Road and Skinners Road;</p> <p>iv. Cleveland-Redland Bay Road and Serpentine Creek Road;</p> <p>v. Cleveland-Redland Bay Road and German Church Road;</p> <p>vi. Cleveland-Redland Bay Road, Giles Road and Gordon Road;</p> <p>vii. Cleveland-Redland Bay Road and Boundary Street; and</p> <p>viii. Cleveland-Redland Bay Road and Double Jump Road.</p> <p>The road works must be designed and constructed in accordance with the Department of Transport and Main Road's Road Planning and Design Manual and the Manual of Uniform Traffic Control Devices, and generally in accordance with the following:</p> <ul style="list-style-type: none"> • Beenleigh-Redland Bay Road and Bryants Road Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.05 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611. • Beenleigh-Redland Bay Road and California Creek Road Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.06 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611. • Beenleigh-Redland Bay Road, Mt Cotton Road and Skinners Road Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.07 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611. • Cleveland-Redland Bay Road and Serpentine Creek Road Intersection, Civil Dimensions Pty Ltd, 17 February 2014, CD14-038-SK.12, signed by Stuart Holland RPEQ 05611, 17 February 2015 • Cleveland-Redland Bay Road and German Church Road Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.08 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611. • Cleveland-Redland Bay Road and Gordon Road Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.09 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611. • Cleveland-Redland Bay Road and Boundary Street 	<p>of Survey to the local government for approval for the first allotment, whichever comes first.</p> <p>b) At all times</p>

No.	Conditions	Condition timing
	<p>Intersection, Civil Dimensions Pty Ltd, 10 December 2014, CD14-038-SK.10 (Draft Preliminary 2031 Functional Layouts), signed by Stuart Holland RPEQ 05611.</p> <ul style="list-style-type: none"> • Cleveland-Redland Bay Road and Double Jump Road Intersection, Civil Dimensions Pty Ltd, 17 February 2014, CD14-038-SK.11, signed by Stuart Holland RPEQ 05611, 17 February 2015. <p>b) The design and construction of the works outlined in (a) above (including, but not limited to, additional land requirements, all adjustments and/or relocations to existing services) is to be at no cost to the State of Queensland.</p>	
6.	All existing access arrangements between Beenleigh-Redland Bay Road (Serpentine Creek Road) and lots which are not part of the subject site must be maintained.	At all times.
7.	<p>a) All existing vehicular property accesses located between the subject site and Beenleigh-Redland Bay Road (Serpentine Creek Road) must be permanently closed and removed by the applicant.</p> <p>b) Direct access is not permitted between Beenleigh-Redland Bay Road (Serpentine Creek Road) and the subject site at any location other than the permitted road access location(s).</p> <p>Note: To remove any doubt, intersections are not permitted road access locations.</p>	<p>(a) Prior to the commencement of any use or prior to submitting the Plan of Survey for the first lot to the local government for approval, whichever comes first.</p> <p>(b) At all times.</p>
8.	Construct a three (3) metre high acoustic (noise) wall for the full extent of the sites frontage with Beenleigh-Redland Bay Road (Serpentine Creek Road), in accordance with <i>Access and Movement. Shoreline</i> , prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK019 [9] (as amended in red, 28 October 2015, to show location of acoustic (noise) wall).	Prior to the commencement of any use or prior to submitting the Plan of Survey for the first lot to the local government for approval, whichever comes first and to be maintained.
9.	<p>a) Stormwater management of the development must ensure no worsening or actionable nuisance to the State-controlled road network.</p> <p>b) Any works on the subject site must not:</p> <ul style="list-style-type: none"> i. create any new discharge points for stormwater runoff onto the State-controlled road; 	<p>(a) and (b)</p> <p>At all times.</p>

No.	Conditions	Condition timing
	<ul style="list-style-type: none"> ii. interfere with and/or cause damage to the existing stormwater drainage on the State-controlled road; iii. surcharge any existing culvert or drain on the State-controlled road; iv. reduce the quality of stormwater discharge onto the State-controlled road. 	
10.	<p>a) The streets labelled 'Sub-arterial Road - State-controlled road' shown on <i>Access and Movement. Shoreline</i>, prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK019 [9] (as amended in red, 28 October 2015), must be designed and constructed to be in accordance with the Schedule – Code for IDAS, Part 2 – Development Standards of the Transport Planning and Coordination Regulation 2005 for a single unit rigid bus of 14.5m in length.</p> <p>b) Any road identified as containing a future bus route must be designed and constructed to be in accordance with the Schedule – Code for IDAS, Part 2 – Development Standards of the Transport Planning and Coordination Regulation 2005 for a single unit rigid bus of 14.5m in length.</p>	Prior to submitting the Plan of Subdivision to the local government for approval for the relevant stage.
<p>Schedule 7, Table 3, Item 5 (Coastal Management District) — Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i>, the chief executive administering the Act nominates the Director-General of Environment and Heritage Protection to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):</p>		
11.	The 'Foreshore Subprecinct' as shown on <i>Precinct Plan [Draft]. Shoreline</i> , prepared by Lat 27, dated 22 October 2015 and plan reference 14009_SK015 [20], must be maintained as a development free buffer, except for infrastructure and non-habitable structures provided as part of the development's open space dedications or as otherwise the subject of a development approval.	At all times.
<p>Schedule 7, Table 3, Item 10 (Vegetation Clearing) — Pursuant to section 255D of the <i>Sustainable Planning Act 2009</i>, the chief executive administering the Act nominates the Director-General of Natural Resources and Mines to be the assessing authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):</p>		
12.	Clearing of native vegetation associated with this material change of use must not occur within Area A (A1- A6) as shown on the attached Referral Agency Response (Vegetation) Plan RARP SDA-0714-012691.	At all times.
13.	New infrastructure associated with this material change of use must not be located within Area A (A1- A6) as shown on the attached Referral Agency Response (Vegetation) Plan RARP SDA-0714-	At all times.

No.	Conditions	Condition timing
	012691.	
14.	New infrastructure associated with this material change of use must not be located in Area B (B1- B6) as shown on the attached Referral Agency Response (Vegetation) Plan RARP SDA-0714-012691 unless the infrastructure is a fence, road, driveway, effluent area, a sediment, detention or bio-retention basin, retaining wall or for underground services.	At all times.

Our reference: SDA-0714-012691 (F14/12027)

Your reference: MCU013287

Attachment 2—Amended reasons for decision to impose conditions

The reasons for this decision are:

- To ensure the development is carried out generally in accordance with the plans of development submitted with the application.
- To manage the impacts of development on the safety and efficiency of the state-controlled road.
- To ensure that the impacts of stormwater events associated with development are minimised and managed to avoid creating any adverse impacts on the state transport corridor.
- To ensure the development avoids or minimises adverse impacts on coastal resources and their values.
- To ensure the natural processes and the protective function of landforms and vegetation are maintained in coastal hazard areas.
- To ensure the clearing works are carried out in the location and to the extent specified on the approved plans.

Our reference: SDA-0714-012691 (F14/12027)

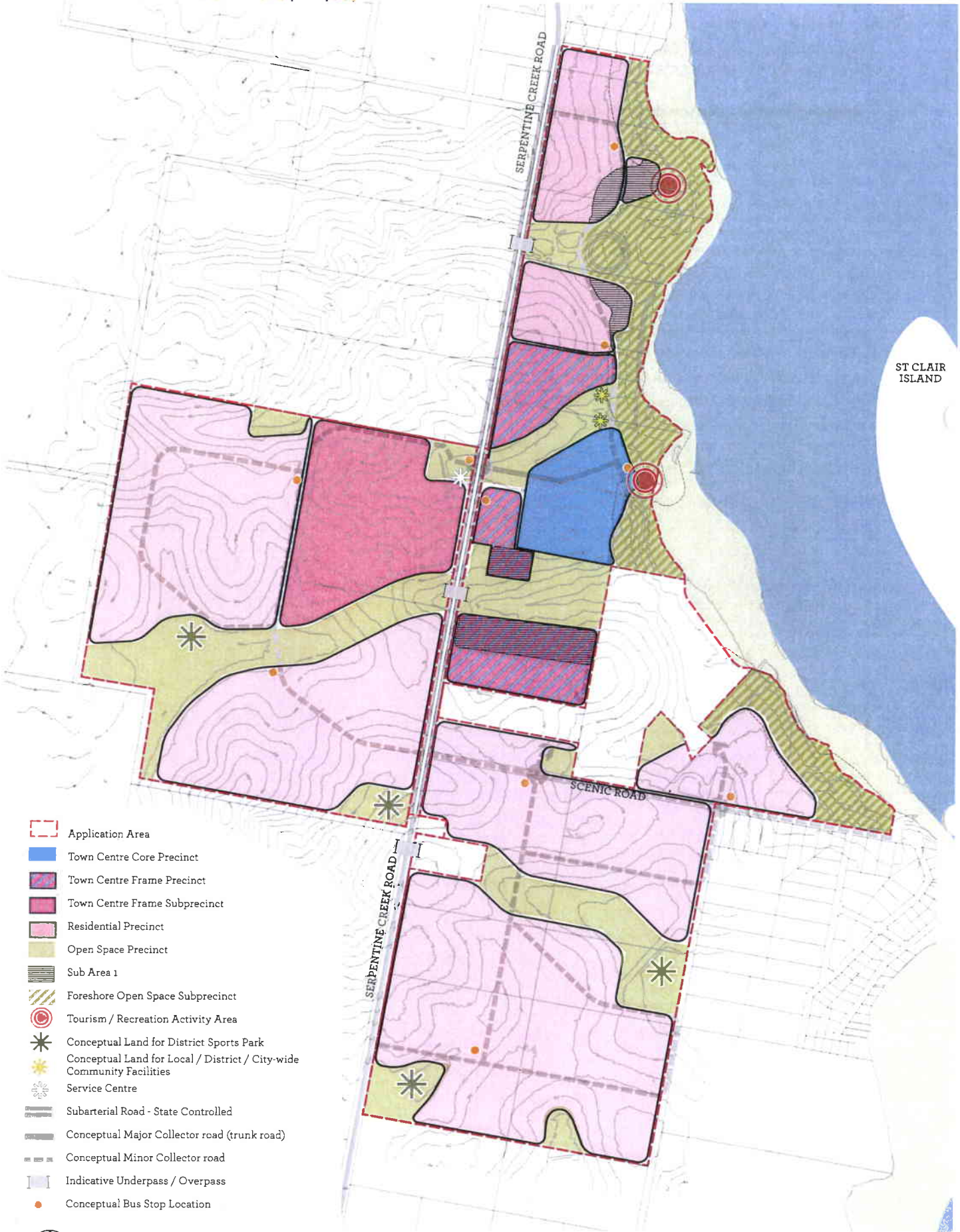
Your reference: MCU013287

Attachment 3—Amended Further advice

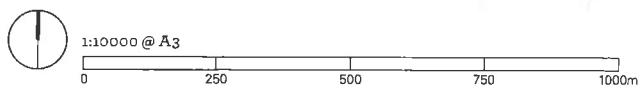
General advice	
1.	<p>Road Traffic Noise</p> <p>With regards to assessing road traffic noise, the following material should be referred to and considered as part of any future development:</p> <ul style="list-style-type: none">• Mandatory Part (MP) 4.4 of the Queensland Development Code (QDC) - <i>Buildings in a Transport Noise Corridor</i>. MP4.4 seeks to ensure that the habitable rooms of Class 1, 2, 3 and 4 buildings located in a transport noise corridor are designed and constructed to reduce transport noise.• Department of Transport and Main Roads' <i>State Development Assessment Provisions Supporting Information – Community Amenity (Noise)</i>.

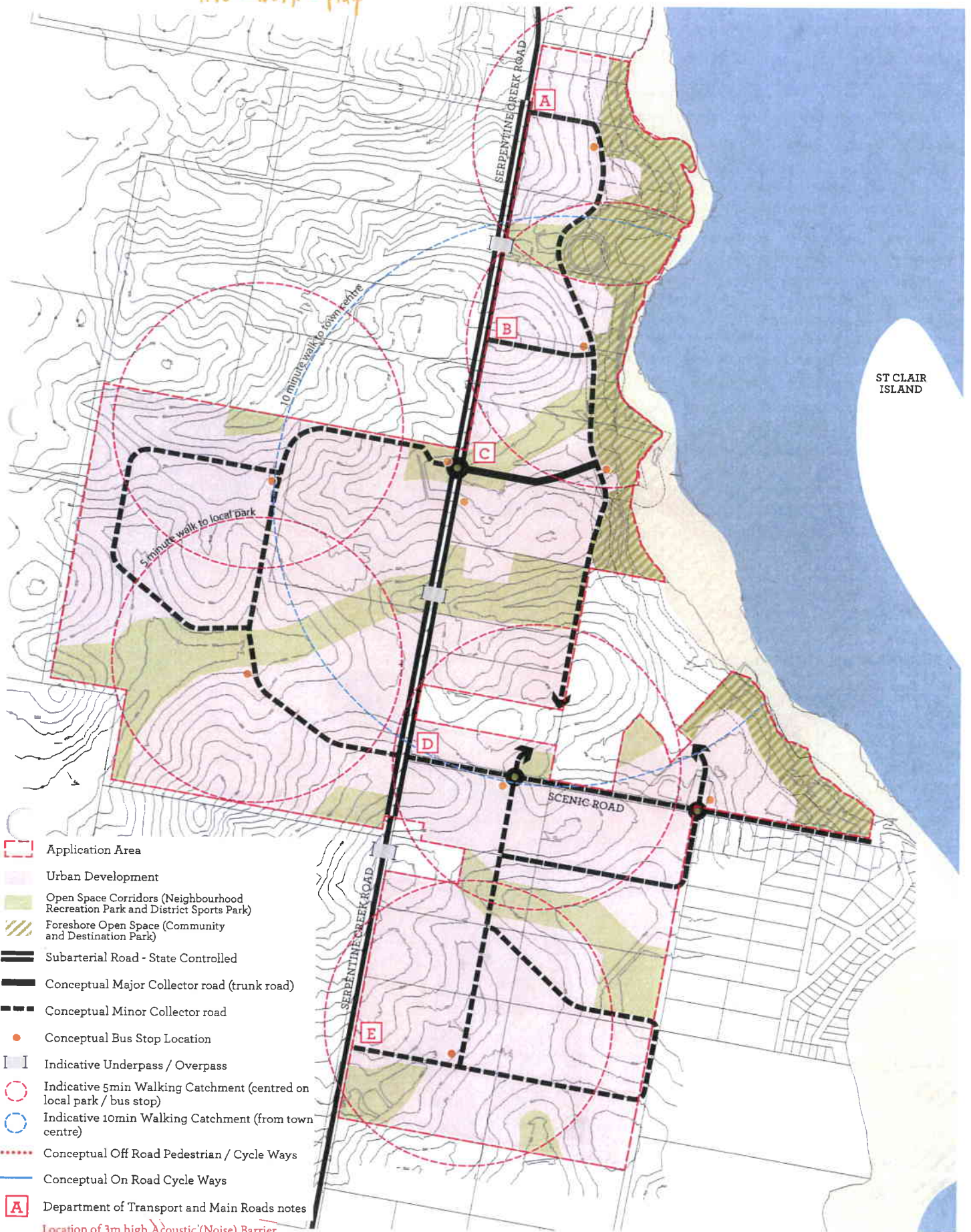
Our reference: SDA-0714-012691 (F14/12027)
Your reference: MCU013287

Attachment 4—Amended approved plans and specifications



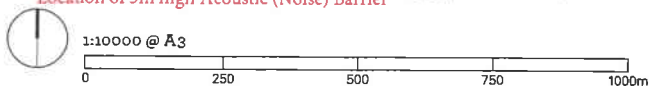
- Application Area
- Town Centre Core Precinct
- Town Centre Frame Precinct
- Town Centre Frame Subprecinct
- Residential Precinct
- Open Space Precinct
- Sub Area 1
- Foreshore Open Space Subprecinct
- Tourism / Recreation Activity Area
- Conceptual Land for District Sports Park
- Conceptual Land for Local / District / City-wide Community Facilities
- Service Centre
- Subarterial Road - State Controlled
- Conceptual Major Collector road (trunk road)
- Conceptual Minor Collector road
- Indicative Underpass / Overpass
- Conceptual Bus Stop Location





ST CLAIR ISLAND

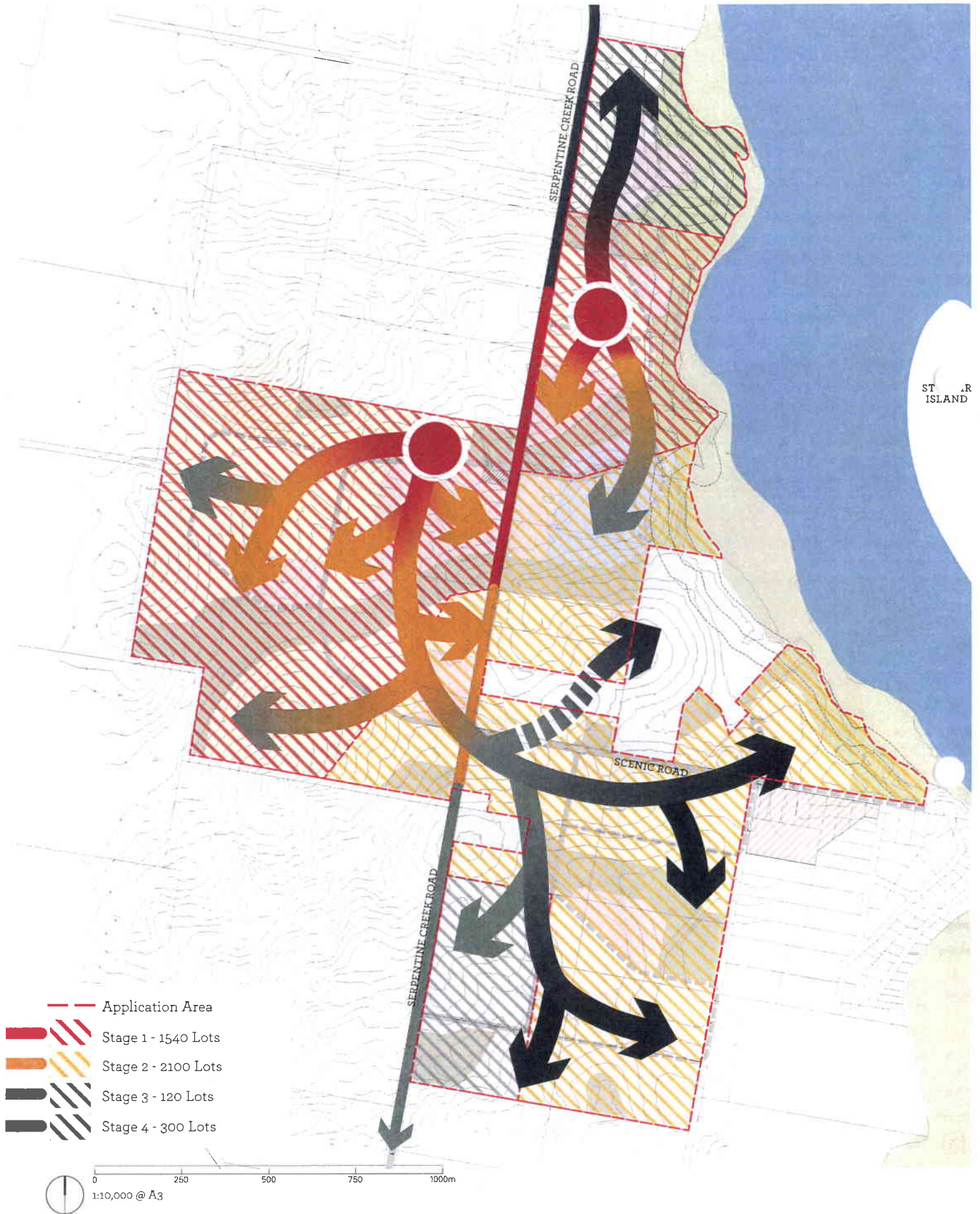
- Application Area
- Urban Development
- Open Space Corridors (Neighbourhood Recreation Park and District Sports Park)
- Foreshore Open Space (Community and Destination Park)
- Subarterial Road - State Controlled
- Conceptual Major Collector road (trunk road)
- Conceptual Minor Collector road
- Conceptual Bus Stop Location
- Indicative Underpass / Overpass
- Indicative 5min Walking Catchment (centred on local park / bus stop)
- Indicative 10min Walking Catchment (from town centre)
- Conceptual Off Road Pedestrian / Cycle Ways
- Conceptual On Road Cycle Ways
- A Department of Transport and Main Roads notes
Location of 3m high Acoustic (Noise) Barrier








Amended in Red by DILGP - 28 October 2015

Access and Movement. Shoreline -----

22.October.2015 . 14009_SK019 [9]



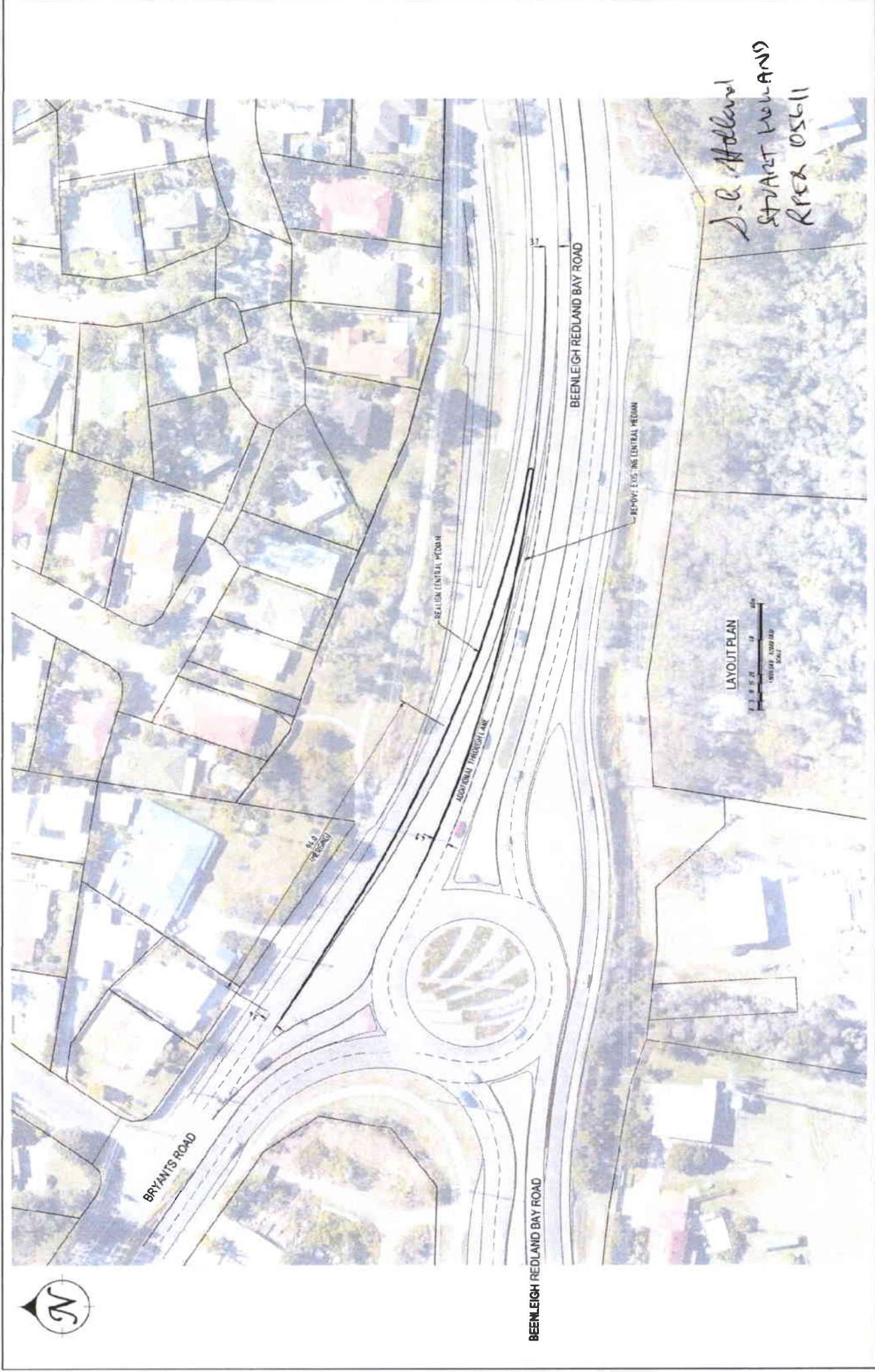
ST. PAUL ISLAND

-  Application Area
-  Stage 1 - 1540 Lots
-  Stage 2 - 2100 Lots
-  Stage 3 - 120 Lots
-  Stage 4 - 300 Lots

0 250 500 750 1000m
1:10,000 @ A3

Development Staging Plan. Shoreline

10.December.2014 . 14009_SK027 [5]

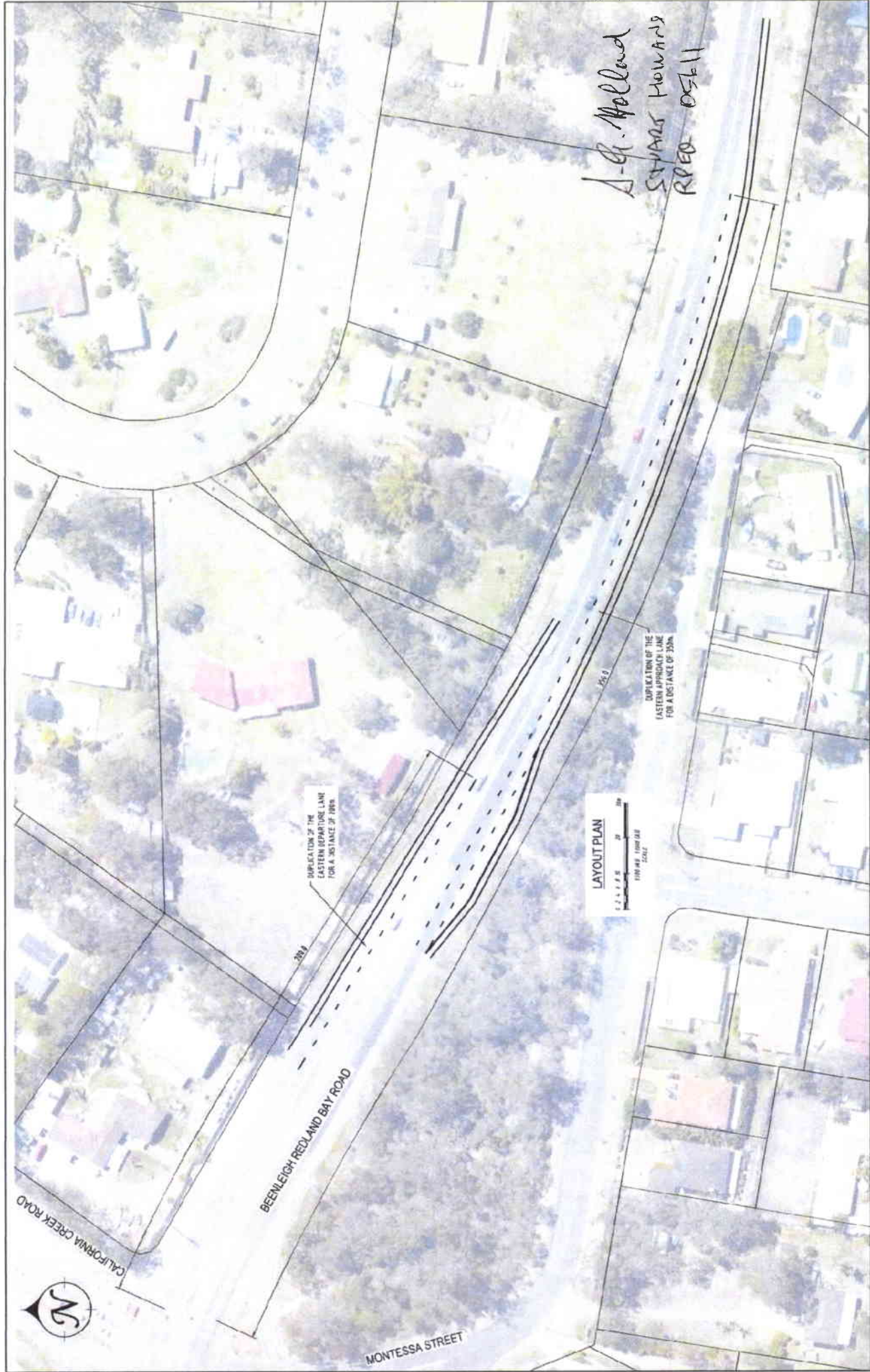


Civil Dimensions
Consulting Engineers
Unit 8, 51 Eccles Street Mt. Orewa 314 4122
Tel: 3822 2050
Fax: 3422 2021
www.civildimensions.co.nz



DISCLAIMER:
Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing.

Beenleigh Redland Bay Road and Bryants Road Intersection
CD14-038-SK.05 - Date: 10/12/2014
(Draft Preliminary 2031 Functional Layouts)



J. G. Molland
 STAIRS TOWARDS
 RPEO 05/11

DUPLICATION OF THE
 EASTERN DEPARTURE LANE
 FOR A DISTANCE OF 300M

DUPLICATION OF THE
 EASTERN APPROACH LANE
 FOR A DISTANCE OF 300M



LAYOUT PLAN

DISCLAIMER
 Some information shown on this drawing may be
 inaccurate. Users should take appropriate measures
 to verify any information obtained from this drawing.

Beenleigh Redland Bay Road and California Creek Road Intersection
 CD14-038-SK.06 - Date: 10/12/2014
 (Draft Preliminary 2031 Functional Layouts)



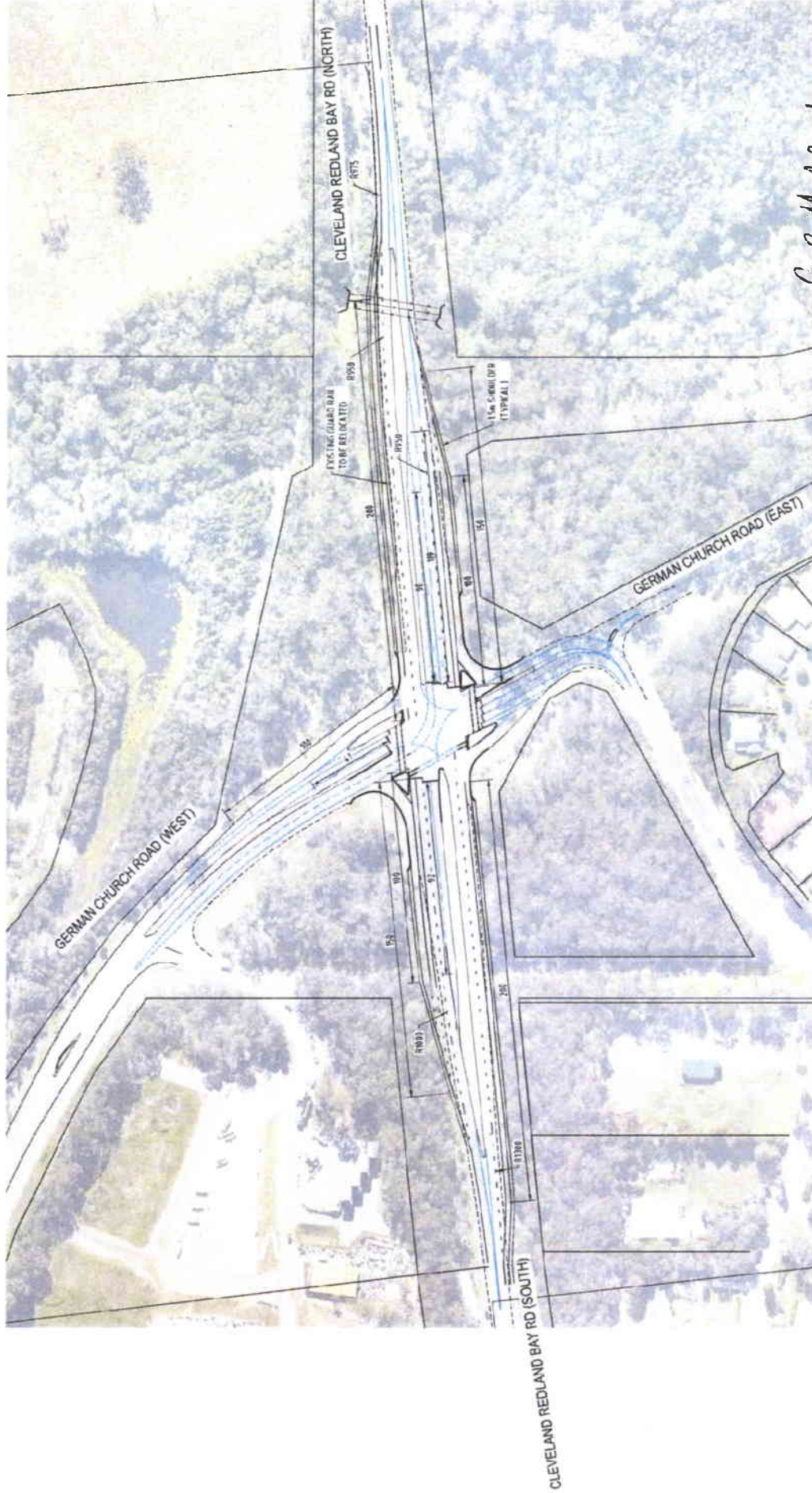
S.A. Holland
 STRAIGHT HOLLAND
 OPEN 605611



Civil Dimensions
 Consulting Engineers
 11/11/2014 10:57
 3492 2620
 3492 2621
 msh@civildimensions.com.au

DISCLAIMER:
 Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing.

Beenleigh Redland Bay Road, Mt Cotton Road and Skimmers Road Intersection
 CD14-038-SK.07 - Date: 10/12/2014
 (Draft Preliminary 2031 Functional Layouts)



J. B. Holland
 STUNER WOLAND
 RPER 05611

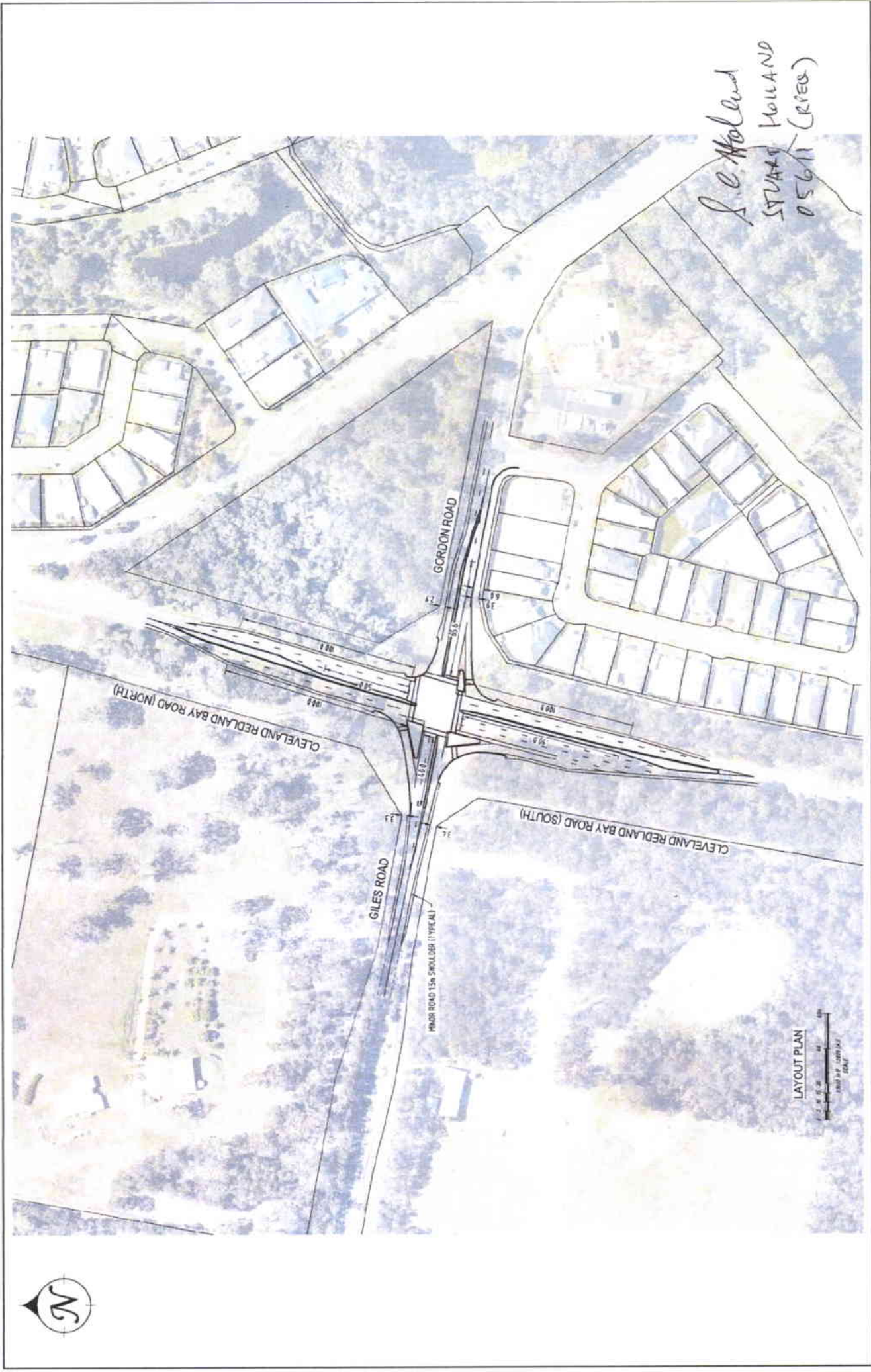
LAYOUT PLAN
 0 10 20 30 40 50 60 70 80 90 100
 FEET



Civil Dimensions
 Consulting Engineers
 111/20214 177 70 74 Address 707 A3 Cour 231
 Tel: 3142 26230
 Fax: 3142 26231

DISCLAIMER
 "Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing."

Cleveland Redland Bay Road and German Church Road Intersection
 CD14-038-SK.08 - Date: 10/12/2014
 (Draft Preliminary 2031 Functional Layouts)



DISCLAIMER:
 Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing.

Cleveland Redland Bay Road, Giles Road and Gordon Road Intersection
CD14-038-SK.09 - Date: 10/12/2014
(Draft Preliminary 2031 Functional Layouts)

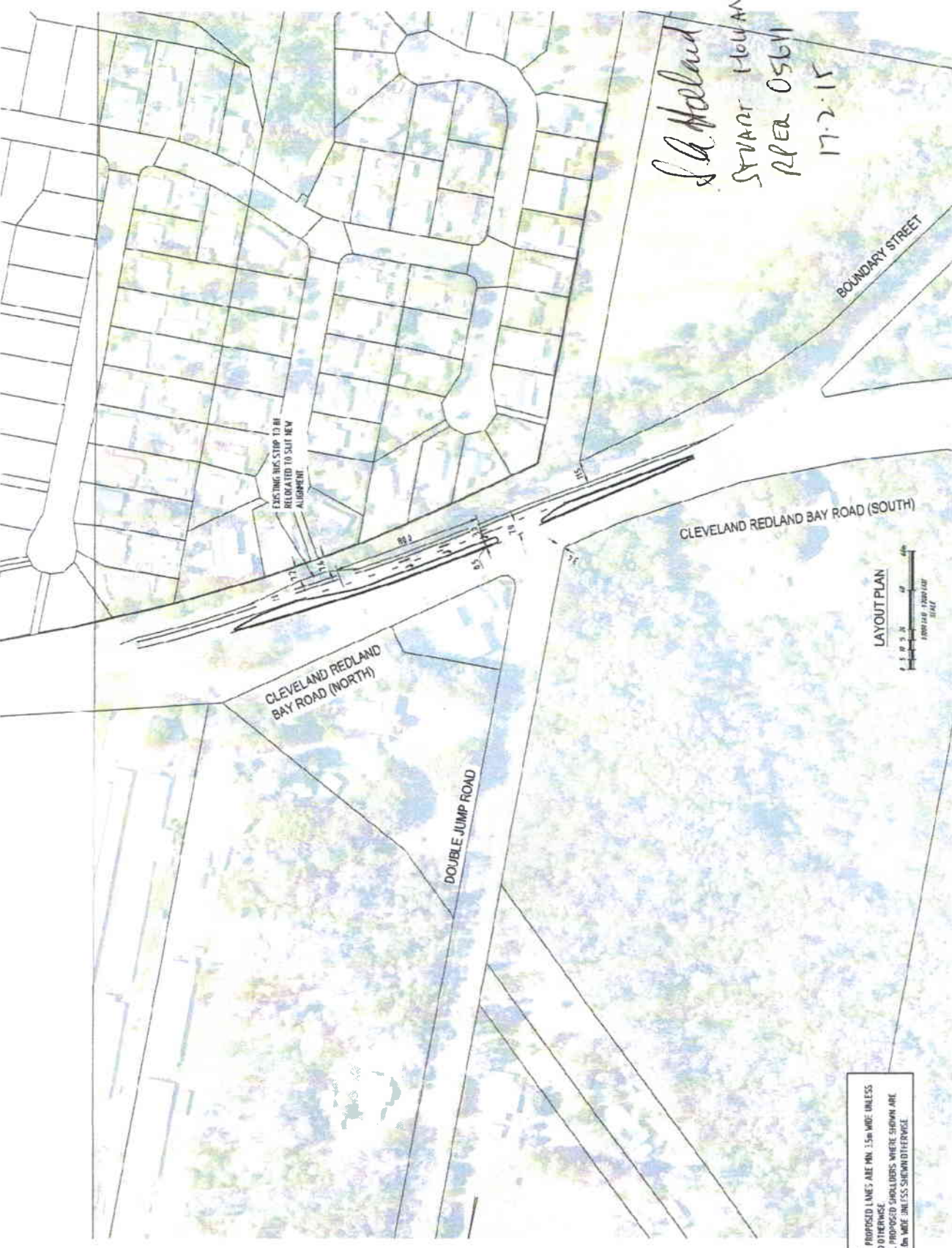


Civil Dimensions
Consulting Engineers Inc.

Unit B, 51 Franklin Street, Cleveland OH 44115
Tel: 216.342.2021
Fax: 216.342.2021
info@civildimensions.com

DISCLAIMER:
"Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing."

Cleveland Redland Bay Road and Boundary Street Intersection
CD14-038-SK.10 - Date: 10/12/2014
(Draft Preliminary 2031 Functional Layouts)



NOTE:
 1. ALL PROPOSED LINES ARE MIN. 1.5m WIDE UNLESS NOTED OTHERWISE
 2. ALL PROPOSED SHOULDERS WHERE SHOWN ARE MIN. 2.0m WIDE UNLESS SHOWN OTHERWISE



Cleveland Redland Bay Road and Double Jump Road Intersection
 CD14-038-SK.11 - Date: 17/02/2015

DRAFT

DECLARER
 "I declare that the information shown on this drawing was prepared by me or under my direct supervision and I am a duly qualified professional engineer in the State of Queensland."





J. L. Holland
 STUART HOLLAND
 RPO# 0564
 17-2-15

SERPENTINE CREEK ROAD

CLEVELAND REDLAND BAY ROAD

SERPENTINE CREEK ROAD

NOTE:
 1. ALL PROPOSED LANES ARE 10M WIDE UNLESS NOTED OTHERWISE.
 2. ALL PROPOSED SHOULDER WIDTHS SHOWN ARE 7M WIDE UNLESS SHOWN OTHERWISE.



**Cleveland Redland Bay Road and Serpentine Creek Road
 Intersection
 CD14-038-SK.12- Date: 17/02/2015**

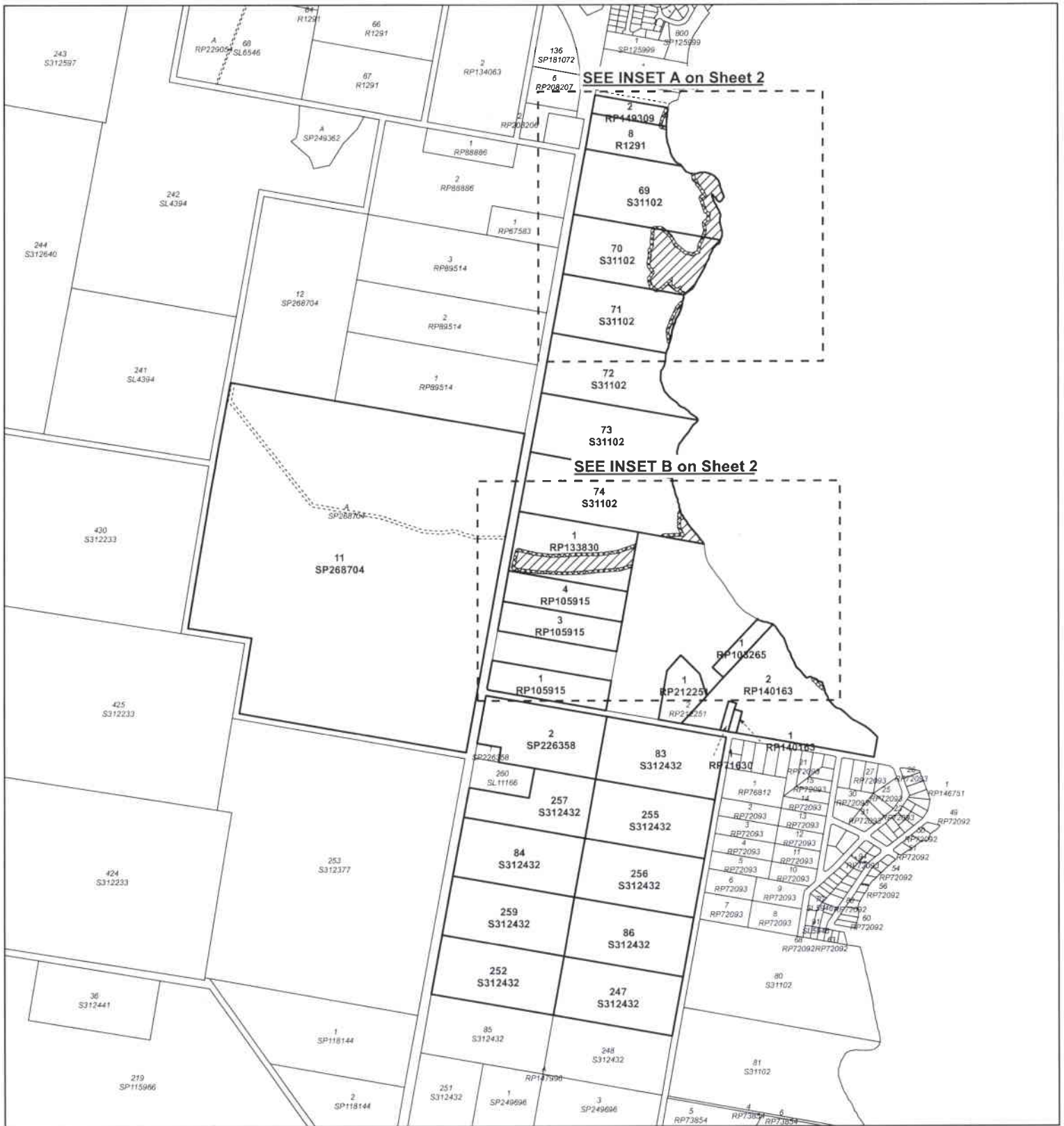
DRAFT

shoreline
 Civil Dimensions
 Consulting Engineers

Unit 8, 51 Fresh St Upper Mt Ouseville QLD 4122
 Tel: 3422 2928
 Fax: 3422 3921
 info@shoredimensions.com.au

DISCLAIMER:
 "Some information shown on this drawing may be incorrect. Users should take appropriate measures to verify any information obtained from this drawing."

Produced: 17/02/2015



Projection: UTM (MGA Zone 56) Datum: GDA94

Note: Derived Reference Points are provided to assist in the location of the Referral Agency Response boundaries. Responsibility for locating these boundaries lies solely with the landholder and delegated contractor(s).

The property boundaries shown on this plan are APPROXIMATE ONLY. They are NOT an accurate representation of the legal boundaries.

Note: This plan must be read in conjunction with Referral Agency Response SDA-0714-012691

<p>LEGEND</p> <ul style="list-style-type: none"> • Derived Reference Points for GPS □ Subject Lot(s) ▨ Area A1, A2, A3, A4, A5 & A6 - Specific conditions apply - see Referral Agency Response SDA-0714-012691 for details ▩ Area B1, B2, B3, B4, B5 & B6 - Specific conditions apply - see Referral Agency Response SDA-0714-012691 for details 	<p align="center">Referral Agency Response (Vegetation) Plan</p> <p align="center">Plan of all Areas A & B in Lot 11 on SP268704, Lot 1 on RP103265, Lots 1, 3 & 4 on RP105915, Lot 1 on RP133830, Lots 1 & 2 on RP140163, Lot 1 on RP212251, Lot 1 on RP71630, Lots 247, 252, 255, 256, 257, 259, 83, 84 & 86 on S312432, Lot 2 on RP149309, Lot 2 on SP226358, Lots 69, 70, 71, 72, 73 & 74 on S31102 and Lot 8 on R1291</p> <p>CENTRE: GYMPIE LOCALITY OF REDLAND BAY</p> <p>REGION: SOUTH LOCAL GOVT: REDLAND CITY</p> <p>Map Reference: 9542 Compiled from: DCDB, PVMP & NRMO Notes</p> <p>File Reference: eLVAS 2014/005812 Prepared by: LMO Date: 15 September 2014</p>	<p align="center">RARP SDA-0714-012691 Sheet 1 of 3</p>
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REFERRAL AGENCY RESPONSE (Vegetation) PLAN

Derived Reference Points
 Projection: UTM (MGA Zone 56) Datum: GDA(94)
 All GPS points continue sequentially when labels are not shown

Point	Easting	Northing	Parcel
1	530370	6941640	A1
2	530356	6941606	A1
3	530351	6941587	A1
4	530351	6941584	A1
5	530364	6941581	A1
6	530364	6941571	B1
7	530349	6941574	B1
8	530344	6941577	B1
9	530341	6941582	B1
10	530341	6941589	B1
11	530347	6941610	B1
12	530362	6941646	B1
13	530468	6941425	A2
14	530458	6941421	A2
15	530459	6941406	A2
16	530468	6941400	A2
17	530470	6941389	A2
18	530479	6941380	A2
19	530483	6941371	A2
20	530488	6941365	A2
21	530493	6941356	A2
22	530496	6941351	A2
23	530497	6941347	A2
24	530482	6941342	A2
25	530497	6941299	A2
26	530511	6941291	A2
27	530507	6941277	A2
28	530510	6941270	A2
29	530492	6941256	A2
30	530497	6941232	A2
31	530488	6941203	A2
32	530477	6941184	A2
33	530474	6941158	A2
34	530449	6941148	A2
35	530423	6941155	A2
36	530391	6941182	A2
37	530374	6941211	A2
38	530346	6941236	A2
39	530340	6941237	A2
40	530326	6941237	A2
41	530325	6941237	A2
42	530323	6941230	A2
43	530323	6941218	A2
44	530321	6941207	A2
45	530321	6941191	A2
46	530321	6941184	A2
47	530319	6941176	A2
48	530313	6941168	A2
49	530314	6941147	A2
50	530309	6941123	A2
51	530311	6941114	A2
52	530323	6941097	A2
53	530322	6941091	A2
54	530318	6941083	A2
55	530311	6941072	A2
56	530312	6941064	A2
57	530315	6941057	A2
58	530316	6941049	A2
59	530331	6941038	A2
60	530340	6941039	A2
61	530345	6941043	A2
62	530385	6941078	A2
63	530382	6941053	A2
64	530391	6941046	A2
65	530399	6941039	A2
66	530411	6941047	A2
67	530413	6941041	A2
68	530414	6941032	A2
69	530429	6941024	A2
70	530421	6941017	B2
71	530410	6941023	B2
72	530406	6941026	B2

Point	Easting	Northing	Parcel
73	530404	6941031	B2
74	530400	6941029	B2
75	530393	6941031	B2
76	530384	6941038	B2
77	530376	6941046	B2
78	530373	6941050	B2
79	530372	6941054	B2
80	530352	6941036	B2
81	530348	6941033	B2
82	530344	6941030	B2
83	530340	6941029	B2
84	530332	6941028	B2
85	530325	6941030	B2
86	530310	6941041	B2
87	530306	6941048	B2
88	530305	6941054	B2
89	530303	6941059	B2
90	530302	6941064	B2
91	530301	6941071	B2
92	530304	6941079	B2
93	530310	6941088	B2
94	530313	6941094	B2
95	530302	6941109	B2
96	530299	6941121	B2
97	530304	6941147	B2
98	530304	6941171	B2
99	530310	6941181	B2
100	530311	6941185	B2
101	530311	6941191	B2
102	530311	6941207	B2
103	530313	6941219	B2
104	530313	6941231	B2
105	530315	6941239	B2
106	530317	6941243	B2
107	530321	6941246	B2
108	530326	6941247	B2
109	530340	6941247	B2
110	530348	6941246	B2
111	530353	6941244	B2
112	530382	6941217	B2
113	530399	6941188	B2
114	530428	6941164	B2
115	530448	6941158	B2
116	530465	6941165	B2
117	530468	6941186	B2
118	530479	6941207	B2
119	530486	6941233	B2
120	530482	6941255	B2
121	530483	6941261	B2
122	530486	6941264	B2
123	530498	6941274	B2
124	530498	6941279	B2
125	530499	6941286	B2
126	530490	6941291	B2
127	530488	6941296	B2
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129	530473	6941346	B2
130	530477	6941351	B2
131	530483	6941353	B2
132	530480	6941360	B2
133	530476	6941365	B2
134	530471	6941374	B2
135	530462	6941383	B2
136	530459	6941394	B2
137	530451	6941401	B2
138	530449	6941405	B2
139	530448	6941420	B2
140	530448	6941423	B2
141	530416	6940986	A3
142	530402	6940968	A3
143	530385	6940931	A3
144	530373	6940895	A3

Point	Easting	Northing	Parcel
145	530376	6940862	A3
146	530373	6940852	B3
147	530368	6940856	B3
148	530366	6940862	B3
149	530363	6940897	B3
150	530376	6940935	B3
151	530393	6940973	B3
152	530409	6940993	B3
153	530412	6940996	B3
154	530418	6940996	B3
155	530412	6940285	A4
156	530410	6940240	A4
157	530424	6940208	A4
158	530355	6940206	A4
159	530345	6940207	B4
160	530346	6940211	B4
161	530350	6940214	B4
162	530355	6940216	B4
163	530409	6940217	B4
164	530400	6940238	B4
165	530402	6940285	B4
166	530404	6940291	B4
167	530409	6940295	B4
168	530263	6940182	B5
169	530258	6940182	B5
170	530197	6940160	B5
171	530141	6940153	B5
172	530081	6940153	B5
173	529979	6940148	B5
174	529916	6940156	B5
175	529874	6940168	B5
176	529869	6940168	B5
177	529864	6940165	B5
178	529862	6940160	B5
179	529849	6940107	B5
180	529849	6940102	B5
181	529852	6940098	B5
182	529856	6940095	B5
183	529871	6940091	B5
184	529932	6940083	B5
185	530023	6940079	B5
186	530085	6940081	B5
187	530130	6940086	B5
188	530209	6940092	B5
189	530248	6940102	B5
190	530250	6940113	A5
191	530208	6940102	A5
192	530130	6940096	A5
193	530085	6940091	A5
194	530023	6940089	A5
195	529932	6940093	A5
196	529873	6940101	A5
197	529859	6940105	A5
198	529871	6940158	A5
199	529915	6940147	A5
200	529978	6940138	A5
201	530082	6940143	A5
202	530141	6940143	A5
203	530200	6940150	A5
204	530261	6940172	A5
205	530855	6939729	A6
206	530871	6939711	A6
207	530886	6939699	A6
208	530889	6939690	B6
209	530884	6939689	B6
210	530880	6939692	B6
211	530864	6939705	B6
212	530848	6939722	B6
213	530846	6939727	B6
214	530846	6939733	B6

Note: Plan at A3 paper size.

Note: Derived Reference Points are provided to assist in the location of the Referral Agency Response boundaries. Responsibility for locating these boundaries lies solely with the landholder and delegated contractor(s).

Note: This plan must be read in conjunction with Referral Agency Response SDA-0714-012691

RARP
SDA-0714-012691
 Sheet 3 of 3

Our reference: SDA-0714-012691 (F14/12027)
Your reference: MCU013287

Attachment 5—Applicant written agreement to amended concurrence agency response

Your reference: SDA-0714-012891 (F14/12027)

Attn: Ashleigh Hayes

Written agreement for the Department of State Development, Infrastructure and Planning to amend its concurrence agency response

(Given under Section 290(1)(b)(i) of the *Sustainable Planning Act 2009*)

Street address: 148-154, 156-168, 194-214, 218-236, 238-258, 260-280, 275-385, 282-302, 304-324, 326-336, 338-348, 362-372, 422-442 and 466-486 Serpentine Creek Road, 47-91, 68-74, 74A, 90-92 and 94-96 Scenic Road and 91-111 Orchard Road, Redland Bay

Real property description: Lot 2 on RP149309, Lot 8 on R1291, Lots 69, 70, 73 and 74 on S31102, Lot 1 on RP133830, Lots 1, 4 on RP105915, Lot 11 on SP268704, Lot SP226358, Lot 1 on RP212251, Lot 1 on RP103265 1 and 2 on RP140163, Lot 1 on RP71630 and Lot 84, 86, 247, 252, 255, 256, 257 and 259 on S312432

Assessment manager reference: MCU013287

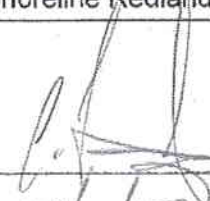
Local government area: Redland City Council

As the applicant of the above development application, I hereby agree to the amended concurrence agency response provided to me in the notice dated 28 October 2015:

Name of applicant: Shoreline Redlands Pty Ltd

Signature of applicant:

Date:



28/10/15

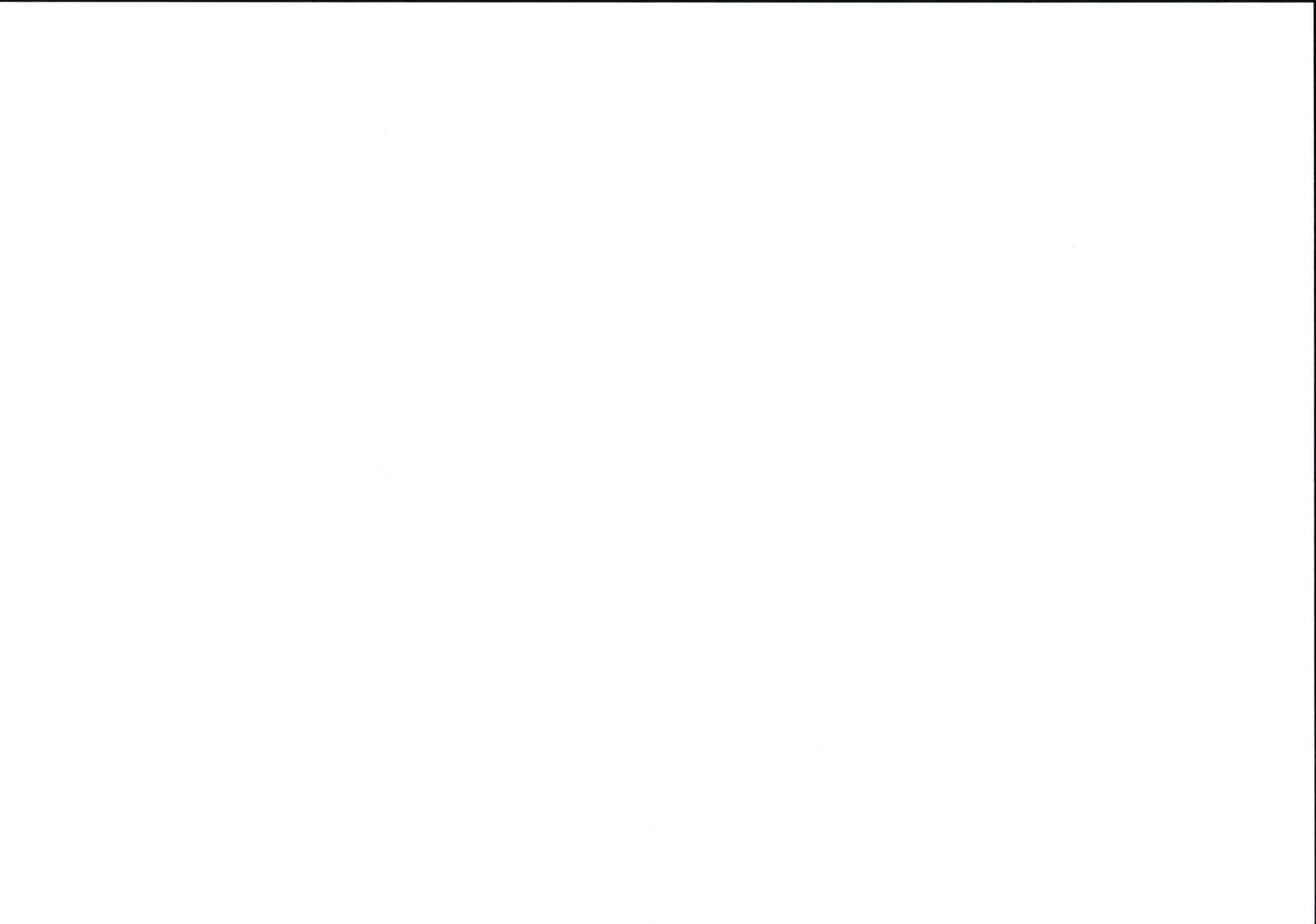


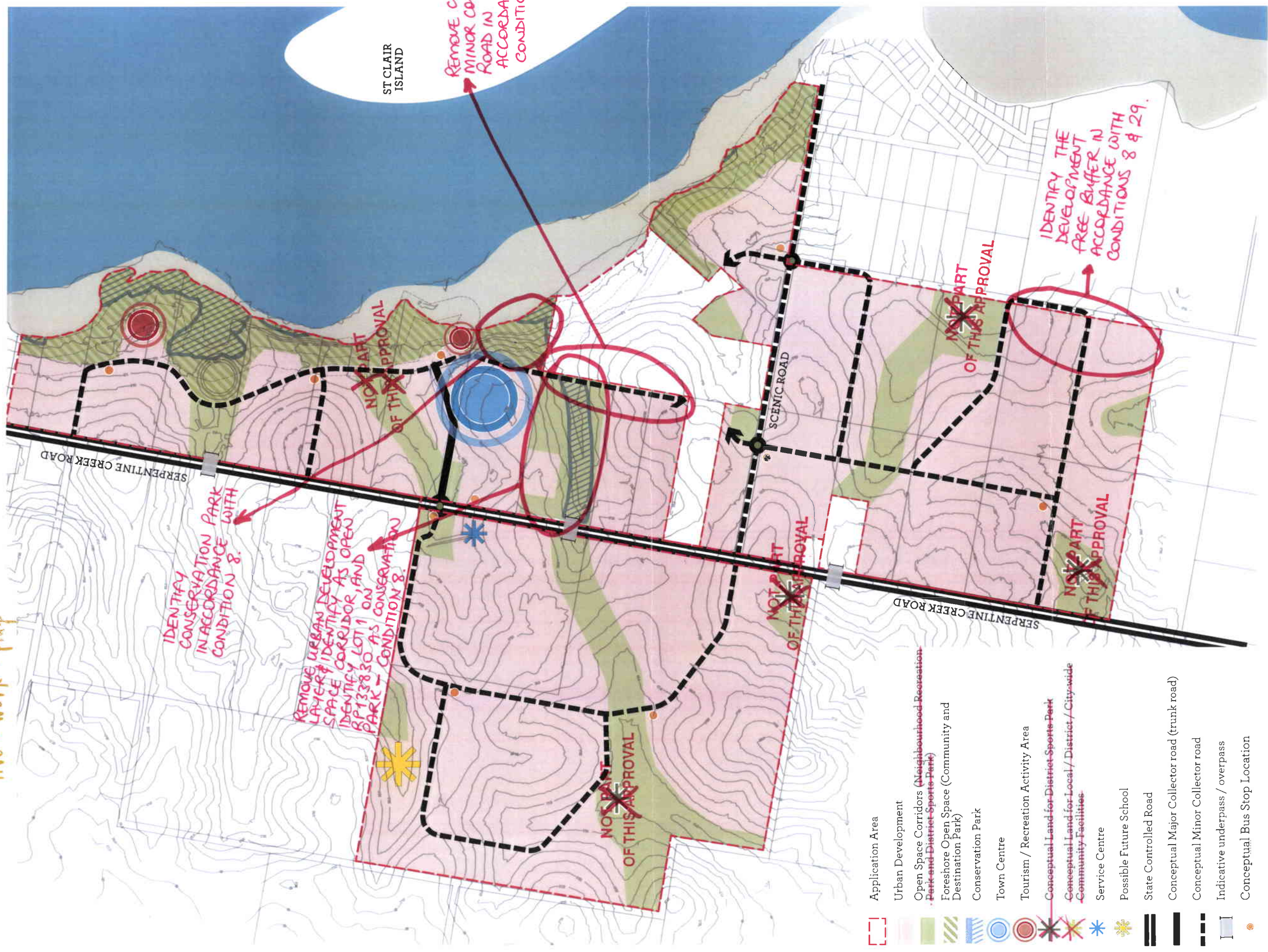
Schedule 5 Drawings

Items in the schedule	Description of the items in the schedule
1	Application Land
2	Master Plan
3	Cycle & Path Network Plan
4	Water Network Map

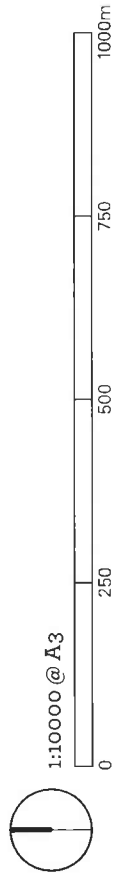








- Application Area
- Urban Development
- Open Space Corridors (Neighbourhood Recreation Park and District Sports Park)
- Foreshore Open Space (Community and Destination Park)
- Conservation Park
- Town Centre
- Tourism / Recreation Activity Area
- Conceptual Land for District Sports Park
- Conceptual Land for Local / District / City-wide Community Facilities
- Service Centre
- Possible Future School
- State Controlled Road
- Conceptual Major Collector road (trunk road)
- Conceptual Minor Collector road
- Indicative underpass / overpass
- Conceptual Bus Stop Location

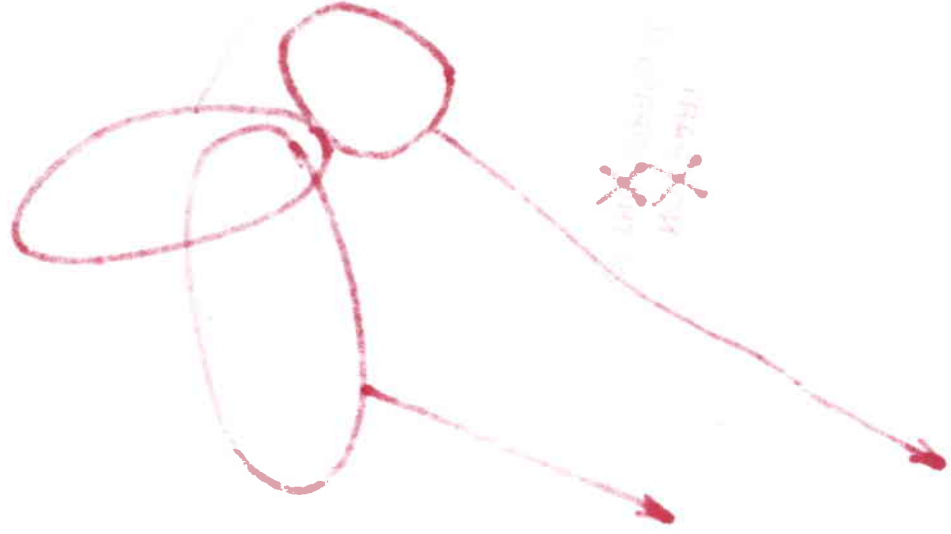




1. C_2

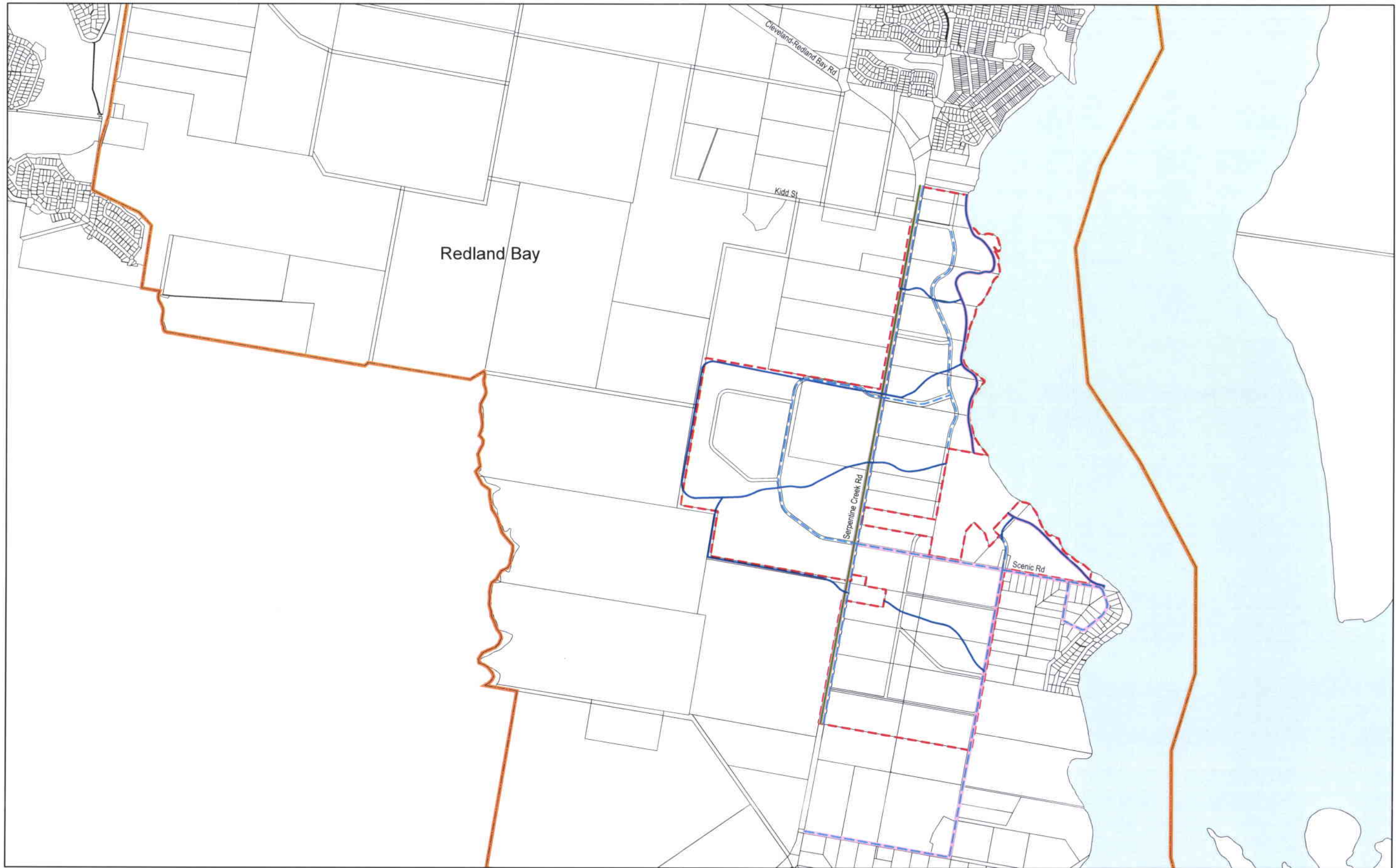
2. C_2

3. C_2



4. C_2

5. C_2



MAP CT9

	Catchment Boundaries	Future Network	
	Development Boundary		Conceptual Off Road Path
Existing Network			Conceptual On Road Cycle Lane
	Off Road Path		Conceptual Off Road Cycleway to be offset against V6.1 Map T8 2012 PIP Infrastructure Charges
	On Road Cycle Lane		Conceptual Cycleway - Path to be offset against Shoreline Redlands Pty Ltd IA Infrastructure Charges
			Conceptual On Road Cycle Lane to be offset against V6.1 Map T8 2012 PIP Infrastructure Charges

CYCLEWAY & PATH NETWORK

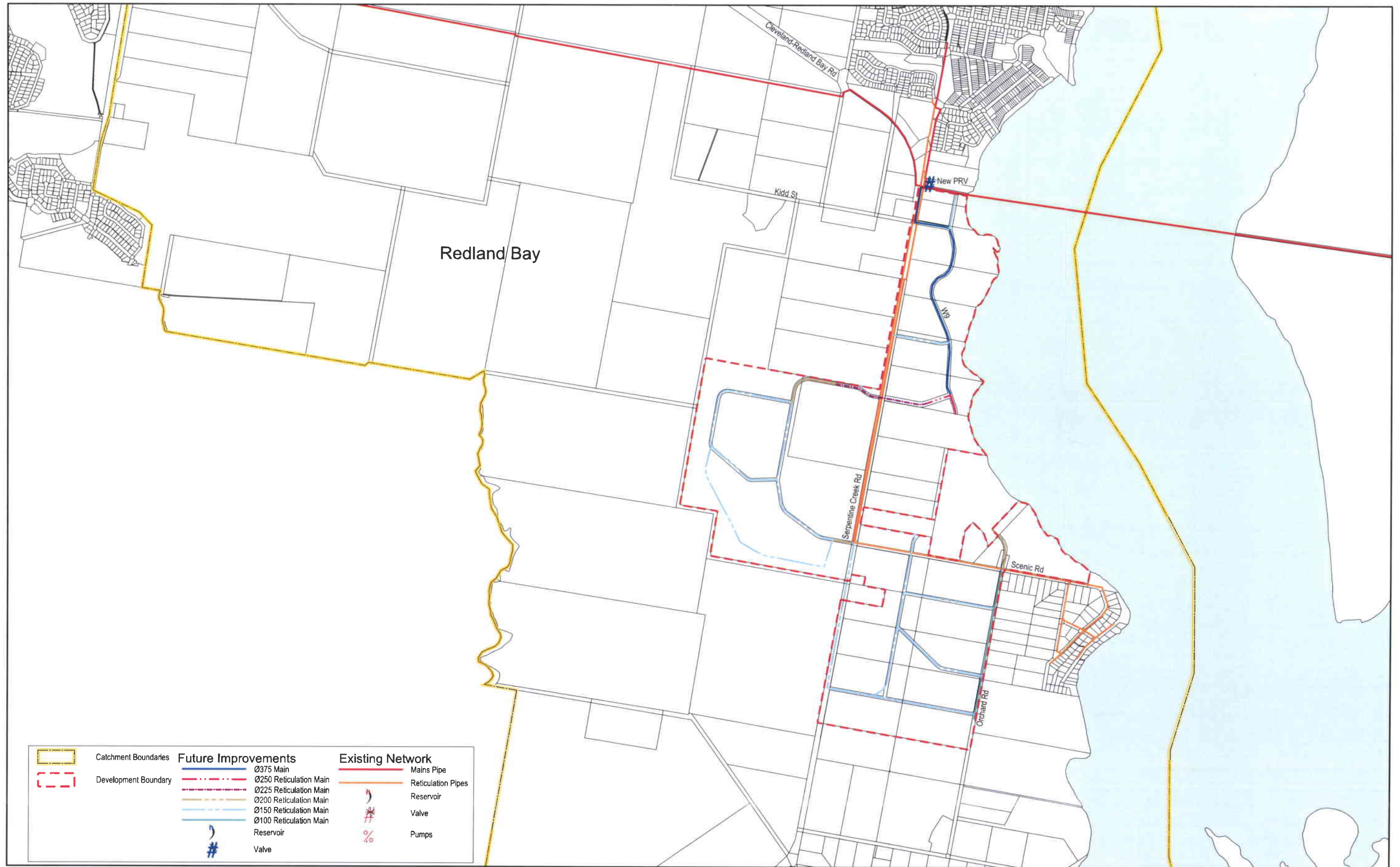
DISCLAIMER:
 "Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing. This Drawing shall not be reproduced either in part or full without Redland City Council Approval".

Produced : 11/06/2015



Civil Dimensions Pty Ltd
 Consulting Engineers
 Unit 8, 51 Freda St Upper Mt Gravatt Qld 4122 Tel: 3422 2020
 mail@civildimensions.com.au Fax: 3422 2021





Future Improvements		Existing Network	
	Catchment Boundaries		Mains Pipe
	Development Boundary		Reticulation Pipes
	Ø375 Main		Reservoir
	Ø250 Reticulation Main		Valve
	Ø225 Reticulation Main		Pumps
	Ø200 Reticulation Main		
	Ø150 Reticulation Main		
	Ø100 Reticulation Main		
	Reservoir		
	Valve		

MAP W9

SHORELINE INFRASTRUCTURE MASTER PLAN
WATER NETWORK
ATTACHMENT B

DISCLAIMER:
"Some information shown on this drawing may be inaccurate. Users should take appropriate measures to verify any information obtained from this drawing. This Drawing shall not be reproduced either in part or full without Redland City Council Approval".

Produced : 11/06/2015



Civil Dimensions Pty Ltd
Consulting Engineers

Unit 8, 51 Freda St Upper Mt Gravatt Qld 4122 Tel: 3422 2020
mail@civildimensions.com.au Fax: 3422 2021

Rev	Description	Date
B	Road Layout updated and Main Alignments to suit	11/11/2015
	Amendment Details	



Annexure A Owner's Consent Evidence (clause 2.4(b))



13 November 2015


**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

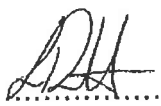
Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 2 on RP149309, situated at 148 Serpentine Creek Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 15th of November 2015.


.....
Peter Alan Robb


.....
Lucy-Lee Jillian Robb


.....
Benjamin Alan Robb

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

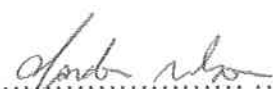
Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

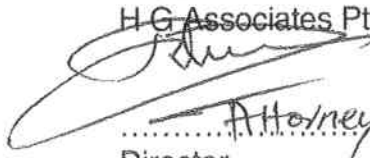
We, the undersigned being the Owner of land described as
Lot 8 on R1291 situated at 156 Serpentine Creek Road
Lot 69 on S31102 situated at 170 Serpentine Creek Road
Lot 70 on S31102 situated at 194 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 5th of June 2015.


.....
Director Name
H G Associates Pty Ltd Trustee under nomination of Trustees No E95643

ALAN GORDON WILSON
.....
Name


.....
Director Name
H G Associates Pty Ltd Trustee under nomination of Trustees No E95643

Attorney H.G. Associates Pty Ltd
.....
Name

BRUCE MICHAEL JURIE
.....
Name

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as

Lot 71 on S31102 situated at 218 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 5th of June 2015.

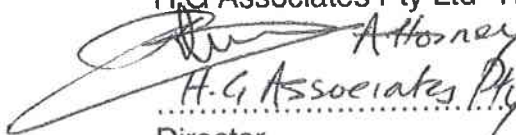

.....

Director

H.G Associates Pty Ltd Trustee under nomination of Trustees No E880975

ALAN GORDON WILSON
.....

Name


.....
Attorney
H.G Associates Pty Ltd

Director

H G Associates Pty Ltd Trustee under nomination of Trustees No E880975

BRUCE MICHAEL DURIE
.....

Name

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as


Lot 72 on S31102 situated at 238 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 5th of June 2015.


.....
Director
Redland Bay South Park Corporation Pty Ltd

ALAN GORDON WILSON
.....
Name


.....
Director
Redland Bay South Park Corporation Pty Ltd

Gary Lloyd Hargrave
.....
Name

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as

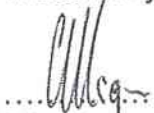
Lot 73 on S31102 situated at 260 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 5th.....of June 2015.


.....
Director
Wilcarr Pty Ltd

ALAN GORDON WILSON
.....
Name


.....
Director
Wilcarr Pty Ltd

Garry Lloyd Mangrum
.....
Name

9 June 2015

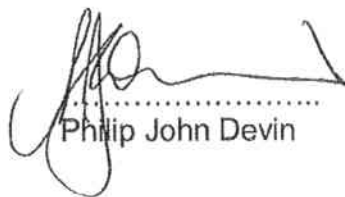
**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 1 on RP133830 situated at 304 – 324 Serpentine Creek Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated *9th* of June 2015.


Philip John Devin


Rhondda Lenore Devin

5 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 4 on RP105915 , situated at 326 Serpentine Creek Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated of June 2015.


.....
Director
South Developments Pty Ltd
ABN 84 095 767 76


.....
Director
South Developments Pty Ltd

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as

Lot 3 on RP105915 situated at 338 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 9/6of June 2015.



.....
Director
Southern View Investments Pty Ltd



.....
Director
Southern View Investments Pty Ltd

KENNETH CY SEETO

.....
Name

Gregory James Bell

.....
Name

14 July 2015

The Chief Executive Officer
Redland City Council
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council

We, the undersigned being the Owner of land described as Lot 1 on RP105915, situated at the corner of Serpentine Creek Road and Scenic Road, Redland Bay (Land) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 17th of July 2015

Italia Ceelia Spensieri
Italia Ceelia Spensieri

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 1 on SP212251 , situated at 68 Scenic Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated *14th* of June 2015.


.....
Joseph Spagnolo

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

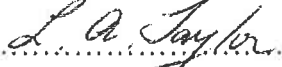
Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 1 on RP140163 , situated at 94 Scenic Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 30 of June 2015.


.....
WJ Taylor


.....
LA Taylor

4 June 2015


The Chief Executive Officer
Redland City Council
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163



Dear Sir,

Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council

We, the undersigned being the Owner of land described as Lot 1 on RP71630 , situated at 90 Scenic Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 30 of June 2015.


.....
WJ Taylor


.....

RJ Taylor

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 1 on RP103265 and Lot 2 on RP140163 , situated at 74 Scenic Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 30 of June 2015.


.....
WJ Taylor


.....
KJ Taylor

4 June 2015

The Chief Executive Officer
Redland City Council
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council

I, the undersigned being the Owner of land described as

Lot 255 on S312432 situated at 27 Orchard Road

Lot 256 on S312432 situated at 49 Orchard Road

Lot 86 on S312432 situated at 69 Orchard Road

Lot 83 on S312432 situated at 91 Scenic Road

Lot 257 on S312432 situated at 410 Serpentine Creek Road

Lot 2 on SP226358 situated at 47 – 91 Scenic Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 5th of June 2015.

.....
Alan Gordon Wilson

4 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as

Lot 84 on S312432 situated at 422 Serpentine Creek Road

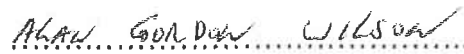
Lot 259 on S312432 situated at 444 Serpentine Creek Road

Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

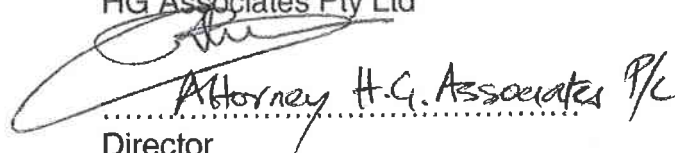
Dated 5th of June 2015.


.....

Director
HG Associates Pty Ltd


.....

Name


.....

Director
HG Associates Pty Ltd


.....

Name

1 June 2015

**The Chief Executive Officer
Redland City Council**
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

**Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council**

We, the undersigned being the Owner of land described as Lot 252 on S312432 , situated at 466 Serpentine Creek Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated *SH* of *JUNE* 2015.

[Signature]
.....
Gary Spink

J. H. Spink
.....
Jeanette Spink

T. Spink
.....
Terry Spink

ma Spink
.....
Mary-Anne Spink

R. E. Spink
.....
Richard Spink

J. E. Spink
.....
Joyce Spink

4 June 2015

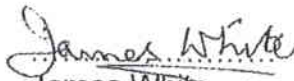
The Chief Executive Officer
Redland City Council
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163

Dear Sir,

Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council

We, the undersigned being the Owner of land described as Lot 247 on S312432 , situated at Orchard Road, Redland Bay (Land) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 6th of June 2015.


James White

10th October 2015


The Chief Executive Officer
Redland City Council
Corner Bloomfield and Middle Streets,
Cleveland,
Queensland 4163


Dear Sir,

Preliminary Approval Material Change of Use
Council Reference MCU013287
Infrastructure Agreement between Shoreline Redlands Pty Ltd and
Redland City Council

We, the undersigned being the Owner of land described as Lot 11 on SP268704 situated at 275 - 385 Serpentine Creek Road, Redland Bay (**Land**) consent to the obligations under the above Infrastructure Agreement being attached to the Land in accordance with section 674 of the *Sustainable Planning Act 2009*.

Dated 10th of October 2015.


.....
Joseph Leslie Fiteni
Managing Director
EDGARANGE PTY LTD


.....
Adam Souter
Company Director
EDGARANGE PTY LTD

Executed as an agreement:

Signed sealed and delivered by
Shoreline Redlands Pty Ltd
ABN 92 163 078 715 in accordance
with s.127 Corporations Act 2001

) APJentz Allegre
) Signature
)
) ADAM SUTER Garry Lloyd Hargrave
) Insert Name & Director / Secretary

17/11/15
Date

In the presence of:

) [Signature]
) Signature
)
) CHRIS BARNES 17/11/15
) Insert Name & Authority

Signed sealed and delivered for and
on behalf of **Redland City Council**
ABN 86 058 929 428

) [Signature]
) Signature
)
) William Harold Lyon
) Chief Executive Officer
) Redland City Council
) Insert Name & Authority

17/11/15
Date

In the presence of:

) [Signature]
) Signature
)
) Andrew James Ross - Solicitor
) Insert Name & Authority