Arborist Report

6 Mary Street
Birkdale
Redland City, Qld

Client
Tershan Pty Ltd
On Behalf of Project Services
GPO Box 2906
Brisbane Qld 4001

Landzone

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Introduction

Landzone Regional Ecosystem Services Pty Ltd has been commissioned by Tershan Pty Ltd, who are acting as project managers on behalf of Project Services, to provide a report on vegetation at 6 Mary Street Birkdale. Specific trees adjacent to the site on the Thorne Road boundary are also to be assessed to determine the effects of construction activities on their critical root zones, suitability for retention post construction, to identify the possible future impact the new construction may have upon the trees and to quantify the potential risk of significant harm from tree failure whilst maintaining the benefits trees provide to their surrounding environment.

Scope of Works

- Comment on 6 trees for removal that are directly within the proposed building layout. It should be noted that there are other trees that we have identified due to their close proximity or their condition that will most likely need removal. We have roughly plotted these trees on Map 1. Some of these trees are not significant as their DBH is under 150mm.
- Inspect 4 Trees on Thorne Rd and comment. Include Hazard assessment. Advise how they will be affected by proposed retaining wall 4m inside boundary.
- Review existing report by Eric Frei & provide comment.

Tree Survey

A survey of vegetation was conducted by Landzone to identify and assess relevant vegetation on the site. The trees assessed all have a DBH over 150mm. See Map 1 refer Annexure A.

Methodology

Landzone arborists have followed industry best practice in the assessment of the trees included in this report.
The combined methodologies of V.T.A. (Mattheck and Breloer 1994), S.U.L.E. (Barrell) and the Quantified Tree Risk Assessment system have been adopted to complete this survey.
Tree Protection methods are observed as per Australian Standards "Protection of Trees on Development Sites" AS4970 2009.
All trees were assessed from ground level. (Refer Annexure C)

References
Protection of Trees on Development Sites AS4970-2009
"Up by Roots" by James Urban
"Reducing Infrastructure Damage by Tree Roots" by L.R. Costello K.S.Jones

Arborist report

Report from Eric Frei

The report from Eric Frei was solely concerned with the 3 tereticornis trees and their benefit as Koala habitat trees. His methodology was quite practical but we do not concur with all his assumptions about the percentage of roots within the Tree Protection Zone . Our calculations do vary quite significantly from Eric's' Important considerations have been omitted regarding the duration that these trees have been in proximity of the road, available soil volume for these trees, hydrology assumptions for the area and techniques for the installation of the retaining wall. Eric has supplied a grim outlook for these trees and with rough handling and with an undisciplined approach for tree protection it may be a real possibility.
We have provided our considerations and recommendations for these trees. We are more optimistic on the SULE of these trees. Eventually all trees move beyond the point where they have no further value in the urban landscape, we have given our recommendations to increase their usefulness as a habitat and street tree.

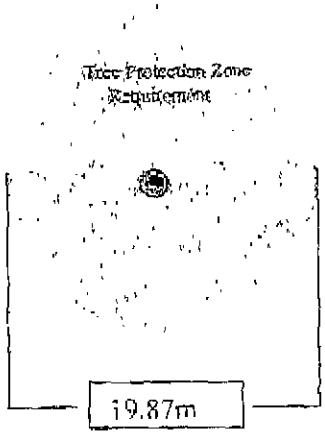
On a final note. There is a significant piece of land behind the proposed units with great potential. This land at present has degenerated to an overgrown, weed based understorey and ground cover, leaving only mature and geriatric trees with very little natural succession of endemic species that would rejuvenate the natural Ecosystem. Weeds and an overburdening lantana ground cover have severely reduced this area as habitat. Removal of the lantana and regeneration of this area will also increase the natural habit for native fauna as most of the species within this Ecosystem are Koala habitat trees.

Site Description

The land had not been surveyed to indicate the proposed buildings extremities. Our workings came from the supplied Draft NPGASQ01/SD/AO1.01
Primarily a cleared block of land with a mixture of endemic tree species in varying condition. There is a small embankment on the northern boundary adjacent to the pedestrian footpath on Thorne Road. The four significant trees concerned are situated between the boundary fence and the footpath. See Map 1. There was limited evidence of fauna activity at the time of assessment. We have included Tree 4 in our report as there will be some affect to this tree from the block wall and the building line extremities.
Two Quinquenervia trees are located at the rear of the property where the mown lawn meets the over grown area. See Map 1(Annexure A).

Tree # 1

Species: *Eucalyptus tereticornis* *(Blue Gum)*



Eastlings

Height 24 metres
Spread 14 metres
Tree Age Mature
DBH 828 mm
Health Good
Structure Good
Deadwood < 1% & < 50mm pieces, no hangers within crown.

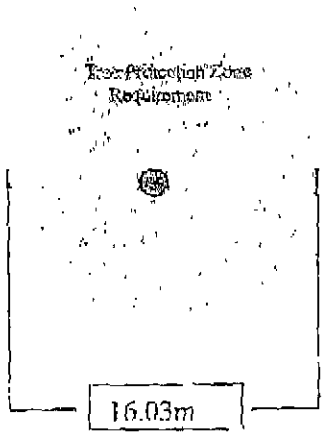
Observations
95% leaf density .Past pruning indicates tree has been pruned for utility services with some limb stubs not correctly collar cut. No signs of limb drop except that of naturally shedding smaller limbs. Some tight rubbing limbs. Minimal organic layer around base, leaf litter only. Tight codominant leaders of similar diameter from base with a 2 metre long area of included bark .Full weeping canopy displaying good vitality and mostly even shoot extension throughout the crown. Good open limb unions throughout the tree, some tight rubbing limbs.

Conclusion
S.U.L.E. : at the time of assessment this tree has a Safe Useful Life Expectancy of more than 10 years.
This tree is 800mm outside boundary fence and the truncated area that is lost due to the retaining wall represents 20.3% of the Tree Protection Area. No encroachment to the Critical Root Zone will occur. There are extended areas on both sides of the tree that will be suitable for offsetting this compromised area.
The trees have been beside the road for some years and the road has had little or no visible effect.

Actions Required
Canopy clean and remove rubbing limbs. Tree Protection guidelines implemented. Mulching. See details in General Conditions. This tree will need an Arborist review again in 2 years.

Tree # 2

Species: *Eucalyptus tereticornis* *(Blue Gum)*

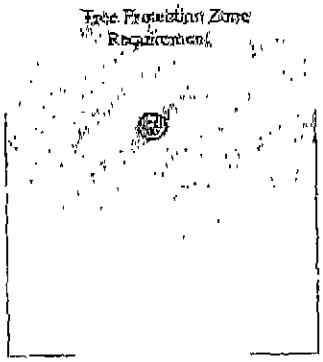


Findings

Height 24 metres
Spread 14 metres
Tree Age Mature
DBH 668 *mm*
Health Good
Structure Very good
Deadwood < 1% & < 50mm pieces, no hangers within crown.
Observations
95% leaf density .No past tree work visible. No signs of limb drop except that of naturally shedding smaller limbs. Minimal organic layer around base, leaf litter only. Lower trunk and buttress area displaying no visual faults. Single clean, even trunk with good taper. Canopy exhibits vitality although the crown shape has been effected by crowding. Even shoot extension throughout canopy. Good open limb unions throughout the tree.
Conclusion
S.U.L.E. : at the time of assessment this tree has a Safe Useful Life Expectancy of more than 20 years.
This tree is 450mm outside boundary fence and the truncated area that is lost due to the retaining wall represents 16.6% of the Tree Protection Area. No encroachment to the Critical Root Zone will occur. There are extended areas on both sides of the tree that will be suitable for offsetting this compromised area.

Actions Required
Canopy clean and remove rubbing limbs. One lateral limb to be removed that will interfere with new building line. Tree Protection guidelines implemented. Mulching. See details in General Conditions. This tree will need an Arborist review again in 2 years

Tree # 3



16200 metre

Species: ***Eucalyptus tereticornis*** *(Blue Gum)*

Findings

Height 24 metres
Spread 13 metres
Tree Age Mature
DBH 675 mm
Health Good
Structure Very good

16.20m

Deadwood <5 % & pieces over 50mm and larger longer pieces over 2metres, lodged hangers within crown.

Observations

85% leaf density .No past tree work visible. No signs of limb drop except that of naturally shedding smaller limbs. Minimal organic layer around base, leaf litter only. Lower trunk and buttress area displaying no visual faults. Single clean, even trunk with good taper. Full erect canopy displaying fair vitality with some areas within the crown with tip dieback. Good open limb unions throughout the tree.

Historical borer damage was observed.

Conclusion

S.U.L.E. : at the time of assessment this tree has a Safe Useful Life Expectancy of more than 20 years.

This tree is 450mm-500mm outside boundary fence and the truncated area that is lost due to the retaining wall represents less than 16.0% of the Tree Protection Area. No encroachment to the Critical Root Zone will occur. There are extended areas on both sides of the tree that will be suitable for offsetting this compromised area.

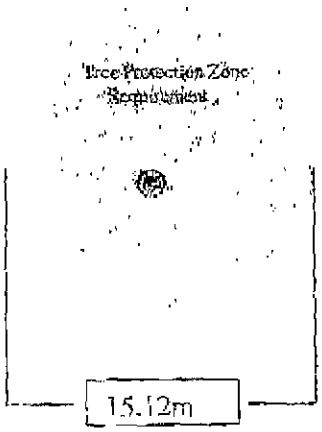
Actions Required

Canopy clean. One lateral limb to be removed that will interfere with new building line. Tree Protection guidelines implemented. Mulching. See details in General Conditions.

This tree will need an Arborist review again in 2 years

Tree # 4

Species: *Eucalyptus siderophloia* *(Ironbark)*



Findings

Height 24 metres
Spread 16 metres
Tree Age Mature
DBH 630 mm
Health Good
Structure Good
Deadwood > 2 % of the canopy is deadwood of different sizes no hangers within crown.

Observations
90% leaf density. No signs of limb drop except that of naturally shedding smaller limbs. Minimal organic layer around base, leaf litter only. Lower trunk and buttress area displaying no visual faults. Old termite nest at base. Single clean, even trunk with good taper. Canopy exhibits vitality with the shape effected by crowding resulting in distorted lateral growth within crown. Good open limb unions throughout the tree. Old termite nest within lower fork of tree.

Conclusion
S.U.L.E. : at the time of assessment this tree has a Safe Useful Life Expectancy of more than 20 years.
This tree is 730mm-750mm outside boundary fence and the truncated area that is lost due to the retaining wall represents less than12.0% of the Tree Protection Area. This could be less depending on the end of the wall. No encroachment to the Critical Root Zone will occur. There are extended areas on both sides of the tree that will be suitable for offsetting this compromised area.

Actions Required
Canopy clean. One lateral limb to be removed that will interfere with new building line. Tree Protection guidelines implemented. Mulching. See details in General Conditions.
This tree will need an Arborist review again in 2 years

Other Affected Trees

2 Melaleuca quinquenervia located in the rear of the building as per Map 1. Both trees will require canopy pruning and vine removal. When the building survey pegs have been placed a more appropriate detailed plan can be given. The Project arborist will then be in the best position to decide on the appropriate Tree Protection Zone . We have placed a Tree Protection Zone on Map 2 as an intermediary measure. There is an issue with the condition of this area. It is overgrown and other refuse was seen dumped during our inspection of this area.
All other trees being removed, as marked in red on Map 1(Annexure A). are either in the category of insignificant or being no longer of an adequate SULE.

General Conditions

1. Arborist must be on site to supervise earthworks for the cut and trenching for wall footings. Excavation must be done in a way to minimize root damage. Use of a water jet or air spade will do the initial cut with the clean up of the roots done with a fine tooth saw with an application of trichederma.

2. Do not expose roots that will allow them to dry out before the backfill has been replaced. Provide temporary protection of roots with Hessian bags with 6 inches of saturated hydro cell or peat moss. Back fill should be done in such a way to avoid air pockets within the soil layers preferably using the same soil as that removed and watered in to ensure uniformity.

3. Gardens in retained area should not have their soil grade changed . Planting should be kept to a minimum and a planting list approved by project Arborist. Mulching should be retained and scheduled for a yearly top up.

4. Tree protection Fencing must be erected as per our Map 2. and the guidelines have been included in the Annexure.

5. A Tree Protection Management Plan has been enclosed for this project.

Tree Protection Management Plan

Management Strategies

Management strategies have been developed to provide a guideline for the project manager to achieve the objectives of the Tree Protection Management Plan.
The head contractor will implement the following measures for the duration of the project to minimize the impact on retained vegetation.

Site Induction for Contractors

The following information will be provided to all employees and contractors in the environmental component of the General Site Induction:

- Tree Protection Zone Guidelines *(Ref Annexure D)*
- All contractors working on site are to have read and signed form 4 as part of the site induction.*(Ref Annexure E)*

Roles and Responsibilities

Project Manager

Main Contractor is responsible for the implementation and management of the Tree Protection Management Plan.

All Contractors

All contractors and persons with access to the site have a 'Duty of Care 'to the environment and are to abide by the guidelines of the Tree Protection Management Plan.
General guidelines are as follows:

- Follow correct land clearing procedures
- Keep out of Tree Protection Zones
- Report any non – compliance of the Tree Protection Management Plan to the project manager.
- Provide assistance in implementing and maintaining 'impact minimisation' as requested by the project manager

Tree Protection Zones

Tree Protection Zones are to be established prior to operational approval for the commencement of any clearing of vegetation and construction activities.

At the consulting Arborists discretion certain TPZ fencing may be left unerected during tree removal/maintenance activities. However the outside radius of the TPZ for these trees must be clearly marked on the ground with marking paint to avoid excessive breaches of this area.
This will enable the tree contractor to work around the TPZ 'safely' and reduce the potential of TPZ fence damage. Machinery breaches to the area by trucks etc are not allowed and TPZ guidelines are to be followed as if the fence was erected.
Tree contractors will be responsible for any damage to vegetation within the TPZ .
TPZ fencing is to be re- erected upon completion of tree work.
The consulting arborist is to be notified of any significant problems concerning the health of trees protected by the Tree Protection Zones.
Tree Protection Zone Guidelines are provided with this Tree Protection Management Plan.

Refer to Map 2 for Tree Protection Zones in Annexure.for installation of TPZ fencing.

Fauna Management

Prior to the commencement of tree pruning /removal it is the responsibility of the person authorised to undertake the work to inspect the trees for resident wildlife.

Responsibility of the person authorised to fell the trees:

- If a Koala or other wildlife is identified in a tree, no work can be undertaken until the Koala/animal has moved on of its own volition.
- If a Koala or other wildlife is identified in a tree adjacent to a tree that is to be removed with canopies interlinking or overlapping, no work can be undertaken until the Koala has moved on of its own volition.
- If the tree is a habitat tree and supports hollows, it is the responsibility of the person authorised to fell the tree, or the persons delegate, to appoint an accredited spotter to inspect the hollows
- If an active nest is identified no work can be undertaken until the nest is empty. If this is not possible it is the responsibility of the person authorised to fell the tree or the person's delegate, to appoint a registered wildlife spotter to relocate the nest.
- It is the responsibility of the person authorised to fell the tree, or the person's delegate, to follow the practices recommended by the accredited wildlife spotter/ catcher. An accredited spotter/catcher is a person or company holding a current Rehabilitation Permit issued by the Environmental Protection Agency under

Section 275(d) of the Nature Conservation Regulation 1994 or under Section 12(d) of the Nature Conservation (Administration) Regulation 2006.

All wildlife is protected under the Nature Conservation Act. Any injured or orphaned wildlife should be reported to 'Wildlife Preservation Society'

Land Clearing and Tree Removal

Land clearing and earthworks have the potential to impact upon retained vegetation. Larger trees for removal that are located within the retained trees TPZ have the potential to cause damage to the Critical Root Zone

Implementation of Works

All tree work for this project must be performed by a company having membership with the QAA or the ISA. Tree workers must have an AQF 3 Certificate in Arboriculture and the consulting arborist must have a minimum Diploma AQF 5 in Arboriculture. All work must also comply with a minimum of Aust. Standard AS4373. Any other tickets that may be needed for example Electrical M31a. Chainsaw Levl must be current.
The project manager is to sight the tree contractor's O H&S Work Method Statements and Procedures.

Disclaimer

Reports are prepared assuming the person making the request has good title and ownership, legitimacy of purpose, the authority to grant access and/or engage service.

This report is prepared with reasonable care. To the extent permitted by law, the author accepts no responsibility for any loss or damage sustained by a recipient as a result of acting on its recommendations.

The author can neither guarantee nor be responsible for the accuracy of information in this report provided by others.

Information provided in a verbal or written report covers only those items examined. It reflects their condition at the time of inspection only.

Unless otherwise specified, inspection is limited to visual inspection from ground level without dissection, excavation, drilling, physical or nutritional analysis or quantification of structural integrity. No responsibility is accepted for the consequences of internal or sub-surface defects which present no discernible external symptoms.

The report shall not be used for any other purpose or conveyed externally in whole, part or meaning without the prior written consent of the author.

Sketches, diagrams, graphs and photographs used as visual aids are not necessarily to scale.

Unauthorised alteration or separate use of any part of the report is prohibited and invalidates the whole report.

In order to achieve intended outcomes, any works recommended by Landzone Regional Ecosystem Services are to be carried out by appropriately qualified persons and in compliance with relevant industry and Australian Standards.

The author accepts no responsibility for the consequences of work performed outside specification, by inappropriately qualified staff or without consultant supervision where it has been recommended.

The conclusions reached and recommendations made do not imply that plants, built landscape or structures will withstand future adverse natural or man-made conditions.

There is no warranty or guarantee that problems, deficiencies, faults or failures of plants or property inspected may not arise in the future. Regular re-inspection will be required to identify emerging disorders.

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Landzone Staff Qualifications and experience

1. **Qualifications:**

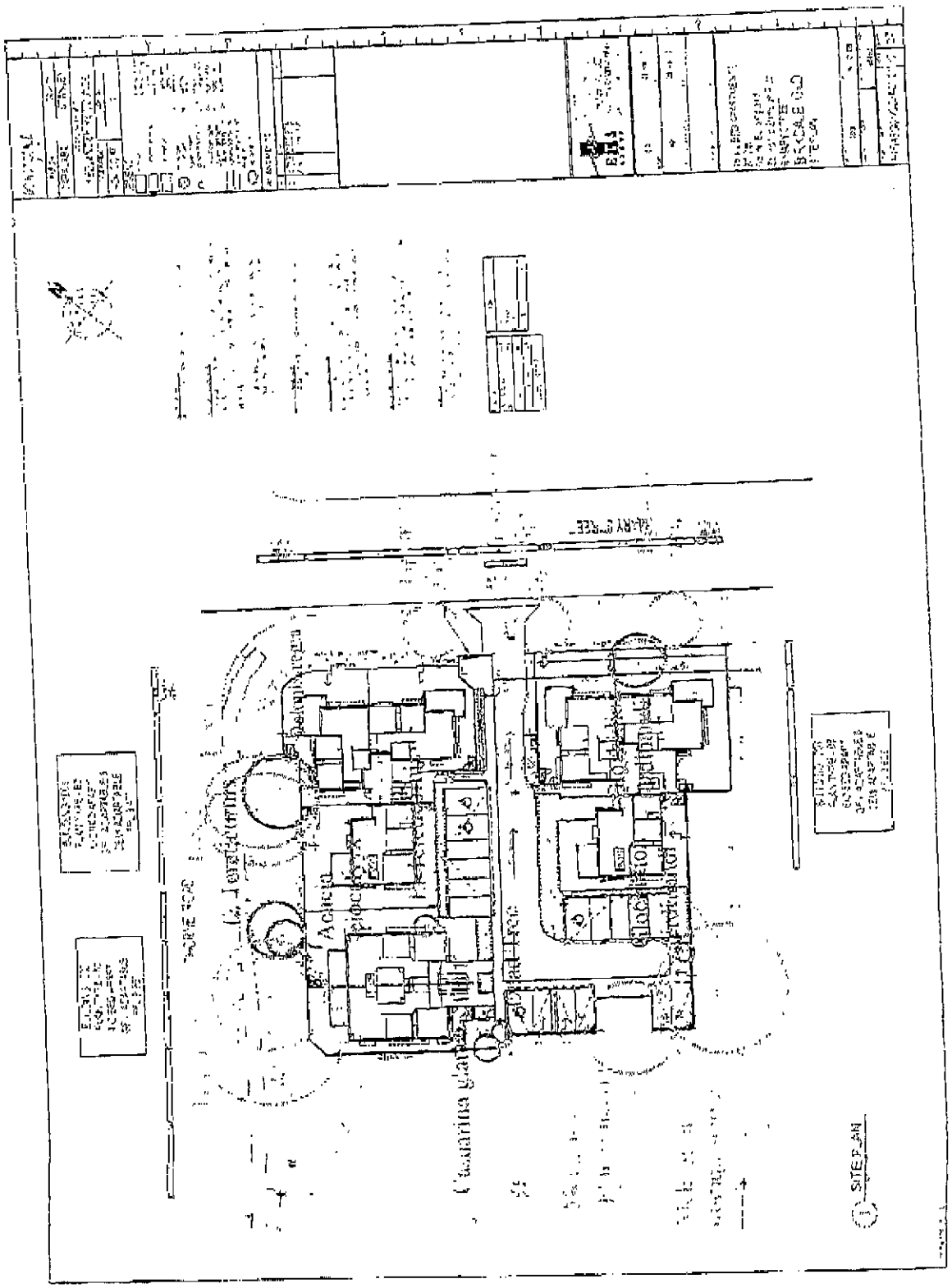
Diploma Arboriculture
ISA Certified Arborist 0046a
NRW Certificate in The QLD Regional Ecosystem Framework
EPA Certificate in Vegetation structure and Remnant Status

2. **Relevant and Practical experience:**

12 years as a practising arborist in South East QLD.
Member of the QLD Arboricultural Association.
Member of the International Society of Arboriculture.

Annexure

ANNEXURE A



ANNEXURE B

MARY STREET
Tree Protection Fence
Fencing and Tree Protection Zones to be finalized
after building set out
SITE PLAN

Annexure C
Methodology

V.T.A.

The internationally recognised approach of Visual Tree Assessment as formulated by Mattheck & Breloer (1994) has been adopted by other internationally recognised arborists and has been incorporated into the essential arboricultural texts including those by Harris, Clark& Matheny (2004) and Lonsdale (1999)

Essentially, V.T.A. proceeds in three phases:
1. Visual inspection for defect symptoms and vitality. If there is no sign of a problem then the investigation is concluded.
2. If a defect is suspected on the basis of symptoms, its presence or absence must be confirmed by a thorough examination.
3. If a defect is confirmed and appears to be a cause for concern, it must be measured and the strength of the remaining part of the tree evaluated.

A tree is a self-optimizing mechanical structure (Mattheck and Breloer 1994) - a generating system which reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts. This precept is described by Claus Mattheck as the axiom of uniform stress. An understanding of the axiom of uniform stress allows an Arborist to make informed judgments about the condition of a tree. Claus Mattheck introduced a biomechanical based system of visual tree assessment (V.T.A.), which uses the reactive nature of tree growth. The basis behind V.T.A. is the identification of symptoms, which the tree produces in reaction to a weak spot, or area of mechanical stress.
Although, Claus Mattheck stresses the limitations of this system by saying; "We can use V.T.A. to state to what extent a defective tree is at greater risk of breaking, compared with a completely sound one. However, since nature's principle of lightweight structures allows a natural failure rate to occur even without defects, there can be no absolute guarantee of safety." It is essential that any arborist using V.T.A. has a broad range of experience of different tree species, as individuals and in groups, to enable them to make informed and reasoned decisions about 'tree safety'.

S.U.L.E.
Safe Useful Life Expectancy (S.U.L.E.)

In a planning context, the time a tree can expect to be usefully retained is the most important long-term consideration. S.U.L.E is a system designed to classify trees into a number of defined categories so that information regarding tree retention can be concisely communicated in a non technical manner.
S.U.L.E. categories are easily verifiable by experienced personnel without great disparity.

A tree's S.U.L.E category is the life expectancy of the tree modified first by its age, health, condition, safety and location (to give safe life expectancy), then by economics (i.e.: cost of maintenance; retaining trees at an excessive management cost is not normally acceptable), effects on more robust trees, and sustained amenity (i.e.: establishing a range of age classes in a local population).
S.U.L.E. assessments are not static but may be modified as dictated by changes in tree health and environment.
Trees with low S.U.L.E. may at present be making a contribution to the landscape but their value to the local amenity will decrease rapidly towards the end of this S.U.L.E., prior to their being removed for safety or aesthetic reasons.
(Adapted from Barrell (1993 and 1995).

QTRA
Quantified Tree Risk Assessment (QTRA)

Tree safety management is a matter of limiting the risk of significant harm from tree failure whilst maintaining the benefits conferred by trees.
The Quantified Tree Risk Assessment (QTRA) system applies established and accepted risk management principles to tree safety management. Firstly, the targets (people and property) upon which trees could fail are assessed and quantified, thus enabling tree managers to determine whether or not and to what degree of rigour a survey or inspection of the trees is required. Where necessary, the tree or branch is then considered in terms of both impact potential (size) and probability of failure. Values derived from the assessment of these three components (target, impact potential and probability of failure) are combined to calculate the probability of significant harm occurring.
Frequency ratings (1-9) for target zones are based on time of occupancy in a twenty four hour cycle. One -being constant occupation, down to a rating of nine - being one occupation per week.

Survey and Mapping of Regional Ecosystems
The process of survey and mapping requires a high level of informed scientific judgement, ecological knowledge and skill in mapping and defining plant communities, which often lack sharply defined boundaries in terms of space and species composition.
Landzone Regional Ecosystem Services Arborists have been trained and are certified in the specific procedures for regional ecosystem and vegetation survey and mapping.

Annexure D

Tree Protection Zone Guidelines

Keeping construction activities and trees separated is the cheapest and easiest way to prevent damage and stress on trees. Most trees will survive in a construction site if they can be kept separated from construction activities. The most successful method of tree protection is the installation of Tree Protection Zones.

1.0 PRE CONSTRUCTION:

1.1 Prior to the commencement of construction the consulting Arborist will issue a statement outlining the following:

a. The maintenance activities for the tree have been performed.
b. That the required protective fencing has been installed in accordance to the TPZ Guidelines
c. A statement that the physical protection of the trees has been performed, if not, any non-conformances and why. e.g. tree removal contractors require access to perform tree removal for a tree within a protected grove of trees.

2.0 TREE PROTECTION ZONES:

2.1 The trees are to be protected by a 1.8 metre high fence to be constructed to include the minimum distance as per the Tree Protection Zone Table.
2.2 Where Tree Protection Zones occur on adjacent properties fencing will stop at the boundary lines.
2.3 Provision may be made if needed to the protection zones for pedestrian access only.
2.4 Prohibited Activities within TPZ:
a) Entry of machinery or people.
b) Storage of building materials.
c) Parking of any kind.
d) Erection or placement of site facilities.
e) Removal or stockpiling of soil or site debris.
f) Disposal of liquid waste including paint and concrete wash.
g) Excavation or trenching of any kind (including irrigation or electrical connections).
h) Attaching any signs or any other objects to the tree.
i) Placing of waste disposal or skip bins.
j) Pruning and removal of branches, except by a qualified Arborist.

3.0 SOIL AMELIORATION

3.1 An application of rooting hormones, humic acids, soil microflora and mycorrhizae may be required to be applied by an arborist .
3.2 Chemical fertilizers are only to be used at the discretion of the arborist

4.0 MULCHING

4.1 The fenced area will be mulched with seed free aged mulch no deeper than 100 mm.
No mulch should be touching the trunk and a 150mm void between mulch and trunk would be acceptable.
Mulch is to be of a standard as directed by the arborist

5.0 WEED CONTROL

5.1 Weed control shall be by hand pulling, or otherwise specified by the arborist.
5.2 Pesticides are only to be used at the discretion of the arborist

6.0 FENCING

The fence surrounding the Tree Protection Zones can be of either the following as directed by the consulting arborist.

a) A rigid chain meshed panels not less than 1.8m high - self supporting with either concrete bases or metal plates with holes to enable staking.

b) A 1.2m high red hazard tape drawn between Star pickets that are no further than 4m apart.

These areas must be defined before machinery is on site however may be erected after tree maintenance activities including all tree work and mulching is completed. Movement of the fence is strictly prohibited at all times.

At times both types of fencing might be used on the same site for different reasons. Directions for fence type will be in job documentation.

7.0 SIGNS

7.1 Signs are to be attached to all tree protection fencing , a minimum of 600mm x 600mm, bearing the following phrase in red letters
on white background at least 50mm in height:

" TREE PROTECTION ZONE "
Entry Prohibited

8.0 NON-CONFORMANCE

8.1 The following are non-conformances that need to be managed if and when they occur.

- The removal or relocation closer to the tree of all or part of any protective fence prior to landscaping
- The performing of any activity noted as prohibited on protection zone signage
- Mechanical damage to the trunk, stems, branches or retained roots.
- The sudden and abnormal or premature shedding or decline of the tree.

9.0 POST CONSTRUCTION

9.1 Barriers removed and mulching beds are to remain.
Inspection by an arborist with follow up work if required.

Annexure E

Environmental Awareness Guide

Site Address: 6 Mary street, Birkdale, Qld

1. Scope

The environmental Awareness Guide is used to promote the environmental management principles set out in The Tree Management Plan for the Tree Protection Zones of this property.

2. Objectives

- To communicate the environmental guidelines of the TMP
- Prevent negative impacts on flora and fauna

3. Responsibilities

Under the Environmental Protection Act 1994, everybody has a 'general environmental duty'. You must be aware of the activities you are involved in that may impact on the environment.
As a contractor on this site it is your responsibility to be aware of the sensitivity of the Tree Protection Zones and avoid any activities that may have a potential impact on the biodiversity of the protected area.

The following activities can all have a potential impact on the covenant area and are to be avoided:

4.1. Soil Compaction

The use of heavy machinery, parking of vehicles, storing of building materials, stockpiling of soils and gravels can all cause soil compaction.

4.2. Fire

The potential for fire may be increased as a result of building activities such as hot work (welding, grinding etc).

4.3. Contamination

Soil and water contaminants have the potential to impact on the health and vigour of plant growth
Cleaning of painting equipment, washing of concrete slurry from trucks, debris from the building site and spillage of fuels or chemicals can all easily contaminate the soil.

5. **Prohibited Activities within TPZ:**
a) Entry of machinery or people.
b) Storage of building materials.
c) Parking of any kind.
d) Erection or placement of site facilities.
e) Removal or stockpiling of soil or site debris.
f) Disposal of liquid waste including paint and concrete wash.
g) Excavation or trenching of any kind (including irrigation or electrical connections).
h) Attaching any signs or any other objects to the tree.
i) Placing of waste disposal or skip bins.
j) Pruning and removal of branches, except by a qualified Arborist.

6. **Environmental incident/non compliance**
You have a duty to notify the Glenzeil Costructions as soon as you become aware of any occurrence/accident that may cause environmental harm within the Revegetation area or a Tree Protection Zone.

The project manager will:

- Verify the extent and degree of the incident.
- Contact the consulting Arborist if required.
- Undertake corrective action.

Contractors to sign:

I have read the Environmental Awareness Guide for this Tree Management Plan and am aware of my responsibilities for this site.

Date	Name	Company	Signature