



20th November 2018

Attention: Hettie Enderes

RE: Tree Survey & Risk Assessment – Flinders Bay Caravan Park

Tree Survey & Risk Assessment – Flinders Bay Caravan Park

Prepared for The Shire of Augusta – Margaret River

Prepared by: Brett Moir

Dip. Hort (Arboriculture)
Quantified Tree Risk Assessment –
Licensed User No: 3417

PO Box 5227, West Busselton WA 6280
PH: 08 9755 4361 | MOB: 0488 119 051
E: brett@arborguy.com.au

Table of Contents

| | | |
|-----|--|---|
| 1.0 | <u>Introduction</u> | 2 |
| 2.0 | <u>Methodology</u> | 2 |
| 3.0 | <u>Site Description</u> | 3 |
| 4.0 | <u>QTRQ - Target Range Appraisal</u> | 4 |
| 5.0 | <u>Overview of Recommended Works</u> | 5 |
| 6.0 | <u>Summary of Findings</u> | 6 |
| 7.0 | <u>Disclaimer</u> | 7 |

| | |
|-------------|--|
| Appendix A: | Schedule of Trees at Flinders Bay Caravan Park |
| Appendix B: | Visual Tree Assessment note |
| Appendix C: | Quantified Tree Risk Assessment note |
| Appendix D: | Tree Location Maps |

Tree Survey & Risk Assessment – Flinders Bay Caravan Park

1.0 Introduction

- 1.1 Instructions were received from Hettie Enderes, Caravan Park Manager of Turner Caravan Park to undertake an assessment of trees within Flinders Bay Caravan Park.
- 1.2 This assessment will make recommendations for mitigation works to reduce tree risk.

2.0 Methodology

- 2.1 A site assessment was carried out through the period 24/07/18 – 06/08/18.
- 2.2 The assessment was carried out from ground level using the Visual Tree Assessment method [See Appendix B]. No aerial or belowground inspections were conducted.
- 2.3 The risk of harm from tree failure was determined using the Quantified Tree Risk Assessment [QTRA] system. [See Appendix C].
- 2.4 The trees were surveyed using a Trimble GeoXH GPS device to record each trees location in northing and easting and to collect the base tree data. This information is recorded in Appendix A – Schedule of Trees Flinders Bay Caravan Park.
- 2.5 Only trees in excess of 200mm in diameter at 1.5m above ground were recorded unless an obvious hazard was evident. Trees with a trunk diameter of <200mm are for the most part young, vigorous and not prone to failure. In the event that such a tree does fail, the risk of harm is usually low. Hedges and shrubs were excluded from the assessment.

For trees located in bush areas, only the trees along the edge of the bush were assessed.

- 2.6 Each surveyed tree was numbered by affixing an aluminium tag to the trunk at approximately 2.0m above ground. These numbered tags correspond to the tree numbers recorded in Appendix A – Schedule of Trees Flinders Bay Caravan Park and the tree location maps.

Tree Survey & Risk Assessment – Flinders Bay Caravan Park

3.0 Site Description

- 3.1 The site of this survey is a Shire of Augusta Margaret River owned caravan park located in Augusta, Western Australia.

The park is located at the southern end of Albany Terrace on the shores of Flinders Bay. There are approximately 130 sites comprising powered and unpowered sites, 3 amenity areas and an office/residence.

- 3.2 288 trees were assessed within the park. This tree population is comprised of 11 different species as per the table below.

Table 1: Number of trees per species

| Common Name | Genus & Species | Number of Trees |
|--------------------|----------------------------------|-----------------|
| Ake Ake | <i>Dodonaea viscosa</i> | 1 |
| Blackbutt | <i>Eucalyptus patens</i> | 24 |
| Eucalyptus | <i>Eucalyptus</i> sp | 1 |
| Jarra | <i>Eucalyptus marginata</i> | 1 |
| Marri | <i>Corymbia calophylla</i> | 1 |
| Paperbark | <i>Melaleuca</i> sp | 4 |
| Peppermint | <i>Agonis flexuosa</i> | 249 |
| Swamp Mahogany | <i>Eucalyptus robusta</i> | 1 |
| Tuart | <i>Eucalyptus gomphocephala</i> | 2 |
| Victorian Tea Tree | <i>Leptospermum laevigatum</i> | 1 |
| Yates | <i>Eucalyptus conferruminata</i> | 3 |

4.0 QTRQ - Target Range Appraisal

- 4.1 The QTRA system is structured such that the initial assessment is an overview of the site use in order to determine the likelihood of a tree part striking a target (person, property, vehicle) rather than the likelihood of a tree part failing. It stands to reason that a tree part that is likely to fail but unlikely to strike a target poses little risk.

The assessed Risk of Harm for each tree is termed the Risk Index. The Risk Index uses K to represent thousand and M to represent million.

For example: if the annualised risk of harm is 1/10,000, the Risk Index is 10K.

- 4.2 For the purpose of calculating the Risk Index of any given tree using the QTRA system it is necessary to allocate trees with a target range. The QTRA system comprises six target ranges based on frequency of occupancy of the target zone by people and vehicles and the value of property targets. Target Range 1 is the highest range and 6 the lowest.

- 4.3 Park occupancy figures provided by Hettie Enderes, Park Manager of Turner Caravan Park were used to determine the appropriate Target Range to apply to this assessment.

The occupancy figures were averaged to determine an average occupancy of 24% across 130 sites.

- 4.4 The nature of the site is such that campers are given to spending long periods each day 'in camp' and as such are exposed to tree hazards in these areas for extended time periods.

- 4.5 Assuming each visitor occupies a given campsite for 12 hrs per/day then there is a total of 372hrs occupancy hours each day (24% of 130 sites = 31) – (31 x 12 = 372hrs of occupation)

- 4.6 $372 \text{ hours} / 130 \text{ sites} = 2.8 \text{ hours of occupation per/site per/day}$. This range of human occupation falls within Target Range '1' on the QTRA Calculator [Human Occupation of the Target Area of > 2.5hrs per/day]. Target Range '1' was used to assess risk for all trees within the site.

5.0 Overview of Recommended Works

- 5.1 The degree of risk willing to be accepted by the Shire of Augusta-Margaret River in regards to this site and trees in particular is for the Shire to determine. It is however widely accepted that a risk of harm of 1/10,000 or less is 'broadly acceptable' when imposed on the general public.
- 5.2 31 trees (10.7% of the total tree population) were assessed as having a risk index of 10K or less. These trees pose a risk of harm that is greater than what would typically be considered acceptable to impose on the general public.
- 5.3 Of these 31 trees, 5 trees with a Risk Index of 10K or less were recommended for removal. This represents 1.7% of the 288 trees surveyed.
- 5.4 Where considered feasible by the assessing Arborist, rather than recommending the removal of a tree in its entirety, the recommendation of 'Retrenchment Pruning' is made. This is the process of shortening an over-mature trees crown structure to mimic the natural aging process whereby the crown of a declining tree retains its overall biomechanical integrity by becoming smaller through the progressive shedding of branches and the development of the lower crown (retrenchment).

There are numerous benefits to retrenchment over total removal including:

- o The retention of the tree in the landscape
- o Retention of habitat hollows
- o Reduced cost compared to total tree removal

6.0 Summary of Findings

- 6.1 90% of the assessed trees were determined to have an annualised risk of harm of less than 1/10,000 (QTRA Risk Index 10K). These trees pose a risk of harm that would generally be considered 'broadly acceptable'.
- 6.2 For the 31 trees with a QTRA Risk Index of 10 or less it is advised that the recommended works be carried out within 12 weeks from the date of this report or other measures be undertaken to restrict entry to people from the 'target zone' of these trees.
- 6.3 For trees in poor health that are recommended for removal (highlighted in yellow) it is advised that these be removed as for the high-risk trees. Although dead trees may not immediately pose a high risk and it is sometimes true that dead trees actually become safer for a time after they die, it is recommended that these trees be removed sooner rather than waiting for them to become high risk trees.
- 6.4 For those trees that have an acceptable risk index but still have recommended works recorded for them it is advised that these works be carried out as maintenance budgets allow.

7.0 Disclaimer

The advice contained herein including all attachments has been provided in good faith and based upon the material information available, collected by the consultant or provided by others at the time the advice was given.

- o Arbor Guy take no responsibility for the accuracy of information provided to us by the client/clients or any other third party and all such information is assumed to be correct.
- o This report is intended to be used only in its complete form and any report or reference to this report must include the complete report attached directly to that submission.
- o The extent and level of assessment of each tree or group of trees is detailed in the report and is determined in conjunction with the client usually prior to the assessment. Arbor Guy takes no responsibility for failing to diagnose tree defects that are not relevant to the level of assessment that the tree is subjected to.
- o The information contained in this report reflects only the condition of the tree/trees at the time of the inspection.
- o Diagrams, maps, and photographs in this report are intended as visual aids and are not necessarily to scale.
- o This report may not be reproduced in any form without the written permission of Arbor Guy.
- o The findings and recommendations in this report represent the professional opinion of the consultant and are not influenced by the acceptance of the report fee.
- o The report fee does not cover the appearance as an expert witness in support of this report and any such appearance will incur additional charges.



APPENDIX A

Schedule of Trees at Flinders Bay Caravan Park

Key to Schedule of Trees:

| Column Heading | Explanation |
|-------------------|--|
| Tree No | Unique number corresponding with aluminium tag affixed to tree. |
| Common Name | English names |
| Genus & species | Biological classification |
| Height | Total tree height estimated in metres. |
| DBH | Trunk diameter at 1.5m above ground estimated in millimetres. |
| Health | Assessment of current health status of tree. |
| QTRA Risk Index | <p>The assessed Risk of Harm for each tree is termed the Risk Index. The Risk Index uses K to represent thousand and M to represent million.</p> <p>For example: if the annualised risk of harm is 1/10,000, the Risk Index is 10K.</p> <p>Cells highlighted in RED are those with a Risk Index of 10 or less.</p> |
| Recommended Works | Recommendation made during the survey and prior to determining each trees Risk Index. |
| Comments | Additional relevant information |
| GPS Date | DD-MM-YYYY |
| Horz Prec | Horizontal precision of GPS position. |
| X & Y | GPS Coordinates |

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|-------------------|--------|-----|--------|-----------------|--------------------------------|--|-----------|------------|------------|
| 1 | Black Butt | Eucalyptus patens | 10 | 350 | Fair | 100K | None | None | 0.9 | 6198621.95 | 331305.733 |
| 2 | Peppermint | Agonis flexuosa | 6 | 300 | Good | 500K | None | None | 0.9 | 6198623.18 | 331309.932 |
| 3 | Black Butt | Eucalyptus patens | 9 | 200 | Poor | 50K | Reduce end-weight | decay at base | 0.5 | 6198631.38 | 331307.734 |
| 4 | Black Butt | Eucalyptus patens | 9 | 300 | Good | 50K | Reduce end-weight | None | 1 | 6198633.38 | 331307.057 |
| 5 | Black Butt | Eucalyptus patens | 10 | 350 | Fair | <1M | Dead Wood | None | 0.9 | 6198634.3 | 331305.669 |
| 6 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.1 | 6198635.57 | 331301.597 |
| 7 | Black Butt | Eucalyptus patens | 10 | 200 | Good | <1M | None | None | 0.4 | 6198637.61 | 331304.125 |
| 8 | Black Butt | Eucalyptus patens | 10 | 500 | Good | <1M | Crown Clean | None | 0.5 | 6198638.71 | 331302.859 |
| 9 | Black Butt | Eucalyptus patens | 7 | 300 | Fair | 500K | Dead Wood | None | 0.6 | 6198642.19 | 331306.825 |
| 10 | Black Butt | Eucalyptus patens | 7 | 200 | Poor | 50K | Remove Tree | decay at base | 0.9 | 6198644.51 | 331304.616 |
| 11 | Black Butt | Eucalyptus patens | 13 | 300 | Good | <1M | None | None | 1 | 6198646.11 | 331304.998 |
| 12 | Black Butt | Eucalyptus patens | 9 | 200 | Good | <1M | None | None | 2.1 | 6198648.81 | 331305.43 |
| 13 | Black Butt | Eucalyptus patens | 13 | 500 | Fair | 500K | Crown Clean | None | 0.4 | 6198654.84 | 331307.854 |
| 14 | Black Butt | Eucalyptus patens | 12 | 400 | Fair | 500K | Crown Clean | None | 0.6 | 6198651.62 | 331310.879 |
| 15 | Black Butt | Eucalyptus patens | 9 | 300 | Fair | 500K | Crown Clean | None | 0.7 | 6198655.18 | 331310.901 |
| 16 | Black Butt | Eucalyptus patens | 9 | 600 | Fair | 500K | Crown Clean | reduce weight | 1 | 6198656.69 | 331309.668 |
| 17 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.4 | 6198663.26 | 331307.942 |
| 18 | Peppermint | Agonis flexuosa | 6 | 350 | Good | <1M | None | None | 0.9 | 6198653.42 | 331318.691 |
| 19 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.4 | 6198650.41 | 331319.709 |
| 20 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | multiple stems | 0.5 | 6198645.14 | 331318.851 |
| 21 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.4 | 6198643.48 | 331321.385 |
| 22 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | multiple stems | 0.6 | 6198647.72 | 331320.613 |
| 23 | Black Butt | Eucalyptus patens | 7 | 250 | Fair | 500K | Reduce end-weight | None | 0.5 | 6198642.37 | 331317.165 |
| 24 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.5 | 6198644.09 | 331315.107 |
| 25 | Black Butt | Eucalyptus patens | 9 | 700 | Fair | 4K | Remove Tree | coppice stump, extensive decay at base | 0.9 | 6198635.98 | 331311.647 |
| 26 | Black Butt | Eucalyptus patens | 9 | 900 | Fair | 4K | reduce height to previous cuts | previously topped | 1.8 | 6198633.67 | 331315.56 |
| 27 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | None | 0.5 | 6198624.17 | 331316.538 |
| 28 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | None | 0.4 | 6198626.64 | 331317.94 |
| 29 | Black Butt | Eucalyptus patens | 7 | 200 | Good | 500K | Reduce end-weight | poor structure | 1.2 | 6198634.22 | 331323.144 |
| 30 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198639.88 | 331322.353 |
| 31 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.8 | 6198645.15 | 331322.096 |
| 32 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.1 | 6198654.79 | 331325.466 |
| 33 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | multiple stems | 1.1 | 6198656.78 | 331325.088 |
| 34 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.6 | 6198662.77 | 331319.837 |
| 35 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.5 | 6198646.29 | 331325.917 |
| 36 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.8 | 6198641.67 | 331328.031 |
| 37 | Peppermint | Agonis flexuosa | 5 | 450 | Good | <1M | None | multiple stems | 0.9 | 6198633.12 | 331327.788 |
| 38 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 1.1 | 6198627.62 | 331331.188 |
| 39 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.5 | 6198629.32 | 331332.924 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|-----------------|--------|------|--------|-----------------|---|---|-----------|------------|------------|
| 40 | Peppermint | Agonis flexuosa | 4 | 200 | Good | <1M | None | None | 0.5 | 6198628.38 | 331334.934 |
| 41 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | multiple stems | 0.6 | 6198631.23 | 331332.971 |
| 42 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.4 | 6198631.63 | 331336.755 |
| 43 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.5 | 6198635.37 | 331335.177 |
| 44 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 1.3 | 6198641.46 | 331333.331 |
| 45 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.4 | 6198646.15 | 331334.294 |
| 46 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198642.5 | 331338.379 |
| 47 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.3 | 6198638.36 | 331340.213 |
| 48 | Peppermint | Agonis flexuosa | 5 | 300 | Good | 50K | Reduce end-weight | extensive decay at base | 0.4 | 6198635.13 | 331340.17 |
| 49 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.4 | 6198631.51 | 331343.164 |
| 50 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | multiple stems | 0.4 | 6198628.12 | 331342.917 |
| 51 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | hedge of peppermint trees south side driveway | 0.6 | 6198619.94 | 331382.237 |
| 52 | Peppermint | Agonis flexuosa | 5 | 400 | Poor | 1K | shorten to 3m high | extensive decay at base, maintain asva shrub | 0.5 | 6198609.42 | 331367.566 |
| 53 | Peppermint | Agonis flexuosa | 5 | 600 | Good | 50K | Crown Clean | previously topped | 0.8 | 6198609.23 | 331362.864 |
| 54 | Peppermint | Agonis flexuosa | 5 | 600 | Good | 50K | Reduce end-weight | None | 0.7 | 6198606 | 331364.355 |
| 55 | Peppermint | Agonis flexuosa | 5 | 400 | Good | 50K | Reduce end-weight | extensive decay at base | 1.2 | 6198602.05 | 331366.645 |
| 56 | Peppermint | Agonis flexuosa | 5 | 800 | Good | 50K | Reduce end-weight | None | 0.8 | 6198598.05 | 331368.973 |
| 57 | Peppermint | Agonis flexuosa | 5 | 350 | Good | 50K | Reduce end-weight | decay trunk | 0.7 | 6198603.52 | 331361.312 |
| 58 | Peppermint | Agonis flexuosa | 5 | 700 | Fair | 4K | reduce height | maintain as a shrub | 0.7 | 6198608.09 | 331349.075 |
| 59 | Peppermint | Agonis flexuosa | 6 | 1000 | Good | <1M | None | None | 0.8 | 6198603.75 | 331358.862 |
| 60 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | None | 0.5 | 6198596.36 | 331358.147 |
| 61 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.5 | 6198594.22 | 331362.84 |
| 62 | Peppermint | Agonis flexuosa | 5 | 800 | Good | 10K | Reduce end-weight | decay at base | 1.7 | 6198589.5 | 331361.16 |
| 63 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.9 | 6198584.6 | 331362.572 |
| 64 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.4 | 6198583.93 | 331365.71 |
| 65 | Peppermint | Agonis flexuosa | 5 | 600 | Good | 400 | Reduce end-weight | extensive decay at base | 0.5 | 6198590.81 | 331372.776 |
| 66 | Peppermint | Agonis flexuosa | 5 | 700 | Good | 400 | Reduce end-weight | limb over caravan | 1.7 | 6198589.49 | 331374.432 |
| 67 | Peppermint | Agonis flexuosa | 6 | 1200 | Good | 500K | None | None | 1.7 | 6198580.8 | 331375.798 |
| 68 | Peppermint | Agonis flexuosa | 6 | 900 | Good | 10K | inspect bracing replace or adjust and reduce end-weight | None | 1 | 6198578.94 | 331383.579 |
| 69 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.8 | 6198582.35 | 331383.267 |
| 70 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.7 | 6198575 | 331389.491 |
| 71 | Peppermint | Agonis flexuosa | 5 | 800 | Good | 4K | Reduce end-weight | extensive decay at base | 0.6 | 6198570.55 | 331389.273 |
| 72 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | 400 | Reduce end-weight | shorten long limb to north by 40percent | 0.8 | 6198564.71 | 331382.278 |
| 73 | Peppermint | Agonis flexuosa | 5 | 700 | Good | <1M | None | None | 0.8 | 6198574.21 | 331379.019 |
| 74 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | <1M | None | None | 1.1 | 6198569.03 | 331373.165 |
| 75 | Peppermint | Agonis flexuosa | 6 | 800 | Good | 50K | Reduce end-weight | leaning north towards laundry | 0.8 | 6198582.5 | 331390.082 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|-----------------|--------|------|--------|-----------------|---------------------------|--|-----------|------------|------------|
| 76 | Peppermint | Agonis flexuosa | 5 | 800 | Good | <1M | None | None | 0.6 | 6198576.25 | 331407.338 |
| 77 | Peppermint | Agonis flexuosa | 5 | 700 | Good | 40 | Remove Tree | or prop | 1 | 6198575.21 | 331402.948 |
| 78 | Peppermint | Agonis flexuosa | 5 | 700 | Good | <1M | None | multiple stems | 0.6 | 6198574.83 | 331404.468 |
| 79 | Peppermint | Agonis flexuosa | 6 | 600 | Good | <1M | None | None | 0.4 | 6198570.69 | 331406.056 |
| 80 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.4 | 6198572.08 | 331411.02 |
| 81 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.8 | 6198569.4 | 331409.297 |
| 82 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | multiple stems | 0.7 | 6198570.84 | 331412.435 |
| 83 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.6 | 6198566.4 | 331413.372 |
| 84 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.7 | 6198567.81 | 331417.711 |
| 85 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 1.1 | 6198566.21 | 331415.517 |
| 86 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.6 | 6198557.89 | 331416.623 |
| 87 | Peppermint | Agonis flexuosa | 3 | 200 | Fair | 50K | None | in bush area | 2.1 | 6198560.23 | 331421.1 |
| 88 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | None | 0.4 | 6198553.02 | 331426.082 |
| 89 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.5 | 6198554.87 | 331422.133 |
| 90 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.2 | 6198551.73 | 331419.103 |
| 91 | Peppermint | Agonis flexuosa | 6 | 600 | Good | <1M | Dead Wood | multiple stems | 0.6 | 6198553.25 | 331415.749 |
| 92 | Peppermint | Agonis flexuosa | 5 | 500 | Good | 50K | Reduce end-weight | split in codom stem | 0.8 | 6198563.04 | 331410.917 |
| 93 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 1.3 | 6198556.06 | 331407.162 |
| 94 | Peppermint | Agonis flexuosa | 5 | 800 | Good | 4K | Reduce end-weight | heavy lean decay at base | 1.3 | 6198562.68 | 331404.772 |
| 95 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | None | 0.6 | 6198561.26 | 331400.768 |
| 96 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.9 | 6198564.44 | 331397.568 |
| 97 | Peppermint | Agonis flexuosa | 5 | 1000 | Fair | 4K | Remove Tree | extensive decay at base | 1.9 | 6198564.27 | 331395.237 |
| 98 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | <1M | None | multiple stems | 0.7 | 6198565.64 | 331370.111 |
| 99 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | None | 0.6 | 6198564.44 | 331372.132 |
| 100 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198564.69 | 331373.989 |
| 101 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198560.66 | 331381.159 |
| 102 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | None | 1.1 | 6198562.54 | 331385.237 |
| 103 | Peppermint | Agonis flexuosa | 5 | 600 | Good | 4K | Reduce end-weight | recent excavation south side | 0.5 | 6198553.73 | 331379.198 |
| 104 | Peppermint | Agonis flexuosa | 5 | 900 | Good | <1M | None | previously topped | 0.8 | 6198546.06 | 331387.233 |
| 105 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | 40K | Reduce end-weight | heavy lean | 0.8 | 6198555.83 | 331391.261 |
| 106 | Peppermint | Agonis flexuosa | 3 | 400 | Fair | <1M | None | decay at base but low loading | 1.2 | 6198551.13 | 331396.909 |
| 107 | Peppermint | Agonis flexuosa | 3 | 200 | Fair | <1M | None | None | 0.7 | 6198548.37 | 331394.516 |
| 108 | Peppermint | Agonis flexuosa | 5 | 900 | Good | <1M | None | multiple stems | 0.7 | 6198543.95 | 331393.921 |
| 109 | Peppermint | Agonis flexuosa | 5 | 300 | Good | 50K | reduce weight and monitor | leaning into neighboring tree which requires removal | 1.3 | 6198548.27 | 331401.637 |
| 110 | Peppermint | Agonis flexuosa | 4 | 500 | Fair | 100 | Remove Tree | extensive decay at base | 0.8 | 6198552.25 | 331403.139 |
| 111 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | None | 0.7 | 6198549.33 | 331402.509 |
| 112 | Peppermint | Agonis flexuosa | 6 | 700 | Good | <1M | None | decay at base | 0.6 | 6198544.69 | 331399.64 |
| 113 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 1.7 | 6198539.21 | 331399.986 |
| 114 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.5 | 6198542.57 | 331403.366 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|-----------------|--------|------|--------|-----------------|---|---|-----------|------------|------------|
| 115 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | multiple stems | 1.4 | 6198548.29 | 331406.509 |
| 116 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1 | 6198543.21 | 331406.82 |
| 117 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 1.6 | 6198539.71 | 331406.571 |
| 118 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 1.6 | 6198539.84 | 331408.706 |
| 119 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 0.8 | 6198541.25 | 331410.533 |
| 120 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.8 | 6198539.35 | 331410.653 |
| 121 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 1.2 | 6198545.92 | 331412.897 |
| 122 | Peppermint | Agonis flexuosa | 5 | 600 | Good | 500K | None | None | 1 | 6198547.16 | 331416.457 |
| 123 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | None | multiple stems | 1.1 | 6198545.43 | 331416.752 |
| 124 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | 400 | remove decayed stem | None | 0.9 | 6198534.34 | 331402.508 |
| 125 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.6 | 6198533.75 | 331408.378 |
| 126 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.8 | 6198534.1 | 331412.324 |
| 127 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1 | 6198533.33 | 331411.665 |
| 128 | Peppermint | Agonis flexuosa | 3 | 200 | Good | <1M | None | None | 1.6 | 6198527.57 | 331404.492 |
| 129 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.3 | 6198529.03 | 331408.177 |
| 130 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 1.1 | 6198528.16 | 331405.657 |
| 131 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.7 | 6198527.45 | 331405.416 |
| 132 | Peppermint | Agonis flexuosa | 4 | 800 | Good | <1M | None | None | 1 | 6198529.2 | 331409.154 |
| 133 | Peppermint | Agonis flexuosa | 5 | 500 | Good | <1M | clear light | None | 1.2 | 6198524.42 | 331414.242 |
| 134 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198520.37 | 331410.088 |
| 135 | Peppermint | Agonis flexuosa | 5 | 500 | Good | 50K | Reduce end-weight | None | 0.5 | 6198519.27 | 331411.087 |
| 136 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | None | 0.8 | 6198518.4 | 331412.489 |
| 137 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | None | 0.6 | 6198515.71 | 331412.903 |
| 138 | Peppermint | Agonis flexuosa | 4 | 500 | Good | <1M | None | None | 0.6 | 6198548.47 | 331430.914 |
| 139 | Peppermint | Agonis flexuosa | 4 | 1100 | Good | 400 | Reduce end-weight | maintain as a shrub extensive decay at base | 1.2 | 6198544.94 | 331427.578 |
| 140 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | None | 1.1 | 6198545.37 | 331431.066 |
| 141 | Peppermint | Agonis flexuosa | 3 | 200 | Good | <1M | None | None | 0.6 | 6198544.17 | 331432.549 |
| 142 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | None | 1.1 | 6198541.23 | 331421.617 |
| 143 | Peppermint | Agonis flexuosa | 4 | 1000 | Good | <1M | None | None | 0.7 | 6198539.9 | 331420.78 |
| 144 | Peppermint | Agonis flexuosa | 4 | 1000 | Good | 4K | remove stem leaning west | None | 0.7 | 6198531.67 | 331419.751 |
| 145 | Peppermint | Agonis flexuosa | 3 | 200 | Good | <1M | None | None | 0.7 | 6198532.76 | 331423.594 |
| 146 | Peppermint | Agonis flexuosa | 3 | 200 | Good | <1M | None | None | 0.7 | 6198531.02 | 331423.043 |
| 147 | Peppermint | Agonis flexuosa | 3 | 300 | Good | <1M | None | None | 0.6 | 6198529.64 | 331428.395 |
| 148 | Peppermint | Agonis flexuosa | 4 | 800 | Fair | 1K | reduce height to 2m maintain as a shrub | extensive decay at base | 2.8 | 6198526.32 | 331428.632 |
| 149 | Peppermint | Agonis flexuosa | 4 | 700 | Good | 5K | Reduce end-weight | all stems | 0.7 | 6198526.55 | 331422.718 |
| 150 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | None | 0.6 | 6198524.73 | 331420.558 |
| 151 | Peppermint | Agonis flexuosa | 4 | 400 | Good | <1M | None | None | 0.6 | 6198521.23 | 331425.779 |
| 152 | Peppermint | Agonis flexuosa | 3 | 400 | Good | <1M | None | None | 0.8 | 6198513.65 | 331425.21 |
| 153 | Peppermint | Agonis flexuosa | 3 | 300 | Good | <1M | None | None | 0.7 | 6198512.98 | 331423.294 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|--------------------|---------------------------|--------|------|--------|-----------------|---|---|-----------|------------|------------|
| 154 | Peppermint | Agonis flexuosa | 3 | 300 | Good | <1M | None | None | 0.6 | 6198509.4 | 331421.743 |
| 155 | Peppermint | Agonis flexuosa | 6 | 900 | Good | 10K | Reduce end-weight | leans over steps | 0.6 | 6198506.78 | 331418.801 |
| 156 | Eucalypt | Eucalyptus sp | 8 | 900 | Good | <1M | Remove Tree | stump coppice - unsuitable species | 1 | 6198498.37 | 331418.471 |
| 157 | Peppermint | Agonis flexuosa | 3 | 300 | Good | <1M | None | None | 0.5 | 6198503.86 | 331424.763 |
| 158 | Peppermint | Agonis flexuosa | 3 | 500 | Good | <1M | None | None | 1.4 | 6198500.97 | 331424.001 |
| 159 | Peppermint | Agonis flexuosa | 3 | 500 | Good | <1M | None | multiple stems | 0.6 | 6198488.42 | 331437.382 |
| 160 | Peppermint | Agonis flexuosa | 3 | 500 | Good | <1M | None | multiple stems | 1.8 | 6198480.39 | 331440.904 |
| 161 | Peppermint | Agonis flexuosa | 3 | 500 | Good | <1M | None | multiple stems | 1.3 | 6198479.7 | 331443.964 |
| 162 | Peppermint | Agonis flexuosa | 3 | 500 | Good | <1M | None | multiple stems | 1.4 | 6198477.12 | 331447.277 |
| 163 | Peppermint | Agonis flexuosa | 3 | 400 | Good | 500 | remove limb over path before it falls | None | 0.7 | 6198469.05 | 331443.701 |
| 164 | Peppermint | Agonis flexuosa | 6 | 900 | Good | <1M | None | multiple stems | 1.8 | 6198473.09 | 331447.036 |
| 165 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.7 | 6198467.02 | 331434.93 |
| 166 | Peppermint | Agonis flexuosa | 5 | 700 | Good | 500 | remove dead stem to south | None | 1.9 | 6198472.56 | 331435.357 |
| 167 | Peppermint | Agonis flexuosa | 6 | 700 | Good | 50K | Reduce end-weight | None | 0.6 | 6198476.11 | 331432.434 |
| 168 | Peppermint | Agonis flexuosa | 6 | 1200 | Good | 10K | Reduce end-weight | multiple stems | 2.2 | 6198484.07 | 331425.867 |
| 169 | Peppermint | Agonis flexuosa | 6 | 200 | Poor | 50K | Remove Tree | almost dead | 0.6 | 6198487.55 | 331428.551 |
| 170 | Peppermint | Agonis flexuosa | 5 | 200 | Fair | <1M | None | None | 1 | 6198491.01 | 331428.218 |
| 171 | Peppermint | Agonis flexuosa | 6 | 400 | Fair | <1M | remove vine | None | 1.2 | 6198491.29 | 331428.133 |
| 172 | Peppermint | Agonis flexuosa | 6 | 400 | Fair | <1M | remove vine | None | 1 | 6198493.63 | 331424.568 |
| 173 | Yates | Eucalyptus conferruminata | 6 | 400 | Good | <1M | None | None | 0.6 | 6198471.08 | 331419.659 |
| 174 | Peppermint | Agonis flexuosa | 7 | 600 | Good | <1M | None | None | 0.4 | 6198436.29 | 331450.683 |
| 175 | Peppermint | Agonis flexuosa | 7 | 250 | Good | <1M | None | None | 1 | 6198433.35 | 331449.577 |
| 176 | Peppermint | Agonis flexuosa | 7 | 600 | Good | <1M | None | None | 0.5 | 6198436.36 | 331453.867 |
| 177 | Akeake | Dodonaea viscosa | 5 | 300 | Fair | 1K | remove stem leaning into neighboring tree | None | 1.3 | 6198442.2 | 331456.662 |
| 178 | Paperbark | Melaleuca sp | 6 | 400 | Good | 10K | weight reduce stems leaning into park | mixed paperbark yates shelter row of trees along drain western boundary of park | 0.6 | 6198389.47 | 331390.781 |
| 179 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | multiple stems | 0.9 | 6198472.33 | 331390.942 |
| 180 | Peppermint | Agonis flexuosa | 5 | 600 | Good | <1M | None | multiple stems | 0.5 | 6198473.65 | 331383.343 |
| 181 | Yates | Eucalyptus conferruminata | 4 | 200 | Good | <1M | None | None | 0.5 | 6198473.83 | 331378.203 |
| 182 | Paperbark | Melaleuca sp | 4 | 300 | Good | <1M | None | None | 0.5 | 6198473.62 | 331376.452 |
| 183 | Paperbark | Melaleuca sp | 4 | 200 | Good | <1M | None | None | 0.3 | 6198472.28 | 331374.613 |
| 184 | Paperbark | Melaleuca sp | 4 | 500 | Good | <1M | None | multiple stems | 0.9 | 6198472.59 | 331371.266 |
| 185 | Peppermint | Agonis flexuosa | 4 | 500 | Good | <1M | None | multiple stems | 0.6 | 6198492.5 | 331398.134 |
| 186 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | None | 0.5 | 6198493.95 | 331401.183 |
| 187 | Victorian Tea Tree | Leptospermum laevigatum | 4 | 400 | Poor | <1M | Remove Tree | almost dead | 0.5 | 6198500.42 | 331388.367 |
| 188 | Tuart | Eucalyptus gomphocephala | 10 | 1800 | Fair | 5K | crown reduce 20percent | previously topped | 0.6 | 6198500.43 | 331384.553 |
| 189 | Peppermint | Agonis flexuosa | 8 | 1200 | Good | <1M | None | previously topped | 0.6 | 6198509.12 | 331377.383 |
| 190 | Peppermint | Agonis flexuosa | 8 | 450 | Good | <1M | None | previously topped | 1.3 | 6198512.19 | 331379.589 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|--------------------------|--------|------|--------|-----------------|------------------------|--|-----------|------------|------------|
| 191 | Peppermint | Agonis flexuosa | 8 | 550 | Good | <1M | None | previously topped | 1.2 | 6198510.88 | 331383.635 |
| 192 | Tuart | Eucalyptus gomphocephala | 10 | 1600 | Fair | 500K | crown reduce 15percent | previously topped | 2.1 | 6198523.55 | 331391.027 |
| 193 | Peppermint | Agonis flexuosa | 6 | 500 | Good | 4K | Reduce end-weight | heavy lean, exposed position | 0.9 | 6198529.79 | 331383.462 |
| 194 | Peppermint | Agonis flexuosa | 9 | 800 | Good | 500K | Crown Clean | dead wood | 1.1 | 6198537.05 | 331373.464 |
| 195 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.6 | 6198545.27 | 331345.719 |
| 196 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.9 | 6198549.72 | 331345.13 |
| 197 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | None | 0.4 | 6198551.16 | 331348.997 |
| 198 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.5 | 6198554.47 | 331349.639 |
| 199 | Peppermint | Agonis flexuosa | 5 | 1000 | Good | <1M | None | multiple stems | 1.8 | 6198547.66 | 331356.269 |
| 200 | Peppermint | Agonis flexuosa | 5 | 300 | Good | <1M | None | multiple stems | 0.7 | 6198553.69 | 331353.311 |
| 201 | Peppermint | Agonis flexuosa | 4 | 200 | Fair | <1M | None | None | 0.4 | 6198563.43 | 331355.536 |
| 202 | Peppermint | Agonis flexuosa | 5 | 400 | Fair | 400 | Remove Tree | decay at base, leaning into neighboring tree | 1.5 | 6198563.27 | 331354.383 |
| 203 | Peppermint | Agonis flexuosa | 5 | 200 | Fair | <1M | None | decay at base, low loading | 0.7 | 6198562.17 | 331352.06 |
| 204 | Peppermint | Agonis flexuosa | 5 | 200 | Fair | <1M | None | None | 0.4 | 6198561.93 | 331352.409 |
| 205 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.9 | 6198562.36 | 331347.607 |
| 206 | Peppermint | Agonis flexuosa | 5 | 350 | Good | <1M | None | None | 0.5 | 6198558.35 | 331339.84 |
| 207 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | multiple stems | 1.4 | 6198562.31 | 331340.893 |
| 208 | Peppermint | Agonis flexuosa | 6 | 200 | Good | 5K | Dead Wood | None | 0.4 | 6198563.07 | 331336.466 |
| 209 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | decay at base | 0.9 | 6198563.13 | 331342.943 |
| 210 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.7 | 6198563.81 | 331344.284 |
| 211 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 0.5 | 6198565.42 | 331346.603 |
| 212 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 0.5 | 6198567.71 | 331350.819 |
| 213 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | None | 0.7 | 6198569.61 | 331347.567 |
| 214 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | None | 0.9 | 6198574.88 | 331345.057 |
| 215 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | None | 1.3 | 6198571.54 | 331340.646 |
| 216 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.5 | 6198567.98 | 331337.225 |
| 217 | Peppermint | Agonis flexuosa | 6 | 600 | Good | <1M | None | multiple stems | 0.9 | 6198565.79 | 331337.684 |
| 218 | Peppermint | Agonis flexuosa | 6 | 350 | Good | <1M | None | None | 0.9 | 6198570.3 | 331330.571 |
| 219 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | multiple stems | 0.6 | 6198574.97 | 331337.749 |
| 220 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | twin stems | 0.7 | 6198575.76 | 331343.494 |
| 221 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.9 | 6198575.75 | 331341.858 |
| 222 | Peppermint | Agonis flexuosa | 6 | 1000 | Good | <1M | None | multiple stems - climbing tree | 0.6 | 6198584.68 | 331347.052 |
| 223 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | Dead Wood | twin stems decay at base | 0.7 | 6198582.84 | 331340.604 |
| 224 | Peppermint | Agonis flexuosa | 6 | 250 | Good | <1M | None | None | 0.4 | 6198584.22 | 331338.469 |
| 225 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | twin stems | 0.7 | 6198586.28 | 331335.926 |
| 226 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | Dead Wood | None | 0.4 | 6198581.05 | 331333.019 |
| 227 | Peppermint | Agonis flexuosa | 6 | 600 | Good | <1M | None | multiple stems | 2.2 | 6198578.66 | 331337.924 |
| 228 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.7 | 6198578.95 | 331336.818 |
| 229 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | multiple stems | 2 | 6198580.81 | 331333.005 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

Schedule of Trees at Flinders Bay Caravan Park



| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|----------------|----------------------|--------|------|--------|-----------------|--------------------------------------|--------------------------------------|-----------|------------|------------|
| 230 | Peppermint | Agonis flexuosa | 6 | 250 | Good | <1M | None | None | 0.7 | 6198575.52 | 331329.896 |
| 231 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | previous failure codom stem | 0.8 | 6198575.57 | 331326.553 |
| 232 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.5 | 6198574.48 | 331322.552 |
| 233 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | twin stems | 0.4 | 6198578.08 | 331317.922 |
| 234 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.8 | 6198580.63 | 331319.012 |
| 235 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.6 | 6198582.48 | 331324.922 |
| 236 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 1.1 | 6198582.57 | 331324.499 |
| 237 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | twin stems | 1.3 | 6198583.07 | 331323.116 |
| 238 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 0.8 | 6198583.46 | 331325.395 |
| 239 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | twin stems | 1.1 | 6198581.31 | 331328.837 |
| 240 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | twin stems | 0.7 | 6198583.86 | 331328.568 |
| 241 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | None | 0.8 | 6198591.09 | 331336.122 |
| 242 | Peppermint | Agonis flexuosa | 6 | 800 | Good | <1M | None | multiple stems | 0.6 | 6198594.39 | 331344.214 |
| 243 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | None | None | 0.5 | 6198599.73 | 331341.229 |
| 244 | Peppermint | Agonis flexuosa | 6 | 1000 | Good | <1M | Dead Wood | multiple stems | 0.5 | 6198596.96 | 331337.113 |
| 245 | Peppermint | Agonis flexuosa | 6 | 500 | Good | <1M | None | multiple stems | 0.7 | 6198602.23 | 331335.282 |
| 246 | Peppermint | Agonis flexuosa | 4 | 300 | Good | <1M | None | decay at base | 0.6 | 6198602.89 | 331334.393 |
| 247 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 1.1 | 6198600.19 | 331333.557 |
| 248 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | twin stems | 0.9 | 6198599.35 | 331327.833 |
| 249 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.6 | 6198594.11 | 331325.778 |
| 250 | Peppermint | Agonis flexuosa | 6 | 800 | Good | <1M | Dead Wood | multiple stems | 0.5 | 6198591.74 | 331331.134 |
| 251 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | Dead Wood | None | 1.7 | 6198591.11 | 331322.149 |
| 252 | Peppermint | Agonis flexuosa | 6 | 200 | Fair | <1M | None | broken dead stem, low load remaining | 0.8 | 6198588.96 | 331320.974 |
| 253 | Peppermint | Agonis flexuosa | 6 | 250 | Good | <1M | Dead Wood | None | 2.1 | 6198589.33 | 331325.445 |
| 254 | Peppermint | Agonis flexuosa | 6 | 300 | Good | 500K | remove lowest side branch north side | None | 0.6 | 6198585.51 | 331318.769 |
| 255 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | recent failure dead limb | 1.6 | 6198590.1 | 331325.79 |
| 256 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 0.5 | 6198583.07 | 331317.787 |
| 257 | jarrah | Eucalyptus marginata | 8 | 500 | Good | <1M | None | None | 1.4 | 6198595.62 | 331318.958 |
| 258 | Peppermint | Agonis flexuosa | 6 | 400 | Good | <1M | Dead Wood | twin stems | 1.7 | 6198597.27 | 331320.639 |
| 259 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 1 | 6198595.22 | 331318.956 |
| 260 | Peppermint | Agonis flexuosa | 7 | 300 | Good | <1M | Dead Wood | None | 1.1 | 6198600.4 | 331315.589 |
| 261 | Peppermint | Agonis flexuosa | 7 | 500 | Good | <1M | None | wattle growing at base | 2.1 | 6198605.17 | 331320.288 |
| 262 | Peppermint | Agonis flexuosa | 7 | 300 | Good | <1M | None | None | 2 | 6198599.4 | 331324.403 |
| 263 | Peppermint | Agonis flexuosa | 7 | 300 | Good | <1M | None | None | 1.5 | 6198605.73 | 331320.743 |
| 264 | Peppermint | Agonis flexuosa | 4 | 200 | Good | <1M | None | None | 1.8 | 6198608.37 | 331320.889 |
| 265 | Peppermint | Agonis flexuosa | 7 | 300 | Good | <1M | None | None | 1.3 | 6198606.28 | 331322.459 |
| 266 | Peppermint | Agonis flexuosa | 7 | 600 | Good | <1M | Dead Wood | twin stems | 1.8 | 6198608.49 | 331322.992 |
| 267 | Peppermint | Agonis flexuosa | 5 | 400 | Good | <1M | None | decay at base | 0.6 | 6198600.85 | 331325.248 |
| 268 | Black Butt | Eucalyptus patens | 9 | 1200 | Fair | 10K | Reduce end-weight | and crown clean | 0.5 | 6198597.3 | 331306.612 |
| 269 | Swamp Mahogany | Eucalyptus robusta | 8 | 500 | Fair | 500K | None | None | 1.3 | 6198596.61 | 331309.144 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal

| Tree Number | Common Name | Genus & species | Height | DBH | Health | QTRA Risk Index | Recommended Works | Comments | Horz Prec | Northing | Easting |
|-------------|-------------|---------------------------|--------|------|--------|-----------------|-------------------|----------------------------------|-----------|------------|------------|
| 270 | Black Butt | Eucalyptus patens | 8 | 700 | Fair | 500K | None | leans away to bush | 0.8 | 6198593.16 | 331303.463 |
| 271 | Black Butt | Eucalyptus patens | 8 | 300 | Fair | 500K | None | leans away to bush | 1.4 | 6198592.97 | 331304.391 |
| 272 | Black Butt | Eucalyptus patens | 8 | 300 | Poor | 500K | None | will need remove 5 - 10years | 0.7 | 6198589.5 | 331307.453 |
| 273 | Black Butt | Eucalyptus patens | 8 | 900 | Fair | 1K | Crown Clean | and weight reduce | 1.2 | 6198586.07 | 331305.878 |
| 274 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 1.4 | 6198577.22 | 331308.158 |
| 275 | Peppermint | Agonis flexuosa | 5 | 200 | Good | <1M | None | None | 0.8 | 6198573.34 | 331310.452 |
| 276 | Peppermint | Agonis flexuosa | 7 | 300 | Good | <1M | None | None | 0.9 | 6198576.08 | 331315.211 |
| 277 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | multiple stems | 0.7 | 6198565.9 | 331320.296 |
| 278 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 2.2 | 6198562.52 | 331323.516 |
| 279 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 1.9 | 6198563.35 | 331326.091 |
| 280 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 1 | 6198561.15 | 331328.625 |
| 281 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | monitor decay at base | 0.8 | 6198560.58 | 331331.343 |
| 282 | Peppermint | Agonis flexuosa | 6 | 300 | Dead | <1M | Remove Tree | remove or shorten to safe height | 2 | 6198551.29 | 331326.323 |
| 283 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 0.8 | 6198549.41 | 331321.289 |
| 284 | Marri | Corymbia calophylla | 6 | 400 | Good | <1M | None | None | 1.7 | 6198556.44 | 331318.27 |
| 285 | Black Butt | Eucalyptus patens | 8 | 1200 | Good | 50K | Dead Wood | and weight reduce stem to north | 2.3 | 6198566.27 | 331316.845 |
| 286 | Peppermint | Agonis flexuosa | 6 | 300 | Good | <1M | None | None | 1.1 | 6198559.31 | 331310.313 |
| 287 | Peppermint | Agonis flexuosa | 6 | 200 | Good | <1M | None | None | 1.9 | 6198577.89 | 331304.129 |
| 288 | Yates | Eucalyptus conferruminata | 6 | 800 | Good | <1M | Crown Clean | and weight reduce north side | 1.4 | 6198455.4 | 331431.449 |

Red - Risk of Harm 1/10,000 or greater

Yellow - Lower risk of harm but still recommended for removal



APPENDIX B

Visual Tree Assessment [VTA]

The assessing arborist uses his skill, experience and knowledge to locate any visual abnormalities upon or surrounding the subject trees. VTA interprets the body language of trees, linking internal defects to the tree's own repair-structures, confirming and measuring these defects, and finally assessing them with failure criteria, and from this, deducing measures for the 'therapy' of the tree. Accordingly trees that are only apparently dangerous should be distinguished from those that are really dangerous, thus avoiding unnecessary fellings and accidents caused by tree failure.

VTA comprises the assessment of predictable symptoms associated with tree failures and / or tree disorders that culminate to form visual tree condition. This process is accepted by professional arborists as being a first measure in the assessment and management of urban trees.

The assessment is conducted visually from ground level or under binocular view. In order to achieve clear viewing the assessor may initiate clearance of vines or plant clutter from around tree base, upon tree main stems, within main branch unions or other key locations prior to conducting the assessment itself. Hand tools and data recording equipment are commonly employed during VTA.

In the event the VTA process is deemed by as being insufficient in determination of a trees condition then further measures of an exploratory or investigative nature may be recommended. Employment of specialist tools, sophisticated measuring instruments and laboratory-based analysis are a few of the investigative activities that may be adopted by the assessor as additional diagnostic tools in support of VTA.



APPENDIX C

Quantified Tree Risk Assessment

Tree safety management is a matter of limiting the risk of significant harm from tree failure whilst maintaining the benefits conferred by trees. Although it may seem counter intuitive, the condition of trees should not be the first consideration. Instead, tree managers should consider first the usage of the land on which the trees stand, which in turn will inform the process of assessing the trees.

The Quantified Tree Risk Assessment (QTRA) system applies established and accepted risk management principles to tree safety management. Firstly, the targets (people, property and vehicles) upon which trees could fail are assessed and quantified, thus enabling tree managers to determine whether or not and to what degree of rigor 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 the probability of failure within the next 12 months.

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. The system moves the management of tree safety away from labelling trees as either 'safe' or 'unsafe', thereby requiring definitive statements of tree safety from either tree surveyors or tree managers. Instead, QTRA quantifies the risk of significant harm from tree failure in a way that enables tree managers to balance safety with tree value and operate to a predetermined limit of reasonable or acceptable risk.

The assessed Risk of Harm for each tree is termed the Risk Index. The Risk Index uses K to represent thousand and M to represent million.

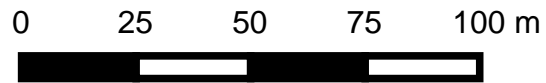
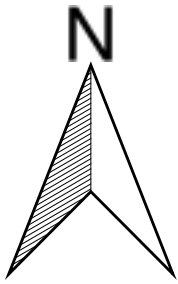
For example: if the annualised risk of harm is 1/10,000, the Risk Index is 10K.

The level of risk that is acceptable for any given tree is ultimately decided by the tree 'owner' and their willingness to accept a certain level of risk associated with a given tree or trees. It is however commonly accepted that a risk of harm of 1 in 10,000 or less is generally and universally considered acceptable in risk management practice be it tree related or non-tree related.



APPENDIX D

Tree Location Maps



Flinders Bay Caravan Park - Tree Location Map Overview

Projection: GDA94 MGA50
Author: BM - Arbor Guy
Data Source: Landgate Imagery

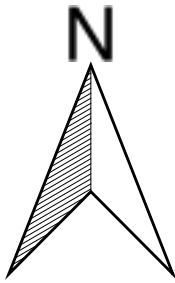


0 5 10 15 20 m



Flinders Bay Caravan Park - Map 1

*Projection: GDA94 MGA50
Author: BM - Arbor Guy
Data Source: Landgate Imagery*



0 5 10 15 20 m



Flinders Bay Caravan Park - Map 2

Projection: GDA94 MGA50
Author: BM - Arbor Guy
Data Source: Landgate Imagery



0 5 10 15 20 m



Flinders Bay Caravan Park - Map 3

*Projection: GDA94 MGA50
Author: BM - Arbor Guy
Data Source: Landgate Imagery*