The Professional Approach to Tree Care
Burnett Trees
PO Box 169
Jamberoo NSW 2533
Phone: 0412 324 548
andrew@burnetttrees.com.au
ABN 23 056 698 227

Burnett Trees Arborist Report

in relation to

39 Macquarie Street, Jamberoo
Lot 1, DP 710456

Prepared by Andrew Burnett of Burnett Trees, 22 October 2014

Prepared for Mr Andrew Carswell

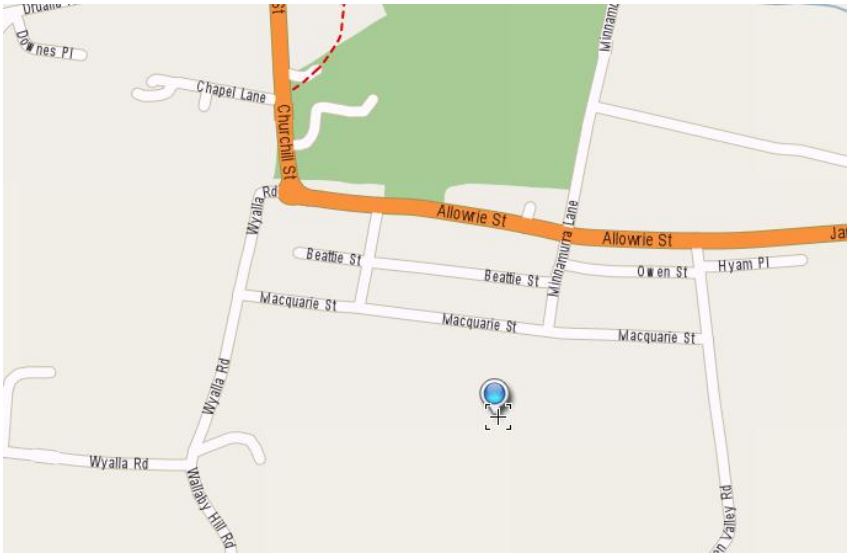
1. CLIENT BRIEF AND BACKGROUND

Burnett Trees was commissioned by Mr Andrew Carswell on 16 October 2014 to undertake a Preliminary Arborist Assessment and present a Report on 39 Macquarie Street, Jamberoo with a view to preparing a Development Application for sub-division to form an 800m3 block on the current north east corner of Lot 1, DP 710456. The proposed subdivision has a street frontage of 20m diameter and depth of 40m.

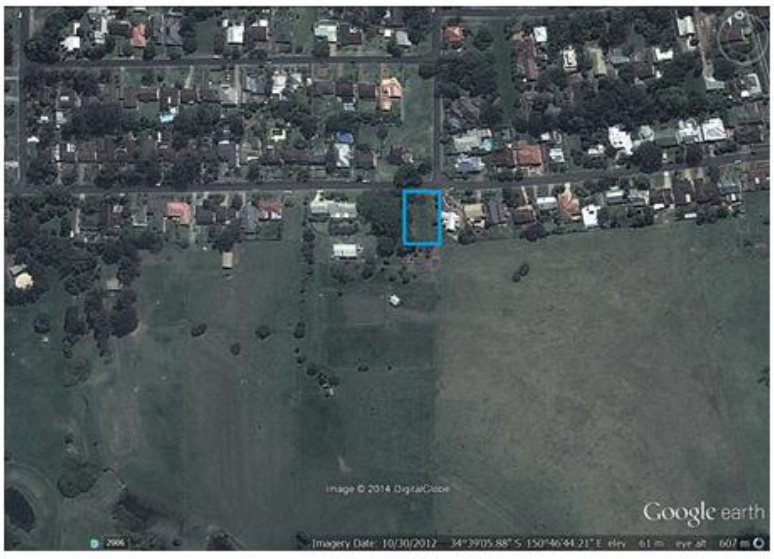
Level 5 Arborist Andrew Burnett inspected the site on 22 October 2014.

Two documents supplied by the client were viewed:

1. Google Earth map with an approximated map of the proposed subdivision.
2. A site survey map dated 17 June 1986.



Approximate location of the assessed trees.



Area to be rezoned. 20m street frontage width x approx 40m depth.

Above map supplied by client.

2. INSPECTION FINDINGS

The most considerable trees on the property are two Moreton Bay Figs (*Ficus macrophylla*). The first fig, furthest south from the road and 36m from the current eastern property boundary, was assessed as having a Diameter at Breast Height (DBH) of 2m, growing to a height of approximately 16m and having both Good Health and Good Structure. The tree is Mature in Age. Its SULE rating was assessed as 1a, being a tree "that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk and is structurally sound trees located in positions that can accommodate future growth."

This tree has a Crown Spread which extends 15m to the north, 16m to the east and 7m to the west. The tree's canopy currently extends 8 metres over an existing fenceline on the property and is estimated to extend to only 5 metres from the western boundary of the proposed new boundary line which would be 21 metres from the tree's trunk.

A second Moreton Bay Fig located 8m north-west of the other Fig is younger and smaller than the other fig and less likely to be impacted by or to impact on the subdivision than the first fig due to the greater distance from the proposed boundary to the trunk. This tree was not fully assessed in relation to this report.

Both trees are native species to the Southern Illawarra and good examples of mature specimens. They are considered worthy of special efforts for retention.

Various other trees located on the property include Water Gums (*Tristaniopsis laurina*), Jacaranda (*Jacaranda mimosifolia*) , Peppercorn (Schinus molle), Illawarra Flame Tree (*Brachychiton acerifolius),* Phoenix Palm (*Phoenix canariensis*), *Callistemon sp.* and White Cedar (*Melia azedarach*). None of these trees are considered significant in terms of development and none are worthy of significant efforts for retention or likely to impact potential subdivision.

Adjacent property on the eastern boundary, 51 Macquarie Street, has a 40m boundary with the subject property. No significant trees were found to be located on this adjacent property and there are not considered to be any arboricultural implications on this property from potential development.

Two Moreton Bay Figs at 39 Macquarie Street, viewed from the street, looking south, south west

4. DISCUSSION IN RELATION TO IMPACT ON TREES AND DEVELOPMENT

Subdivision of the property at a distance of 20m from the current eastern boundary is not expected to impact on either the canopy spread or root spread of the Moreton Bay Figs. A distance of 21m between the proposed boundary and the closest tree canopy is considered sufficient to not have potentially adverse impact on the tree.

It is anticipated minor root growth may extend within the proposed subdivision but at a distance of 5m beyond the current dripline the roots of the closest Fig are not expected to be large, impacting or structurally significant.

5. RECOMMENDATIONS

- **Both Moreton Bay Figs (Ficus macrophylla) located on the property are recommended for special efforts for retention.**

- **Proposed subdivision is not expected to significantly adversely affect the two Moreton Bay Figs or other tree species.**

- **Boundary fencing on any subdivided property should be erected prior to any excavation or construction works in order to provide a permanent Tree Protection Zone. No building materials or machinery should be permitted to be stored or placed under either Fig tree.**

- **Construction techniques for boundary fencing should use minimum impact techniques to avoid potential root damage, ideally hand-dug pier technique. No strip footing methods should be employed which could severe roots.**

6. BURNETT TREES

Burnett Trees is a professional tree care business owned and operated by Andrew and Elizabeth Burnett. Andrew Burnett has worked professionally in the management of trees for more than 15 years. He holds a Bachelor Degree in Science (Forestry) from the Australian National University and is a qualified Arborist, Tree Surgeon and Horticulturist. Burnett Trees adheres to Arboriculture Australia and International Society of Arboriculture guidelines and all employees use safe work methods conforming to the Workcover Code of Practice for the Amenity Tree Industry and pruning methods which meet 'AS4373-2007 Pruning Of Amenity Trees'. Burnett Trees carries professional indemnity and broadcover public liability insurance to $25 million.

Please direct queries regarding this report to Andrew Burnett on 42 331 311.

Andrew Burnett
B.Sc (For.), MNAAA, MISAA
Partner, Burnett Trees

APPENDIX A - DEFINITIONS OF TERMS

Age Class

Young : Mainly upright growth, young form, actively growing
Semi-mature : approaching mature growth rate (growth rate slowing down) and beginning to assume mature form
Mature : form representative of species at maturity, growth rate slow
Over-Mature : senescing, increasing amounts of deadwood in crown, mature shape, very slow rates of extension growth.

Health

Health ratings are based on deadwood and leaf cover percentages. Ratings may vary according to species due to varying growth habits.
Good : Minimal deadwood, new growth and good, full leaf crown cover
Fair : Deadwood present, adequate yet not vigorous or representative leaf cover
Poor : Considerable to extreme deadwood present and visually declining leaf cover.

Structure

Branch configuration, growth habit, stability and previous pruning. Ratings may vary according to species due to varying growth habits.
Good : branch and growth habit true to form, adequate stability and indications of unimpeded root growth.
Fair : indications of altered branch and growth habit and/or stability or root damage.
Poor : Signs of disease, cavities, rubbing or growth habit not true to form, instability and strong indications of root disease or damage.

SULE – Safe Useful Life Expectancy

SULE is the length of time an Arborist assesses an individual tree can be retained with an acceptable level of risk based on the information available at the time of inspection. SULE is not static and is closely related to tree health and the surrounding conditions. Alterations to the variables may result in changes in the SULE assessment. While an accurate estimate of life expectancy is difficult a SULE provides a useful indication of long term survival and anticipated replacement needs and suitability.

SULE (Safe Useful Life Expectancy) CATEGORIES

1: **Long SULE**: Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.
(a) Structurally sound trees located in positions that can accommodate future growth.
(b) Trees that could be made suitable for retention in the long term by remedial tree care.
(c) Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention.

2: **Medium SULE**: Trees that appear to be retainable at the time of assessment for 15-40 years with an acceptable level of risk.
(a) Trees that may only live between 15 and 40 more years.
(b) Trees that could live for more than 40 years but may be removed for safety or nuisance reasons.
(c) Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
(d) Trees that could be made suitable for retention in the medium term by remedial tree care.

3: **Short SULE**: Trees that appeared to be retainable at the time of assessment for 5-15 years with an acceptable level of risk.
(a) Trees that may only live between 5 and 15 more years.
(b) Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.
(c) Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide space for new plantings.
(d) Trees that require substantial remedial tree care and are only suitable for retention in the short term.

4: **Remove**: Trees that should be removed within the next 5 years.
(a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.
(b) Dangerous trees because of instability or recent loss of adjacent trees.
(c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
(d) Damaged trees that are clearly not safe to retain.
(e) Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide space for new plantings.
(f) Trees that are damaging or may cause damage to existing structures within 5 years.
(g) Trees that will become dangerous after removal of other trees for reasons given in (a) to (f).
(h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.

5. **Small, young or regularly pruned**: Trees that can be reliably moved or replaced.
(a) Small trees less than 5m in height.
(b) Young trees less than 15 years old but over 5 metres in height.
(c) Formal hedges and trees intended for regular pruning to artificially control growth.

(Jeremy Barrell, Barrell Treecare, UK – April 2001)

APPENDIX B – General Tree Protection Guidelines

Any pruning should be done according to AS4373 - 2007 Pruning of Amenity Trees and tree protection should follow guidelines according to AS 4970 - 2009 Protection of trees on development sites (note, this standard is currently a guideline rather than a legislative requirement in the affected Council area).

1. Fence off the canopy and root zone to prevent compaction of the soil and damage to the trunk and crown. The trunk may be wrapped for protection if applicable.

2. All trees to be retained should be fenced off with 1.8m high steel mesh fencing. If there are likely to be roots near the fence post positions, the fence should be supported by blocks laid on the ground (no digging).

3. Chemicals and fuels must not be spilt in the vicinity. Cement must not be mixed in the area of the root zone.

4. The soil level must not be raised or lowered.

5. The area inside the fence should be mulched with a wood chip / leaf litter to a depth of 75-100mm.

6. The area should have a temporary irrigation system installed and used. It might be necessary to have a separate water connection. If the drainage pattern is altered, long term supplementary watering might be necessary.

7. Root spread should be considered before service trenches are sited.