
ATTACHMENT 8



Lot 192 Hale Road

Wattle Grove



Preliminary Arborist Report

September 2023



Prepared for:

Lester Mulder

Design Director

Mulder Kampman Design

Date: 15 September 2023

Prepared by:

Joshua Groenewold

Consulting Arborist - Treeswest Australia

Email: josh@treeswest.com.au



Lot 192 Hale Road

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1. Abstract

This report details the process and outcome of preliminary tree assessments carried out to accompany a Development Application for Lot 192 Hale Road, Wattle Grove.

2. Scope

Treeswest has been engaged by Lester Mulder of Mulder Kampman Design to carry out a preliminary assessment of trees on Lot 192 Hale Road, Wattle Grove to assist with a Development Application for the site. The purpose of this assessment is to:

- identify all trees on the site,
- provide an assessment of the condition of each tree,
- assess the retention value of each tree,
- assess the impact of the current proposed design on each tree.



Figure 1 Boundary of assessed area

3. Methodology and limitations

All trees within property boundary were initially assessed and a determination was made as to whether they are to be included for formal assessment. Consistent with City of Kalamunda Local Planning Policy 33 – Tree Retention all trees that were greater than 4m in height, 4m canopy spread, and a Diameter at Breast Height (DBH) of 160mm were included in the formal assessment. There were a number of trees that did not meet all three characteristics and of these that did not meet all characteristics only those trees formally planted as part of the landscape included, with self-seeded

trees and all shrubs excluded from this assessment. The most visually significant of the exclusion is the small dense stand of self-seeded lemon scented gums (*Corymbia citriodora*).

Trees were assessed visually from ground level in a systematic manner in accordance with the principles of Visual Tree Assessment. This method includes but is not limited to looking at the area surround the tree, visible roots, trunk flare, trunk, and overall canopy. No aerial inspections were carried out and no below ground excavations or inspections were carried out. Basic assessment tools were utilised as required including binoculars, sounding hammer and probes. Measuring instruments include electronic clinometer, laser distance measuring device and diameter tape.

This report is not designed to be a comprehensive Tree Protection Management Plan. The Tree Protections Zones (TPZ) and Structural Root Zones (SRZ) that referenced in this report are solely derived from measurements taken on site and calculated using AS 4970 Protection of Trees on Development Site. They have not been adjusted to take into consideration individual tree morphology and site or design considerations.

The trees were assessed for any obvious or immediate risk but a comprehensive risk assessment on these trees was not carried out nor are general tree work recommendations provided.

4. Individual Assessment Characteristics

The record of assessment captures the quantitative properties of the tree including height, Diameter at Breast Height (DBH), canopy spread as well as the following qualitative characteristics:

HEALTH - Tree health is assessed taking into account the total canopy coverage, leaf density and annual twig extension. The production of woundwood and occlusion is also indicative of tree health and used as part of the assessment. Health ratings were classed as Good, Fair, Poor, and Very Poor.

STRUCTURAL CONDITION - Structure was identified as being good (no identifiable defects), fair (minor apparent defects), poor (defects present and contributing to poor structure) or very poor (major defects that have significantly compromised tree structure). The trees are evaluated against growth habits and characteristics typical of that species.

LIFE EXPECTANCY (SULE) - This section provides an indicative time scale in which the tree will contribute to the amenity of the area. This also identified whether the tree was dead. The remaining classifications are provided as year classifications from 0, 1-5 years, 6-10 years, 11-20 years, 21-40 years and 40+ years.

AGE CLASS - The trees age was categorised as follows young, semi mature, early mature, mature, and over mature. The age classification is indicative of the tree's location within the life span of the tree and indicative of its overall progression through the mortality spiral.

RETENTION VALUE - A consideration of the overall value of the tree to the environmental and amenity value of the site when considering its SULE as well as the size, species, and location of the tree.



5. Site Description

The site is located at Lot 192 (332) Hale Road Wattle Grove and is within the City of Kalamunda local government boundary. The site is approximately 9300m². To the west is a recently developed commercial site of similar size and to the east is a former nursery site that occupies two lots. To the north is public open space encompassing Woodulpine Brook.

All trees on this property were assessed, subject to the limitation set out above. There were no trees on adjoining properties that are likely to be impacted by the development nor impact or impede the development.



Figure 2 Subject property in location

6. Assessment summary

There were 29 trees on this site that met the criteria for individual assessment. These are a broad mix of endemic, native, and exotic species and are also in a broad variety of sizes and condition. However generally speaking the large mature trees are in fair or good condition and health, with the smaller planted landscape trees primarily at the front of the property in poor health or structural condition.

A map showing location of these trees is contained in Appendix 1 and Individual records of assessment, including photos are contained in Appendix 2. Below is a summary of the retention value of the assessed trees.

Very High and High Retention Value

The following trees have been deemed to have HIGH or VERY HIGH retention Value:

Project ID	Botanical Name	Health	Structure	Height (m)	DBH (mm)	Spread (m)	Age	SULE	Retention Value	Comments (assessment)
16	<i>Corymbia citriodora</i>	Good	Good	17.0	825	22.0	Mature	40+ yrs	Very High	Excellent specimen. Typical open canopy. Good weight distribution. Minimal Deadwood. 5.9 m from adjacent tree
17	<i>Corymbia citriodora</i>	Good	Fair	13.0	540	17.0	Mature	40+ yrs	High	Slightly sparse canopy. Minimal deadwood. Slightly suppressed by adjacent larger tree.
18	<i>Eucalyptus globulus</i>	Good	Fair	16.0	1190	16.0	Mature	21-40 yrs	High	Slight canopy lean, hollows in trunk, some evidence of failures
23	<i>Corymbia calophylla</i>	Good	Fair	13.0	650	15.0	Mature	40+ yrs	High	Slight lean south. Closest to high water table, more stress responsive growth. Typical amount of deadwood
24	<i>Corymbia calophylla</i>	Good	Fair	18.0	790	17.0	Mature	40+ yrs	High	Slight lean east. Closest to high water table, more stress responsive growth. Typical amount of deadwood
25	<i>Corymbia calophylla</i>	Good	Fair	14.0	573	13.5	Mature	40+ yrs	High	Slight lean south and suppressed by neighbour. Stressed, slightly sparse canopy potentially from excess water.
26	<i>Corymbia calophylla</i>	Good	Fair	16.0	540	11.0	Mature	40+ yrs	High	Slight lean west and suppressed by neighbour. Stressed, slightly sparse canopy potentially from excess water.
27	<i>Agonis flexuosa</i>	Good	Fair	11.0	1910	12.5	Mature	40+ yrs	Very High	High value tree, well balanced, no work.
28	<i>Agonis flexuosa</i>	Good	Good	13.0	1076	9.0	Mature	40+ yrs	Very High	High value tree, suppressed by neighbour, leans to S, sound union at base.

With one exception all trees with a high or very high retention values have been incorporated into the current design. Trees 16 and 17 are a pair of large lemon scented gums (*Corymbia citriodora*) closest to the road. The current design has a tree 16 on the landscaped verge with tree 17 in a traffic island with driveway on both sides. Both have a minimum deep soil area which is lower than the recommended 64m² recommended in LPP33 Table 1.2 for large trees, but both do meet the recommended 40m² as contained in Table 2.1 Minimum planting area requirements for car parks. There are also rootable soil volumes surrounding these areas and in conjunction with careful use of materials for the driveway this will minimise the impact on these trees and allow them to continue to be a prominent feature in the landscape.

Tree 18 is a large mature Tasmanian blue gum (*Eucalyptus globulus*) which is not compatible with the current design. While the retention of a mature tree such as this is to be preferred there appears to be no practical way to incorporate this tree into the design. This tree is currently in good condition but its longevity is uncertain. It is tree endemic to Tasmania, and like most Tasmanians it prefers a cooler wetter climate than is typical of Perth area. It is likely in good condition currently due to high water availability, which may change with the site development.

Trees 23-26 are a group of 4 marri (*Corymbia calophylla*), which are endemic natives. These trees have been deemed to have high retention value primarily due to their size and that they are endemic. However, they are currently only in fair condition with sparse canopy and excessive twig dieback, and are likely suffering stress from excess water, either from high water table or a legacy of the nursery next door. The retention of these is compatible with the current design if they are carefully managed during the construction process. These trees are however located in the area earmarked for a potential expansion of the building. There doesn't appear to be a straightforward design alternative to retain these trees should the proposed building expansion proceed. Consideration should be given to pre-emptive replacement planting as soon as practical if these are being considered for removal. This will allow for the replacement canopy to become established which in turn will minimise any canopy loss during the transition.





Figure 3 Trees 23-26 showing sparse, inconsistent canopy

Trees 28 and 28 are very large mature Weeping peppermints (*Agonis flexuosa*) located at the very rear of the property. These are in excellent condition, especially considering their age class and size. These should not be impacted by the development but must be protected nonetheless.

Medium Retention Value

The following trees have been deemed to have MEDIUM retention Value:

Project ID	Botanical Name	Health	Structure	Height (m)	DBH (mm)	Spread (m)	Age	SULE	Retention Value	Comments (assessment)
19	<i>Eucalyptus globulus</i>	Good	Poor	12.0	1050	13.0	Mature	21-40 yrs	Medium	Extended low westerly stem, sound union. Codominant stems. Good branch structure in upper canopy, no signs root heave.
21	<i>Olea europaea</i>	Good	Good	9.0	410	12.0	Mature	40+ yrs	Medium	Even canopy, minor deadwood
22	<i>Olea europaea</i>	Good	Fair	9.0	520	8.5	Mature	40+ yrs	Medium	Some evidence of limb failure
29	<i>Eucalyptus marginata</i>	Good	Fair	3.0	620	12.0	Mature	11-20 yrs	Medium	Failed tree but still remains viable. Healthy specimen.

Tree 19 is another Tasmanian bluegum (*E. globulus*), also in good health similar to tree 19 but in worse structural condition. It has a heavy lean, although it appears stable, and has a very large, long, low main scaffold limb making it difficult to prune to achieve useable space around the trees. Again, the retention of this tree would be preferable but does not appear compatible with full effective use of the site.

Trees 21 and 22 are olive (*Olea europaea*) trees and are currently incorporated into the current design. Their location is compatible with the design, although they will require careful protection during construction. However, their profuse fruiting nature means that they may not be suitable in such close proximity to the carpark surface.

Tree 29 is a jarrah (*Eucalyptus marginata*) that is in good health with great vigour but has poor structure having failed whole and is now prostrate. It would make an interesting feature if it were able to be incorporated into the soft landscape but doesn't appear to be compatible with the current design.



Figure 4 Tree 29 - Vigorous but failed jarrah

Low Retention Value

The following trees have been deemed to have LOW retention Value:

Project ID	Botanical Name	Health	Structure	Height (m)	DBH [mm]	Spread (m)	Age	SULE	Retention Value	Comments (assessment)
1	Callistemon viminalis	Fair	Very Poor	4.0	405	5.0	Mature	1-5 yrs	Low	Lopped with poor quality regrowth
2	Callistemon viminalis	Good	Very Poor	5.0	300	5.0	Mature	1-5 yrs	Low	Lopped with vigorous regrowth
3	Callistemon viminalis	Good	Very Poor	5.0	198	5.0	Mature	1-5 yrs	Low	Lopped with acceptable regrowth
4	Callistemon viminalis	Good	Very Poor	5.0	327	5.0	Mature	1-5 yrs	Low	Lopped with acceptable regrowth
5	Citrus cultivar	Fair	Fair	1.0	114	2.0	Mature	11-20 yrs	Low	Nice specimen, but not suitable for retention
6	Washingtonia filifera	Dead	Poor	13.0	530	1.0	Over Mature	0 yrs	Low	Dead and partially failed, no retention value
7	Washingtonia filifera	Good	Good	15.0	450	2.0	Mature	40+ yrs	Low	Non-native palm species
8	Washingtonia filifera	Good	Good	17.0	490	2.0	Mature	40+ yrs	Low	Non-native palm species
9	Washingtonia filifera	Good	Good	17.0	510	2.0	Mature	40+ yrs	Low	Non-native palm species
10	Phoenix canariensis	Good	Good	5.0	900	7.0	Mature	40+ yrs	Low	Non-native palm species
11	Dyopsis decaryi	Good	Good	5.0	350	4.0	Mature	40+ yrs	Low	Non-native palm species

12	Syagrus romanzoffiana	Good	Good	8.0	270	5.0	Mature	21-40 yrs	Low	Non-native palm species
13	Schefflera actinophylla	Fair	Fair	7.0	357	7.0	Mature	21-40 yrs	Low	Non-native species. Bifurcated with tight forks at 1 m.
14	Dyopsis decaryi	Good	Good	5.0	350	4.0	Mature	40+ yrs	Low	Non-native palm species
15	Syagrus romanzoffiana	Good	Poor	8.0	270	4.0	Mature	21-40 yrs	Low	Non-native palm species
20	Syagrus romanzoffiana	Good	Good	7.0	330	3.0	Mature	11-20 yrs	Low	Non-native palm specimen.

All trees with low retention value are incompatible with the current proposed design. These also do not meet the criteria for retention as per the City's LPP 33 Tree retention policy. These trees are in poor condition, do not meet physical size characteristics, or are of a species or type not suitable for retention e.g. palms, fruit trees. No further discussion is warranted around these trees.

7. Standard of Work

It is imperative that should this Development proceed, that further consultation with a Project Arborist be undertaken to ensure that a Tree Protection Plan is established.

This tree protection plan must comply with Australian Standard AS 4970—2009 Protection of trees on development sites and any work carried out on trees to be retained must comply with Australian Standard AS 4373-2007 Pruning of Amenity Trees

8. Conclusion

Overall, the current design is sympathetic to the retention of the significant trees on the site, with 10 large trees being retained. There is also capacity within the landscaped areas of the site to integrate further planting of medium and larger trees to either enhance the site or offset any additional development.

Trees provide many tangible and intangible benefits to both the owner and the community around the tree including shade, fauna habitat, aesthetics, heat moderation, air quality and much more. Carefully managed the trees on this site will provide these benefits not to just the users of the site but the broader community.

Joshua Groenewold
Diploma of Arboriculture (AQF level 5)
Quantified Tree Risk Assessment – Licenced User

Limitations of assessment

It is our policy to attach the following clause regarding limitations. The assessment of the trees presented in this report has been made using accepted arboricultural techniques.

Notwithstanding the recommendations and conclusions in this report, it must be recognised that trees are living organisms and are subject to change on a daily basis. They aren't immune to change in site or weather conditions or general seasonal variations.

It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or its component parts, regardless of the methods and techniques of any assessment. Inevitably, a standing tree will always pose some level of risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that his assessment is accurate, the tree should be re-assessed periodically. The assessment presented in this report is only valid at time of inspection.

References

Australian Standard AS 4373-2007 Pruning of Amenity Trees

Australian Standard AS 4970—2009 Protection of trees on development sites

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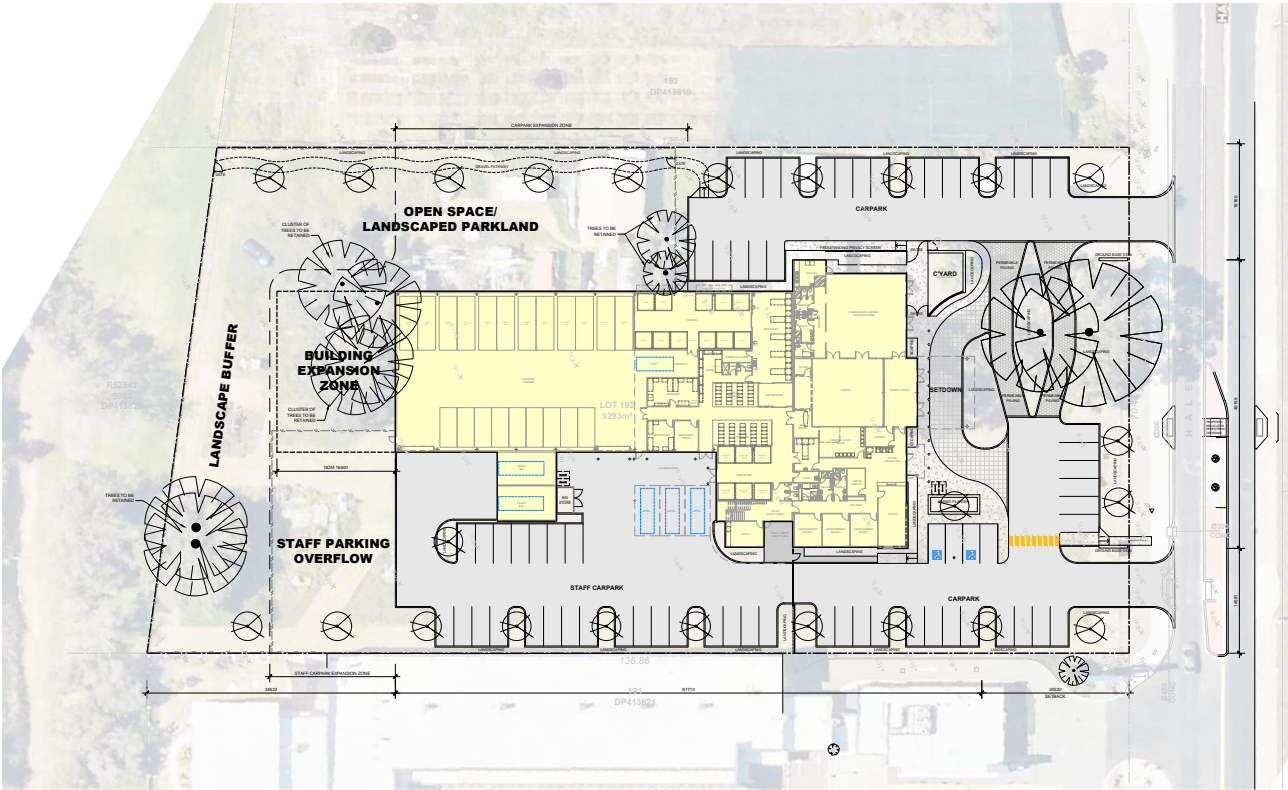
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Nicolle, D. (2016) *Smaller Eucalypts for Planting in Australia*. Adelaide, South Australia: Lane Print and Post


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Appendix 1 Maps
1.1 Map – Current proposed design



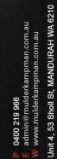


 **SITE PLAN**



MULDER KAMPMAN
DESIGN

PROPOSED FUNERAL PARLOUR
SEASONS FUNERALS
Lot 192 (H26) Hale Road, WATTLE GROVE

DATE	SCALE	PROJECT No	DRAWING No	REV
2023.09.08	1:250 (A1) 1:500 (A3)	0876	Sheet 3	SK07


0800 210 896

615 940 1111

www.mulderkampan.com.au
Unit 4, 53 Sheel St, MANDURAH WA 6210









Lot 192 Hale Road

1.2 Map – Trees by retention value



Lot 192 Hale Road

Appendix 2 – Record of Individual Assessment

Weeping Bottlebrush Tree ID 01		Weeping Bottlebrush Tree ID 02	
Tree Details Botanical Name: <i>Callistemon viminalis</i> Common Name: Weeping Bottlebrush Height (m): 4 Spread (m): 5 Health: Fair Structure: Very Poor Age: Mature SULE: 1-5 yrs Retention Value: Low Comments (assessment): Lopped with poor quality re-growth DBH (mm): 405 Tree Protection Zone (TPZ) (m): 4.86 Structural Root Zone (SRZ) (m): 2.26	Photos 	Tree Details Botanical Name: <i>Callistemon viminalis</i> Common Name: Weeping Bottlebrush Height (m): 5 Spread (m): 5 Health: Good Structure: Very Poor Age: Mature SULE: 1-5 yrs Retention Value: Low Comments (assessment): Lopped with vigorous regrowth DBH (mm): 300 Tree Protection Zone (TPZ) (m): 3.6 Structural Root Zone (SRZ) (m): 2.0	Photos 
Tree Location Site: Lot 192 Hale Road Longitude: 115.986698 Latitude: -31.999777		Tree Location Site: Lot 192 Hale Road Longitude: 115.986565 Latitude: -31.999834	
Weeping Bottlebrush Tree ID 03		Weeping Bottlebrush Tree ID 04	
Tree Details Botanical Name: <i>Callistemon viminalis</i> Common Name: Weeping Bottlebrush Height (m): 5 Spread (m): 5 Health: Good Structure: Very Poor Age: Mature SULE: 1-5 yrs Retention Value: Low Comments (assessment): Lopped with acceptable regrowth DBH (mm): 198 Tree Protection Zone (TPZ) (m): 2.38 Structural Root Zone (SRZ) (m): 1.68	Photos 	Tree Details Botanical Name: <i>Callistemon viminalis</i> Common Name: Weeping Bottlebrush Height (m): 5 Spread (m): 5 Health: Good Structure: Very Poor Age: Mature SULE: 1-5 yrs Retention Value: Low Comments (assessment): Lopped with acceptable regrowth DBH (mm): 327 Tree Protection Zone (TPZ) (m): 3.92 Structural Root Zone (SRZ) (m): 2.05	Photos 
Tree Location Site: Lot 192 Hale Road Longitude: 115.986543 Latitude: -31.999738		Tree Location Site: Lot 192 Hale Road Longitude: 115.986543 Latitude: -31.999680	
Citrus Tree ID 05		Cotton Palm Tree ID 06	
Tree Details Botanical Name: <i>Citrus cultivar</i> Common Name: Lemon Height (m): 1 Spread (m): 2 Health: Fair Structure: Fair Age: Mature SULE: 11-20 yrs Retention Value: Low Comments (assessment): Good specimen, but not suitable for retention DBH (mm): 114 Tree Protection Zone (TPZ) (m): 2.0 Structural Root Zone (SRZ) (m): 1.31	Photos 	Tree Details Botanical Name: <i>Washingtonia filifera</i> Common Name: Cotton Palm Height (m): 13 Spread (m): 1 Health: Dead Structure: Poor Age: Over Mature SULE: 0 yrs Retention Value: Low Comments (assessment): Dead and partially failed, no retention value DBH (mm): 530 Tree Protection Zone (TPZ) (m): 6.36 Structural Root Zone (SRZ) (m): 2.53	Photos 
Tree Location Site: Lot 192 Hale Road Longitude: 115.986647 Latitude: -31.999701		Tree Location Site: Lot 192 Hale Road Longitude: 115.986675 Latitude: -31.999763	

Cotton Palm Tree ID 07**Tree Details**

Botanical Name:	Washingtonia filifera
Common Name:	Cotton Palm
Height (m):	15
Spread (m):	2
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	450
Tree Protection Zone (TPZ)(m):	5.4
Structural Root Zone (SRZ)(m):	2.37

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986595
Latitude:	-31.999812

PhotosCotton Palm Tree ID 08**Tree Details**

Botanical Name:	Washingtonia filifera
Common Name:	Cotton Palm
Height (m):	17
Spread (m):	2
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	490
Tree Protection Zone (TPZ)(m):	5.88
Structural Root Zone (SRZ)(m):	2.45

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986522
Latitude:	-31.999709

PhotosCotton Palm Tree ID 09**Tree Details**

Botanical Name:	Washingtonia filifera
Common Name:	Cotton Palm
Height (m):	17
Spread (m):	2
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	510
Tree Protection Zone (TPZ)(m):	6.12
Structural Root Zone (SRZ)(m):	2.49

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986616
Latitude:	-31.999668

PhotosCanary Island Date Palm Tree ID 10**Tree Details**

Botanical Name:	Phoenix canariensis
Common Name:	Canary Island Date Palm
Height (m):	5
Spread (m):	7
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	900
Tree Protection Zone (TPZ)(m):	19.8
Structural Root Zone (SRZ)(m):	3.17

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986603
Latitude:	-31.999702

PhotosTriangle Palm Tree ID 11**Tree Details**

Botanical Name:	Dypsis decaryi
Common Name:	Triangle Palm
Height (m):	5
Spread (m):	4
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	350
Tree Protection Zone (TPZ)(m):	4.2
Structural Root Zone (SRZ)(m):	2.13

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986603
Latitude:	-31.999702

PhotosCocos Palm Tree ID 12**Tree Details**

Botanical Name:	Syagrus romanzoffiana
Common Name:	Cocos Palm
Height (m):	8
Spread (m):	5
Health:	Good
Structure:	Good
Age:	Mature
SULE:	21-40 yrs
Retention Value:	Low
Comments (assessment):	Non-native palm species
DBH (mm):	270
Tree Protection Zone (TPZ)(m):	3.24
Structural Root Zone (SRZ)(m):	1.91

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986540
Latitude:	-31.999628

Photos

Umbrella Tree Tree ID 13**Tree Details**

Botanical Name:	<i>Schefflera actinophylla</i>
Common Name:	Umbrella Tree
Height (m):	7
Spread (m):	6
Health:	Fair
Structure:	Fair
Age:	Mature
SULE:	21-40 yrs
Retention Value:	Low
Comments (assessment):	Non-native species. Bifurcated with tight forks at 1 m.
DBH (mm):	357
Tree Protection Zone (TPZ)(m):	4.29
Structural Root Zone (SRZ)(m):	2.13

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986513
Latitude:	-31.999547

PhotosTriangle Palm Tree ID 14**Tree Details**

Botanical Name:	<i>Ocypsis decaryi</i>
Common Name:	Triangle Palm
Height (m):	5
Spread (m):	4
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Low
Comments (assessment):	Non-native species
DBH (mm):	350
Tree Protection Zone (TPZ)(m):	4.2
Structural Root Zone (SRZ)(m):	2.13

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986454
Latitude:	-31.999559

PhotosCocos Palm Tree ID 15**Tree Details**

Botanical Name:	<i>Syagrus romanzoffiana</i>
Common Name:	Cocos Palm
Height (m):	8
Spread (m):	4
Health:	Good
Structure:	Poor
Age:	Mature
SULE:	21-40 yrs
Retention Value:	Low
Comments (assessment):	Non-native palm species
DBH (mm):	270
Tree Protection Zone (TPZ)(m):	3.24
Structural Root Zone (SRZ)(m):	1.91

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986432
Latitude:	-31.999561

PhotosLemon-scented Gum Tree ID 16**Tree Details**

Botanical Name:	<i>Corymbia citriodora</i>
Common Name:	Lemon-scented Gum
Height (m):	17
Spread (m):	22
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Very High
Comments (assessment):	Excellent specimen. Typical open canopy. Good weight distribution. Minimal deadwood. 5.9 m from adjacent tree.
DBH (mm):	825
Tree Protection Zone (TPZ)(m):	9.9
Structural Root Zone (SRZ)(m):	3.2

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986520
Latitude:	-31.999821

PhotosLemon-scented Gum Tree ID 17**Tree Details**

Botanical Name:	<i>Corymbia citriodora</i>
Common Name:	Lemon-scented Gum
Height (m):	13
Spread (m):	17
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	40+ yrs
Retention Value:	High
Comments (assessment):	Slightly sparse canopy. Minimal deadwood. Slightly suppressed by adjacent larger tree.
DBH (mm):	540
Tree Protection Zone (TPZ)(m):	6.48
Structural Root Zone (SRZ)(m):	2.55

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986481
Latitude:	-31.999777

PhotosTasmanian Blue Gum Tree ID 18**Tree Details**

Botanical Name:	<i>Eucalyptus globulus</i>
Common Name:	Tasmanian Blue Gum
Height (m):	16
Spread (m):	16
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	21-40 yrs
Retention Value:	High
Comments (assessment):	Slight canopy loss, hollows in trunk, some evidence of failure.
DBH (mm):	1190
Tree Protection Zone (TPZ)(m):	14.28
Structural Root Zone (SRZ)(m):	3.56

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986347
Latitude:	-31.999606

Photos

Tasmanian Blue Gum Tree ID 19**Tree Details**

Botanical Name:	Eucalyptus globulus
Common Name:	Tasmanian Blue Gum
Height (m):	12
Spread (m):	13
Health:	Good
Structure:	Poor
Age:	Mature
SULE:	21-40 yrs
Retention Value:	High
Comments (assessment):	Extended low westerly stem, sound union. Codominant stems. Good branch architecture, no signs root heave.
DBH (mm):	1050
Tree Protection Zone (TPZ)(m):	12.6
Structural Root Zone (SRZ)(m):	3.38

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986307
Latitude:	-31.999607

PhotosCocos Palm Tree ID 20**Tree Details**

Botanical Name:	Spargus romanzoffiana
Common Name:	Cocos Palm
Height (m):	7
Spread (m):	3
Health:	Good
Structure:	Good
Age:	Mature
SULE:	11-20 yrs
Retention Value:	Low
Comments (assessment):	Non-native palm specimen.
DBH (mm):	330
Tree Protection Zone (TPZ)(m):	3.96
Structural Root Zone (SRZ)(m):	2.0

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986380
Latitude:	-31.999406

PhotosOlive Tree ID 21**Tree Details**

Botanical Name:	Olea europaea
Common Name:	Olive
Height (m):	9
Spread (m):	12
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Medium
Comments (assessment):	Even canopy, minor deadwood
DBH (mm):	410
Tree Protection Zone (TPZ)(m):	4.92
Structural Root Zone (SRZ)(m):	2.28

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986339
Latitude:	-31.999283

PhotosOlive Tree ID 22**Tree Details**

Botanical Name:	Olea europaea
Common Name:	Olive
Height (m):	9
Spread (m):	8.5
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	40+ yrs
Retention Value:	Medium
Comments (assessment):	Some evidence of limb failure
DBH (mm):	500
Tree Protection Zone (TPZ)(m):	6.24
Structural Root Zone (SRZ)(m):	2.51

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986291
Latitude:	-31.999310

PhotosMarri Tree ID 23**Tree Details**

Botanical Name:	Corymbia calophylla
Common Name:	Marri
Height (m):	13
Spread (m):	15
Health:	Fair
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	High
Comments (assessment):	Slight lean south. Closest to high water table, more stress responsive growth. Typical amount of deadwood
DBH (mm):	650
Tree Protection Zone (TPZ)(m):	7.8
Structural Root Zone (SRZ)(m):	2.76

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986059
Latitude:	-31.999012

PhotosMarri Tree ID 24**Tree Details**

Botanical Name:	Corymbia calophylla
Common Name:	Marri
Height (m):	18
Spread (m):	17
Health:	Fair
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	High
Comments (assessment):	Slight lean east. Closest to high water table, more stress responsive growth. Typical amount of deadwood
DBH (mm):	790
Tree Protection Zone (TPZ)(m):	9.48
Structural Root Zone (SRZ)(m):	3.0

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.985998
Latitude:	-31.998956

Photos

Marri Tree ID 25**Tree Details**

Botanical Name:	Corymbia calophylla
Common Name:	Marri
Height (m):	14
Spread (m):	13.5
Health:	Fair
Structure:	Fair
Age:	Mature
SULE:	40+ yrs
Retention Value:	High
Comments (assessment):	Slight lean south and suppressed by neighbour. Stressed, slightly sparse canopy potentially from excess water.
DBH (mm):	573
Tree Protection Zone (TPZ)(m):	6.88
Structural Root Zone (SRZ)(m):	2.61

Tree Location

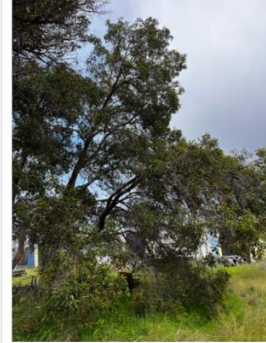
Site:	Lot 192 Hale Road
Longitude:	115.985899
Latitude:	-31.999071

PhotosMarri Tree ID 26**Tree Details**

Botanical Name:	Corymbia calophylla
Common Name:	Marri
Height (m):	16
Spread (m):	11
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	40+ yrs
Retention Value:	High
Comments (assessment):	Slight lean west and suppressed by neighbour. Stressed, slightly sparse canopy potentially from excess water.
DBH (mm):	540
Tree Protection Zone (TPZ)(m):	6.48
Structural Root Zone (SRZ)(m):	2.55

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.985896
Latitude:	-31.999032

PhotosWeeping Peppermint Tree ID 27**Tree Details**

Botanical Name:	Agonis flexuosa
Common Name:	Weeping peppermint
Height (m):	11
Spread (m):	12.5
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	40+ yrs
Retention Value:	Very High
Comments (assessment):	High value tree, well balanced, no work.
DBH (mm):	1910
Tree Protection Zone (TPZ)(m):	15.0
Structural Root Zone (SRZ)(m):	4.34

Tree Location

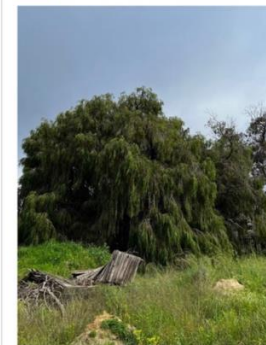
Site:	Lot 192 Hale Road
Longitude:	115.985608
Latitude:	-31.998983

PhotosWeeping Peppermint Tree ID 28**Tree Details**

Botanical Name:	Agonis flexuosa
Common Name:	Weeping peppermint
Height (m):	13
Spread (m):	9
Health:	Good
Structure:	Good
Age:	Mature
SULE:	40+ yrs
Retention Value:	Very High
Comments (assessment):	High value tree, suppressed by neighbour, leans to S, sound union at base.
DBH (mm):	1076
Tree Protection Zone (TPZ)(m):	12.91
Structural Root Zone (SRZ)(m):	3.40

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.985599
Latitude:	-31.998979

PhotosJarraah Tree ID 29**Tree Details**

Botanical Name:	Eucalyptus marginata
Common Name:	Jarraah
Height (m):	3
Spread (m):	12
Health:	Good
Structure:	Fair
Age:	Mature
SULE:	17-20yrs
Retention Value:	Medium
Comments (assessment):	Failed tree but still remains viable. Healthy specimen.
DBH (mm):	620
Tree Protection Zone (TPZ)(m):	7.44
Structural Root Zone (SRZ)(m):	2.71

Tree Location

Site:	Lot 192 Hale Road
Longitude:	115.986086
Latitude:	-31.999776

Photos