

**APPENDIX 7. INVESTIGATIONS – VEGETATION AND FAUNA**



arborman®  
tree solutions  
PROFESSIONALS IN ARBORICULTURE

## Preliminary Tree Assessment

Site: 10-20 Halls Road, Highbury

Date: Friday, 27 October 2023

ATS7424-10-20HaIRdPTA

## Contents

Executive Summary .....	1
Brief .....	2
Documents and Information Provided .....	2
Method .....	3
Limitations .....	3
Site Location.....	4
Assessment.....	5
Tree Assessment.....	5
Legislative Assessment.....	6
Retention Assessment.....	6
Tree Protection Assessment.....	7
Conclusion.....	8
Definitions.....	9
References.....	9

Appendix A - Tree Assessment Methodology

Appendix B - Tree Assessment Findings

Appendix C - Mapping

Appendix D - Tree Assessment Summary

Report Reference Number: ATS7424-10-20HalRdPTA

Report prepared for  
Belinda Monier on behalf of Hallan Nominees Pty Ltd

Author  
Marcus Lodge, Consulting Arborist, Arborman Tree Solutions Pty Ltd  
James Ross, Consulting Arborist - Intern, Arborman Tree Solutions Pty Ltd

## Executive Summary

Arborman Tree Solutions was engaged by Hallan Nominees Pty Ltd to undertake Preliminary Tree Assessment of the trees within the identified survey area at 10-20 Halls Road, Highbury. The purpose of this assessment is to evaluate tree suitability for retention through a Tree Retention Rating system and provide Preliminary Tree Protection advice for trees to be retained. This assessment provides information in accordance with Australian Standard *AS4970-2009 Protection of trees on development sites (AS4970-2009)* and relevant legislation.

The assessment considered twenty-eight trees which are identified as a mix of native and indigenous species. The majority of trees are considered to be in Good to Fair overall condition and have extended useful life expectancies; only Trees 11 and 28 are displaying poor overall condition as evidenced by their significantly degraded structural features.

The assessment has identified there are nine Significant trees, and nineteen Regulated trees as defined in the *Planning, Development and Infrastructure Act 2016*. The remaining trees in the surveyed area are either Exempt from regulation or Unregulated. Significant and Regulated trees should be preserved if they meet aesthetic and/or environmental criteria as described in the *Planning, Development and Infrastructure (General) Regulations 2017*. Trees 1, 16, 17, 19, and 23 to 25 are considered to provide 'important' aesthetic and/or environmental benefit which would warrant their protection; the remaining trees whilst providing benefit in this regard do not do so to a level that would be considered to be 'important'.

The assessment has identified Trees 1, 16, 17, 19, and 23 to 25 as having a High Retention Rating. It is my opinion, as Regulated/Significant trees with a High Retention Rating, these trees display one or more attributes described within the *Planning, Development and Infrastructure Act 2016*, that warrant their retention as important trees.

The remaining trees achieve a Moderate or Low Retention Rating. Trees that achieve a Moderate Retention Rating are worthy of consideration for retention if they can be adequately protected in an otherwise reasonable and expected development. The trees that achieve a Low Retention Rating should not form a constraint to an otherwise reasonable and expected development.

A Project Arborist should be appointed to assist in the design around trees to be retained; the development impacts and tree protection requirements are to be included in a Development Impact Report and a Tree Protection Plan as identified in Australian Standard *AS4970 2009 Protection of trees on development sites*.

## Brief

Arborman Tree Solutions was engaged by Hallan Nominees Pty Ltd to undertake a Preliminary Tree Assessment of the trees within the identified survey area at 10-20 Halls Road, Highbury. The purpose of a Preliminary Tree Assessment is to evaluate trees' suitability for retention through a Tree Retention Rating system and provide Preliminary Tree Protection advice for trees to be retained.

In accordance with section 2.2 of the Australian Standard *AS4970-2009 Protection of trees on development sites* (2.2) the following information is provided:-

- Identification of the species of each tree and assessment of their health and structure.
- Identification of the legislative status of trees as defined in the *Planning, Development and Infrastructure Act 2016 (PDI Act 201)*.
- Tree Retention Rating for each tree, this has been applied to all trees regardless of legislative status.
- Identify the Tree Protection Zone for each tree.

## Documents and Information Provided

The following information was provided for the preparation of this assessment:-

- Email instruction on scope of works.
- Site Plan identifying the area to be assessed.

## Method

A site inspection was undertaken on Monday, 18 September 2023. Trees in this report were mapped using TreePlotter software and assigned a unique tree number. Individual tree findings were recorded using the Tree Assessment Form (TAF©). Tree Health Indicator (THI©), Tree Structure Assessment (TSA©) and Useful Life Expectancy (ULE), were assessed using the methodology described in Appendix A. Legislative Status was identified for all trees controlled under the relevant legislation.

Each tree's suitability for retention was determined by reviewing principles under the *PDI Act 2016* or relevant authority and applying these findings in the Tree Retention Rating (TRR©) method, as described within Appendix A. Tree Protection Zones were calculated using the Australian Standard *AS4970-2009* (Section 3.2). Mapping was performed using GIS and CAD software.

## Limitations

The following limitations apply to this Preliminary Tree Assessment:-

- *This report is intended to provide preliminary advice to assist with determining scope for development and guide design.*
- *The planning authority may require further information to approve the removal of any Significant Trees/Regulated trees.*
- *Tree management options such as pruning, soil amelioration, pathogen treatment and development impact are not part of this report; these should be considered in relation to any proposed development and would form part of a Tree Management Report or Arboricultural Impact Assessment.*

## Site Location



Figure 1: Site Location - 10-20 Halls Road, Highbury



## Assessment

Arborman Tree Solutions was engaged by Hallan Nominees Pty Ltd to undertake Preliminary Tree Assessment of the trees within the identified survey area at 10-20 Halls Road, Highbury. The purpose of this assessment is to evaluate tree suitability for retention through a Tree Retention Rating system and provide Preliminary Tree Protection advice for trees to be retained. This assessment provides information in accordance with Australian Standard *AS4970-2009 Protection of trees on development sites (AS4970-2009)* and relevant legislation.

### Tree Assessment

The assessment considered twenty-eight trees which are identified as a mix of native and indigenous species. The majority of trees are considered to be in Good to Fair overall condition and have extended useful life expectancies; only Trees 11 and 28 are displaying poor overall condition as evidenced by their significantly degraded structural features.

Table 1 - Tree Identification

Botanic Name	Common Name	Number of Trees	Origin	Tree Number
<i>Callitris gracilis</i>	Slender Cypress Pine	2	Indigenous	12 and 13
<i>Corymbia citriodora</i>	Lemon Scented Gum	1	Native	7
<i>Eucalyptus camaldulensis</i>	River Red Gum	24	Indigenous	1-6, 8, 10, 11 and 14-28
<i>Eucalyptus cladocalyx</i>	Sugar Gum	1	Native	9

Findings on individual tree health and condition is presented in Appendix B - Tree Assessment Findings.

***Eucalyptus camaldulensis*** (River Red Gum) is a large tree reaching 25-35 metres in height with a broad spreading crown, as the tree matures it can develop buttress roots from its very thick trunk. This species is the most widespread and best known of the Australian eucalypts. As the common name would suggest it is generally found along waterways and on floodplains, despite this it is a very adaptable tree and will grow in a wide variety of soils and conditions. An advantage of this species heritage as a floodplain tree for the urban environment is that it is able to adapt to changes in soil levels and moisture content to a much greater extent than many other eucalypts being able to withstand changes in soil level, drought and water logging for extended periods. This is at least partially due to the species characteristic of deep sinker roots within two to three metres of the trunk that can extend considerable depths into the soil to areas of permanent water.

***Corymbia citriodora*** (Lemon Scented Gum) is a tall, graceful tree usually 20-30 metres in ornamental plantings, although significantly taller (40 metres or more) in its natural habitat. It prefers medium to sandy loams or well-drained gravels with additional irrigation during the drier seasons. Lemon Scent Gum is most suited to parks, large gardens and avenues where it is able to grow to its full potential unhindered by the constraints of generally smaller urban blocks. Indigenous to central Queensland Lemon Scent Gum has become popular throughout many areas of Australia and is relatively common in Adelaide. This species has developed a reputation as a tree likely to drop branches, this reputation appears to be related to stock of poor genetic quality which is prone to forming included bark unions and therefore has a higher than average incidence of limb failure; modern seed collection and nursery reproduction practices are eliminating this as a problem.

***Eucalyptus cladocalyx*** (Sugar Gum) is a medium to tall forest or woodland tree with mostly smooth shedding bark creating an interesting and colourful surface to the trunk and branches, the crown is very open with the majority of foliage concentrated on the end of the branches. This species is endemic to South Australia where it occurs in only four locations naturally, the Flinders Ranges, Kangaroo Island, the Cleve area and the lower Eyre Peninsula. The two populations on Eyre Peninsular are different in habit and form and are commonly referred to as *Eucalyptus cladocalyx* 'Nana' (Dwarf Sugar Gum). All other specimens and/or stands of this



species have been planted; many of the existing trees were planted by early farmers to create windbreaks and/or supply firewood. Sugar Gum is very adaptable and can grow in variable soil and climatic conditions and is relatively tolerant of root damage and compaction. Sugar Gum does have a reputation for dropping branches, this phenomenon appears to be more common in stressed or declining trees and particularly in trees that have been previously lopped.

**Callitris gracilis** (Slender Cypress Pine) is a conifer indigenous to many parts of mainland Australia, including South Australia. This species grows well in poor, sandy to rocky soils with low rainfall, growing to about 5 metres with a rounded shape in open areas and up to 15 metres tall in woodland areas. The cones and seeds attract native birds such as cockatoos and galahs and are an important food source, as well as being the preferred nesting tree species for the critically endangered pink cockatoo. This tree can be used as an attractive feature tree, windbreak or in revegetation sites in South Australia.

### **Legislative Assessment**

The assessment has identified there are nine Significant trees, and nineteen Regulated trees as defined in the *Planning, Development and Infrastructure Act 2016*. The remaining trees in the surveyed area are either Exempt from regulation or Unregulated. Significant and Regulated trees should be preserved if they meet aesthetic and/or environmental criteria as described in the *Planning, Development and Infrastructure (General) Regulations 2017*. Trees 1, 7, 15-20 and 23-25 are considered to provide 'important' aesthetic and/or environmental benefit which would warrant their protection; the remaining trees whilst providing benefit in this regard do not do so to a level that would be considered to be 'important'.

Table 2 - Legislative Status

Legislative Status	Number of Trees	Tree Numbers
Significant	9	15, 17-23 and 25
Regulated	19	1-14, 16, 24 and 26-28

### **Retention Assessment**

Trees that provide an environmental and/or aesthetic contribution to the area, are in good condition will achieve a High or Moderate Retention Rating and conservation of these trees is encouraged. Trees that do not provide this contribution and/or are in poor condition will achieve a Low Retention Rating; these trees will display one or more of the following or similar attributes:-

- a) are in poor condition due to health and/or structural decline,
- b) have poor form that impacts their aesthetic value,
- c) provide limited environmental and/or aesthetic benefit,
- d) are a short lived species and/or have a short Useful Life Expectancy,
- e) represent a material risk to persons or property, and
- f) are identified as causing or threatening to cause substantial damage to a structure of value.

The assessment has identified Trees 1, 16, 17, 19, and 23 to 25 as having a High Retention Rating. It is my opinion, as Regulated/Significant trees with a High Retention Rating, these trees display one or more attributes described within the *Planning, Development and Infrastructure Act 2016*, that warrant their retention.

The assessment has identified Trees 2-15, 18, 20-22 and 26 as having a Moderate Retention Rating. It is my opinion as Regulated trees with a Moderate Retention Rating, these trees do not display attributes described within the *Planning, Development and Infrastructure Act 2016* that would warrant their retention. However, they are worthy of consideration for retention if they can be adequately protected in an otherwise reasonable and expected development.

The remaining two trees, Trees 27 and 28 achieved a Low Retention Rating indicating that development constraint, alternative designs or tree-friendly construction methodologies are not warranted. As such, tree removal could be considered to achieve development (this includes Regulated/Significant trees).

Table 3 - Retention Rating

Retention Rating	Number of Trees	Tree Numbers
High	7	1, 16, 17, 19 and 23-25
Moderate	19	2-15, 18, 20-22 and 26
Low	2	27 and 28

**Note:** *There are no trees on site that are identified as ‘Special Value’ trees due to their cultural or environmental value that would override their retention rating.*

### **Tree Protection Assessment**

Australian Standard AS4970-2009 *Protection of trees on development sites* prescribes the use of a Tree Protection Zone (TPZ) as the principle means of protecting trees throughout the development process. If encroachment is required within any TPZ, the Project Arborist should be consulted to identify impacts and recommend mitigation measures. The Tree Protection Zones should be used to inform any future development of the site, maintaining these areas as open space.

The Tree Protection Zone radii for these trees, as measured from the centre of the trunk, have been calculated and are shown below in Appendix C - Mapping; alterations to the area around these trees should be restricted in accordance with the guidelines of AS4970-2009.

## Conclusion

The assessment has identified Trees 1, 16, 17, 19, and 23 to 25 as having a High Retention Rating. It is my opinion as Regulated/Significant trees with a High Retention Rating, these trees display one or more attributes described within the *Planning, Development and Infrastructure Act 2016*, that warrant their retention as important trees.

The removal of these trees is highly unlikely to be approved unless it can be demonstrated that:-

- a. they are substantially restricting an otherwise reasonable and expected development, and
- b. alternative design solutions that retain these trees and achieve any form of reasonable and expected development are not available.

The Tree Protection Zone for these trees has been calculated and is measured from the centre of the trunk; alterations to the area around these trees should be restricted in accordance with the guidelines of AS4970-2009. It is recommended the design of any future development consider the extent of the TPZ and minimise all potential encroachments to ensure this tree is not impacted. The TPZ for each tree is available in the Tree Assessment Findings and below in Appendix C - Mapping.

The remaining trees achieve a Moderate or Low Retention Rating. Trees that achieve a Moderate Retention Rating are worthy of consideration for retention if they can be adequately protected in an otherwise reasonable and expected development. The trees that achieve a Low Retention Rating should not form a constraint to an otherwise reasonable and expected development.

Regulated and/or Significant trees require Development Approval prior to any tree damaging activity occurring, regardless of their retention rating. This includes development activities within the TPZ, tree removal and potentially pruning.

A Project Arborist should be appointed to assist in the design around trees to be retained; the development impacts and tree protection requirements are to be included in a Development Impact Report and a Tree Protection Plan as identified in Australian Standard *AS4970 2009 Protection of trees on development sites*.

Thank you for the opportunity to provide this report. Should you require further information, please contact us and we will be happy to be of assistance.

Yours sincerely,



**MARCUS LODGE**  
**Senior Consulting Arborist**  
**Institute of Australian Consulting Arboriculturists –**  
**Accredited Consultant**  
**Australian Arborist License AL11**  
**Diploma in Arboriculture**  
**International Society of Arboriculture – Tree Risk**  
**Assessment**  
**VALID Tree Risk Assessment (VALID)**  
**Native Vegetation Council Trained Arborist**



**JAMES ROSS**  
**Consulting Arborist - Intern**  
**Diploma of Arboriculture – AHC50516 (Enrolled)**  
**Diploma of Applied Horticultural Science**  
**VALID Tree Risk Assessment (VALID)**



## Definitions

<b>Circumference:</b>	trunk circumference measured at one metre above ground level. This measurement is used to determine the status of the tree in relation to the <i>Planning, Development and Infrastructure Act 2016</i> .
<b>Diameter at Breast Height (DBH):</b>	trunk diameter measured at 1.4 metres above ground level used to determine the Tree Protection Zone as described in Australian Standard AS4970-2009 <i>Protection of trees on development sites</i> .
<b>Diameter at Root Buttress (DRB):</b>	trunk diameter measured just above the root buttress as described in Australian Standard AS4970-2009 <i>Protection of trees on development sites</i> and is used to determine the Structural Root Zone.
<b>Tree Damaging Activity</b>	Tree damaging activity includes those activities described within the <i>Planning, Development and Infrastructure Act 2016</i> such as removal, killing, lopping, ringbarking or topping or any other substantial damage such as mechanical or chemical damage, filling or cutting of soil within the TPZ. Can also include forms of pruning above and below the ground.
<b>Tree Protection Zone (TPZ):</b>	area of root zone that should be protected to prevent substantial damage to the tree's health.
<b>Structural Root Zone (SRZ):</b>	calculated area within the tree's root zone that is considered essential to maintain tree stability.
<b>Project Arborist</b>	A person with the responsibility for carrying out a tree assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification. The Project Arborist must be competent in arboriculture, having acquired through training, minimum Australian Qualification Framework (AQTF) Level 5, Diploma of Horticulture (Arboriculture) and/or equivalent experience, the knowledge and skills enabling that person to perform the tasks required by this standard.
<b>Important:</b>	<p>The following definition of important was described by Commissioner Nolan of the Environment, Resource and Development Court in the case of <i>Savoy Developments Pty Ltd v Town of Gawler</i> [2013] SAERDC 32.</p> <p><i>"In my view, for habitat to be raised to the level of 'important' (as sought by Objective 2(d)), it must be beyond that likely to be expected in any mature tree of indigenous origins – that is, it is beyond the normal level that might be expected or that it is so unique or special that it may be considered important. From the evidence before me I do not consider the trees to provide "important habitat for native fauna"."</i></p> <p>This definition of important, whilst in this case relating to Habitat Value, has been related when looking at all Objectives that use the term "Important".</p>
<b>Notable:</b>	The <i>Planning, Development and Infrastructure Act 2016</i> and local Development Plan also use the term "notable" when assessing the visual contribution of a tree. The Environment, Resource and Development Court does not appear to have defined the term "notable" as applied in the <i>Planning, Development and Infrastructure Act 2016</i> however, when researching definitions it is clear that this term bears equal or similar weight as the term "important" and as such for a tree to be "notable" it has to have a similar level of attributes to an important tree. When compared to a typical example of the species for a tree to be described as "notable" it would also be considered to be a noteworthy, remarkable, outstanding, momentous, memorable, impressive, extraordinary or an exceptional example of the species or of greater importance in regard to its value as a visual element than other similar sized example of the species.
<b>PDI Act 2016:</b>	the <i>Planning, Development and Infrastructure Act 2016</i> and associated <i>Planning, Development and Infrastructure (General) Regulations 2017</i> includes provisions for the control of Regulated and Significant Trees within the 18 metropolitan Adelaide councils, townships in the Adelaide Hills Council and parts of the Mount Barker Council; these provisions do not apply in areas outside of these councils.
<b>Regulated Tree:</b>	is recognised as any tree in the prescribed council areas with a trunk circumference of two metres or more. In the case of trees with multiple trunks, those with trunks with a total circumference of two metres or more and an average circumference 625 mm or more. The circumference is measured at a point one metre above natural ground level.
<b>Significant Tree:</b>	The <i>Planning, Development and Infrastructure Act 2016</i> identifies a Significant Tree as any tree in Metropolitan Adelaide or townships in the Adelaide Hills Council or parts of the Mount Barker Council with a trunk circumference of three metres or more. In the case of trees with multiple trunks, those with trunks with a total circumference of three metres or more and an average circumference 625 mm or more. The circumference is measured at a point one metre above natural ground level.
<b>Unregulated or Exempt Tree:</b>	unregulated and/or exempt trees have a trunk circumference of less than two metres and/or are excluded from control due to species, proximity to a structure or other reason as defined in the <i>Planning, Development and Infrastructure (General) Regulations 2017</i> .
<b>Native Vegetation Act 1991:</b>	Native vegetation refers to any naturally occurring local plant species that is indigenous to South Australia, from small ground covers and native grasses to large trees and water plants. It also includes naturally occurring regrowth and in certain circumstances, dead trees. In some circumstances, the management of native vegetation is protected by legislation.

## References

- Australian Standard AS4970–2009 **Protection of trees on development sites**: Standards Australia.
- Matheny N. Clark J. 1998: **Trees and Development a Technical Guide to Preservation of Trees During Land Development**. International Society of Arboriculture, Champaign, Illinois, USA.
- Dunster J.A., Smiley E.T., Metheny N. and Lilly S. 2013. **Tree Risk Assessment Manual**. International Society of Arboriculture, Champaign, Illinois USA.

## Appendix A - Tree Assessment Methodology

## Tree Assessment Form (TAF©)

Record	Description
<b>Tree</b>	In botanical science, a tree is a perennial plant which consists of one or multiple trunks which supports branches and leaves. Trees are generally taller than 5 metres and will live for more than ten seasons, with some species that live for hundreds or thousands of seasons.
<b>Genus and Species</b>	Botanical taxonomy of trees uses the binominal system of a genus and species, often there are subspecies and subgenus as well as cultivars. When identifying tree species, identification techniques such as assessing the tree's form, flower, stem, fruit and location are used. Identifying the right species is critical in assessing the tree's legalisation and environmental benefit. All efforts are made to correctly identify each tree to species level, where possible. Genus is the broader group to which the tree belongs e.g. <i>Eucalyptus</i> , <i>Fraxinus</i> and <i>Melaleuca</i> . Species identifies the specific tree within the genus e.g. <i>Eucalyptus camaldulensis</i> , <i>Fraxinus griffithi</i> or <i>Melaleuca styphelioides</i> . Trees will also be assigned the most commonly used Common Name. Common Names are not generally used for identification due to their nonspecific use, i.e. <i>Melia azedarach</i> is commonly known as White Cedar in South Australia but is also called Chinaberry Tree, Pride of India, Bead-tree, Cape Lilac, Syringa Berrytree, Persian Lilac, and Indian Lilac; equally similar common names can refer to trees from completely different Genus e.g. Swamp Oak, Tasmanian Oak and English Oak are from the <i>Casuarina</i> , <i>Eucalyptus</i> and <i>Quercus</i> genus's respectively.
<b>Height</b>	Tree height is estimated by the arborist at the time of assessment. Tree height is observed and recorded in the following ranges; <5m, 5-10m, 10-15m and >20m.
<b>Spread</b>	Tree crown spread is estimated by the arborist at the time of assessment and recorded in the following ranges <5m, 5-10m, 10-15m, 15-20m, >20m.
<b>Health</b>	Tree health is assessed using the Arborman Tree Solutions - Tree Health Assessment Method that is based on international best practice.
<b>Structure</b>	Tree structure is assessed using Arborman Tree Solutions - Tree Structure Assessment Method that is based on international best practice.
<b>Tree Risk Assessment</b>	Tree Risk is assessed using Tree Risk Assessment methodology. The person conducting the assessment has been trained in the International Society of Arboriculture Tree Risk Assessment Qualification (TRAQ), Quantified Tree Risk Assessment (QTRA) and/or VALID Tree Risk Assessment (VALID). Refer to the Methodology within the report for additional information.
<b>Legislative Status</b>	Legislation status is identified through the interpretation of the <i>Development Act 1993</i> , the <i>Natural Resource Management Act 2004</i> , the <i>Native Vegetation Act 1991</i> and/or any other legislation that may apply.
<b>Mitigation</b>	Measures to reduce tree risk, improve tree condition, remove structural flaws, manage other conditions as appropriate may be recommended in the form of pruning and is listed in the Tree Assessment Findings (Appendix B). Tree pruning is recommended in accordance with AS4373-2007 <i>Pruning amenity trees</i> where practicable. Where measures to mitigate risk is not possible and the risk is unacceptable, then tree removal or further investigation is recommended.



## Useful Life Expectancy (ULE)

ULE Rating	Definition
Surpassed	The tree has surpassed its Useful Life Expectancy. Trees that achieve a surpassed ULE may do so due to poor health, structure or form. Additionally, trees that are poorly located such as under high voltage powerlines or too close to structures may also achieve a surpassed ULE. Trees that achieve this status will be recommended for removal as there are no reasonable options to retain them.
<10 years	The tree displays either or both Poor Health and/or Structure and is considered to have a short Useful Life Expectancy of less than ten years. Some short-lived species such as <i>Acacia sp.</i> may naturally achieve a short ULE.
>10 years	The tree displays Fair Health or Structure and Good Health or Structure and is considered to have a Useful Life Expectancy of ten years or more. Trees identified as having a ULE of >10, will require mitigation such as pruning, stem injections or soil amelioration to increase their ULE.
>20 years	The tree displays Good Health and Structure and is considered to have an extended Useful Life Expectancy of more than twenty years.

## Maturity (Age)

Age Class	Definition
Senescent	The tree has surpassed its optimum growing period and is declining and/or reducing in size. May be considered as a veteran in relation to its ongoing management. Tree will have generally reached greater than 80% of its expected life expectancy.
Mature	A mature tree is one that has reached its expected overall size, although the tree's trunk is still expected to continue growing. Tree maturity is also assessed based on species; as some trees are much longer lived than others. Tree will have generally reached 20-80% of its expected life expectancy.
Semi Mature	A tree which has established but has not yet reached maturity. Normally tree establishment practices such as watering will have ceased. Tree will generally not have reached 20% of its expected life expectancy.
Juvenile	A newly planted tree or one which is not yet established in the landscape. Tree establishment practices such as regular watering will still be in place. Tree will generally be a newly planted specimen up to five years old; this may be species dependant.

## Tree Health Assessment (THA©)

Category	Description
Good	Tree displays normal vigour, uniform leaf colour, no or minor dieback (<5%), crown density (>90%). When a tree is deciduous, healthy axillary buds and typical internode length is used to determine its health. A tree with good health would show no sign of disease and no or minor pest infestation was identified. The tree has little to no pest and/or disease infestation.
Fair	Tree displays reduced vigour abnormal leaf colour, a moderate level of dieback (<15%), crown density (>70%) and in deciduous trees, reduced axillary buds and internode length. Minor pest and/or disease infestation potentially impacting on tree health. Trees with fair health have the potential to recover with reasonable remedial treatments.
Poor	Tree displays an advanced state of decline with low or no vigour, chlorotic or dull leaf colour, with high crown dieback (>15%), low crown density (<70%) and/or in deciduous trees, few or small axillary buds and shortened internode length. Pest and or disease infestation is evident and/or widespread. Trees with poor health are highly unlikely to recover with any remedial treatments; these trees have declined beyond the point of reversal.
Dead	The tree has died and has no opportunity for recovery.



## Tree Structural Assessment (TSA©)

Category	Description
Good	Little to no branch failure observed within the crown, well-formed unions, no included bark, good branch and trunk taper present, root buttressing and root plate are typical. Trees that are identified as having good health display expected condition for their age, species and location.
Fair	The tree may display one or more of the following a history of minor branch failure, included bark unions may be present however, are stable at this time, acceptable branch and trunk taper present, root buttressing and root plate are typical. Trees with fair structure will generally require reasonable remediation methods to ensure the tree's structure remains viable.
Poor	History of significant branch failure observed in the crown, poorly formed unions, unstable included bark unions present, branch and/or trunk taper is abnormal, root buttressing and/or root plate are atypical.
Failed	The structure of the tree has or is in the process of collapsing.

## Tree Form Assessment (TFA©)

Category	Description
Good	Form is typical of the species and has not been altered by structures, the environment or other trees.
Fair	The form has minor impacts from structures, the environment or adjacent trees which has altered its shape. There may be slight phototropic response noted or moderate pruning which has altered the tree's form.
Poor	The tree's form has been substantially impacted by structures, the environment, pruning or other trees. Phototropic response is evident and unlikely to be corrected.
Atypical	Tree form is highly irregular due to structures or other trees impacting its ability to correctly mature. Extreme phototropic response is evident; or the tree has had a substantially failure resulting in its poor condition, or extensive pruning has altered the tree's form irreversibly.

## Priority

Category	Description
Low	Identified works within this priority should be carried out within 12 months.
Medium	Identified works within this priority should be carried out within 6 months.
High	Identified works within this priority should be carried out within 3 months.
Urgent	Identified works within this priority should be carried out immediately. Works within this priority rating will be brought to attention of the responsible person at the time of assessment.

## Tree Retention Rating (TRR)

The Tree Retention Rating is based on a number of factors that are identified as part of the standard tree assessment criteria including Condition, Size, Environmental, Amenity and Special Values. These factors are combined in a number of matrices to provide a Preliminary Tree Retention Rating and a Tree Retention Rating Modifier which combine to provide a Tree Retention Rating that is measurable, consistent and repeatable

### Preliminary Tree Retention Rating

The Preliminary Tree Retention Rating is conducted assessing Tree Health and Structure to give an overall Condition Rating and Height and Spread to give an overall Size Rating. The following matrices identify how these are derived.

Condition Matrix				
Structure	Health			
	Good	Fair	Poor	Dead
Good	Good	Fair	Poor	Very Poor
Fair	Fair	Fair	Poor	Very Poor
Poor	Poor	Poor	Poor	Very Poor
Failed	Very Poor	Very Poor	Very Poor	Very Poor

Size Matrix					
Spread	Height				
	>20	15-20	10-15	5-10	<5
>20	Very Large	Large	Medium	Medium	Medium
15-20	Large	Large	Medium	Medium	Medium
10-15	Medium	Medium	Medium	Medium	Medium
5-10	Medium	Medium	Medium	Small	Small
<5	Medium	Medium	Medium	Small	Very Small

The results from the Condition and Size Matrices are then placed in the Preliminary Tree Retention Rating Matrix.

Preliminary Tree Retention Rating				
Size	Condition			
	Good	Fair	Poor	Very Poor
Very Large	High	Moderate	Low	Low
Large	High	Moderate	Low	Low
Medium	Moderate	Moderate	Low	Low
Small	Moderate	Moderate	Low	Low
Very Small	Moderate	Low	Low	Low

The Preliminary Tree Retention Rating gives a base rating for all trees regardless of other environmental and/or amenity factors and any Special Value considerations. The Preliminary Tree Retention Rating can only be modified if these factors are considered to be of high or low enough importance to warrant increasing or, in a few cases, lowering the original rating.

### Tree Retention Rating Modifier

The Preliminary Tree Retention Rating is then qualified against the recognised Environmental and Amenity benefits that trees present to the community thereby providing a quantitative measure to determine the overall Tree Retention Rating. Data is collected in relation to Environmental and Amenity attributes which are compared through a set of matrices to produce a Tree Retention Rating Modifier.

Environmental Matrix				
Origin	Habitat			
	High Habitat	Medium	Low	No Habitat
Indigenous	High	High	Moderate	Moderate
Native	High	Moderate	Moderate	Low
Exotic	Moderate	Moderate	Low	Low
Weed	Moderate	Low	Low	Low

Amenity Matrix				
Character	Aesthetics			
	High	Moderate	Low	None
High	High	High	Moderate	Moderate
Moderate	High	Moderate	Moderate	Low
Low	Moderate	Moderate	Low	Low
None	Moderate	Low	Low	Low

Tree Retention Rating Modifier			
Amenity	Environment		
	High	Moderate	Low
High	High	High	Moderate
Moderate	High	Moderate	Moderate
Low	Moderate	Moderate	Low

### Tree Retention Rating

The results of the Preliminary Tree Retention Rating and the Tree Retention Rating Modifier matrices are combined in a final matrix to give the actual Tree Retention Rating.

Tree Retention Rating Matrix			
Tree Retention Rating Modifier	Preliminary Tree Retention Rating		
	High	Moderate	Low
High	High	High	Moderate
Moderate	Moderate	Moderate	Low
Low	Moderate	Low	Low

### **Special Value Trees**

There are potentially trees that have Special Value for reasons outside of normal Arboricultural assessment protocols and therefore would not have been considered in the assessment to this point; to allow for this a Special Value characteristic that can override the Tree Retention Rating can be selected. Special Value characteristics that could override the Tree Retention Rating would include factors such as the following:

#### *Cultural Values*

Memorial Trees, Avenue of Honour Trees, Aboriginal Heritage Trees, Trees planted by Dignitaries and various other potential categories.

#### *Environmental Values*

Rare or Endangered species, Remnant Vegetation, Important Habitat for rare or endangered wildlife, substantial habitat value in an important biodiversity area and various other potential categories.

Where a tree achieves one or more Special Value characteristics the Tree Retention Rating will automatically be overridden and assigned the value of Important.

### **Tree Retention Rating Definitions**

- Special Value** These trees will in all instances be required to be retained within any future development/redevelopment. It is highly unlikely that trees that achieve this rating would be approved for removal or any other tree damaging activity. Trees will have either important cultural or environmental value, that warrant their protection regardless of other Arboricultural considerations.
- High** These trees will in most instances be required to be retained within any future development/redevelopment. It is unlikely that trees that achieve this rating would be approved for removal or any other tree damaging activity. Trees in this category will provide a high level of amenity and/or environmental benefit and are still good overall condition.
- Moderate** Trees with a moderate retention rating provide limited environmental benefit and amenity to the area. These trees may be semi mature or exotic species with limited environmental value. Moderate trees may also be large trees that display fair overall condition.
- Low** These trees may not be considered suitable for retention in a future development or redevelopment. These trees will either be young trees that are easily replaced or in poor overall condition. Trees in this category do not warrant special works or design modifications to allow for their retention. Trees in this category are likely to be approved for removal and/or other tree damaging activity in an otherwise reasonable and expected development. Protection of these trees, where they are identified to be retained, should be consistent with Australian Standard AS4970-2009 *Protection of trees on development sites*.

## Appendix B - Tree Assessment Findings

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	15-20 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Good
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	11.28 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>High</b>
-------------------------	-------------

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.



## River Red Gum

Inspected:	18 September 2023
Height:	15-20 metres
Spread:	15-20 metres
Health:	Good
Structure:	Good
Form:	Fair
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	10.08 metres



### Observations

This tree has been subject powerline clearance otherwise it displays good health and structure. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. The crown of this tree has been significantly modified for powerline clearance.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	15-20 metres
Spread:	10-15 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	7.92 metres



### Observations

This tree is in good overall condition and has adapted to its local environment.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

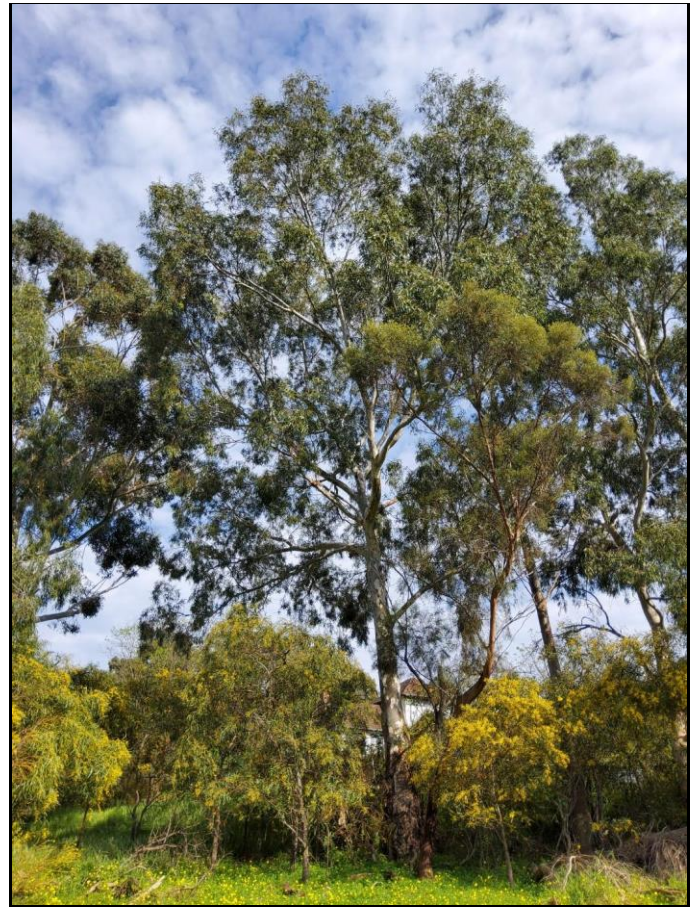
This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	10-15 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Good
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	10.80 metres



### Observations

This tree is in good overall condition and has adapted to its local environment.

### Legislative Status

Regulated

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	>20 metres
Spread:	10-15 metres
Health:	Good
Structure:	Fair
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>10 years
Tree Protection Zone:	8.40 metres



### Observations

The tree is in good health, although it does retain an increased percentage of deadwood, and has a reduced structure rating due to an included bark union in the primary trunk division, and a history of multiple branch failures.

### Legislative Status

Regulated

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

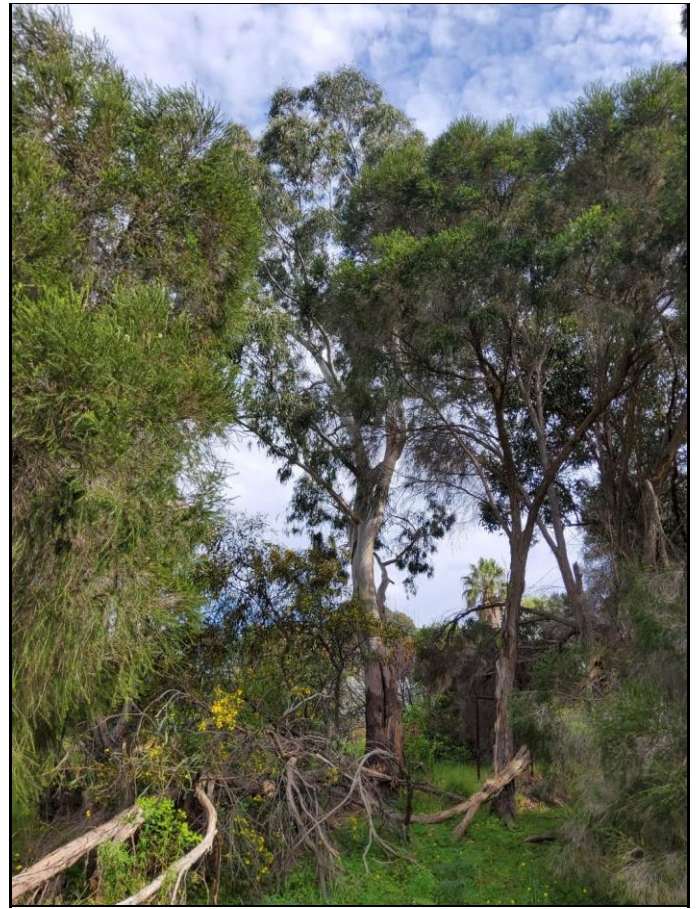
### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

Inspected:	18 September 2023
Height:	10-15 metres
Spread:	10-15 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	8.40 metres



### Observations

This tree is in good overall condition and has adapted to its local environment.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## Lemon Scented Gum

Inspected:	18 September 2023
Height:	>20 metres
Spread:	10-15 metres
Health:	Good
Structure:	Fair
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>10 years
Tree Protection Zone:	9.36 metres



### Observations

This tree is considered to be in fair overall condition due to a moderate history of branch failure and a low level of deadwood within the crown. Branch failures and deadwood are in the lower half of the crown with failed branch sizes from 100-200mm in diameter

### Legislative Status

Regulated

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	10-15 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Good
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	9.60 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Additionally, there is evidence of borer insect activity at the base of the trunk, however it does not appear to be effecting the health of the tree.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## Sugar Gum

Inspected:	18 September 2023
Height:	15-20 metres
Spread:	15-20 metres
Health:	Good
Structure:	Fair
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>10 years
Tree Protection Zone:	10.56 metres



### Observations

This tree is considered to be in fair overall condition due to a moderate history of primary and secondary branch failure and a low level of deadwood within the crown.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

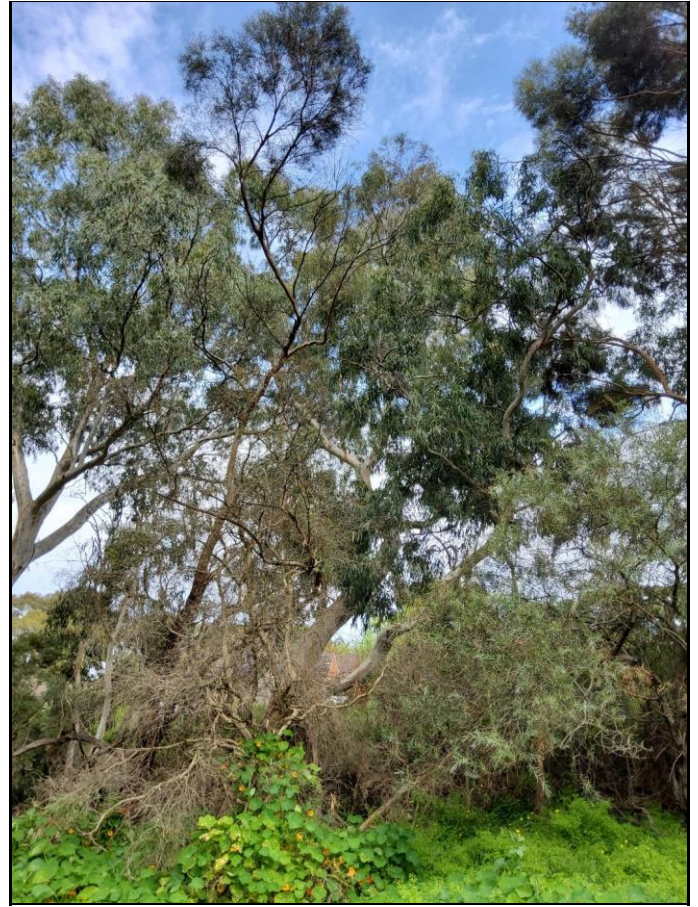
<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	10-15 metres
Spread:	10-15 metres
Health:	Good
Structure:	Good
Form:	Fair
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	10.20 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. This tree has a bias phototropic lean due to proximity with adjacent trees.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	10-15 metres
<b>Health:</b>	Fair
<b>Structure:</b>	Poor
<b>Form:</b>	Good
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	<10 years
<b>Tree Protection Zone:</b>	10.68 metres



### Observations

This tree is considered to be in poor overall condition as evidenced by the unstable and partially failed union in the primary structure and the substantial level of associated decay. This tree has an increased volume of deadwood and history of large diameter branch failures. Additionally, there are two wounds with decay on the trunk, one at the base and the other approximately 5m above ground level.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## Slender Cypress Pine

Inspected:	18 September 2023
Height:	5-10 metres
Spread:	<5 metres
Health:	Good
Structure:	Good
Form:	Fair
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	5.08 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is evidence of early stage included bark however this is not significant or impacting the structural rating for this tree.

### Legislative Status

Regulated

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## Slender Cypress Pine

Inspected:	18 September 2023
Height:	5-10 metres
Spread:	<5 metres
Health:	Good
Structure:	Poor
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	<10 years
Tree Protection Zone:	5.29 metres



### Observations

This tree is considered to be in poor overall condition due to the presence of an unstable included bark union in the primary structure.

### Legislative Status

Regulated

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

### Retention Rating

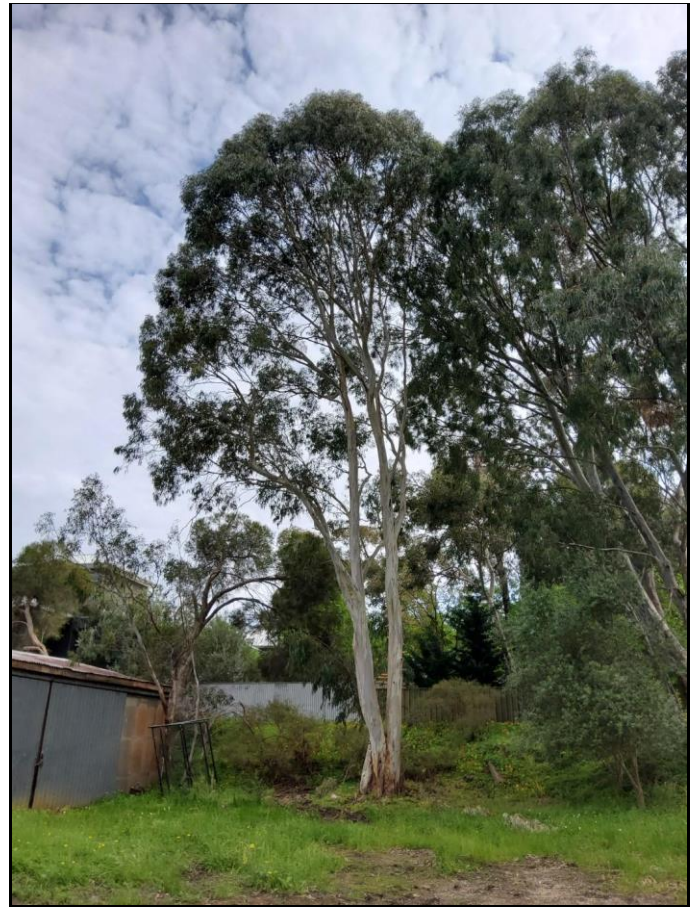
Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	5-10 metres
<b>Health:</b>	Good
<b>Structure:</b>	Fair
<b>Form:</b>	Fair
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	>10 years
<b>Tree Protection Zone:</b>	7.78 metres



### Observations

This tree is in good health however has fair overall condition due to the presence of stable included bark in the primary trunk division. There is deadwood within the crown but not at a level that would indicate reduced health. Additionally there is obvious mechanical damage on the trunk.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	15-20 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Fair
<b>Trunk Circumference:</b>	>3 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	10.50 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	15-20 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Good
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	10.80 metres



### Observations

This tree is in good overall condition and has adapted to its local environment. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>High</b>
-------------------------	-------------

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.



## River Red Gum

Inspected:	18 September 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	15.00 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Lower primary limbs removed 3-6 years ago.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

High

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	15-20 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Fair
<b>Trunk Circumference:</b>	>3 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	12.67 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	15-20 metres
Spread:	15-20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	11.40 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

<b>Legislative Status</b>	<b>Significant</b>
---------------------------	--------------------

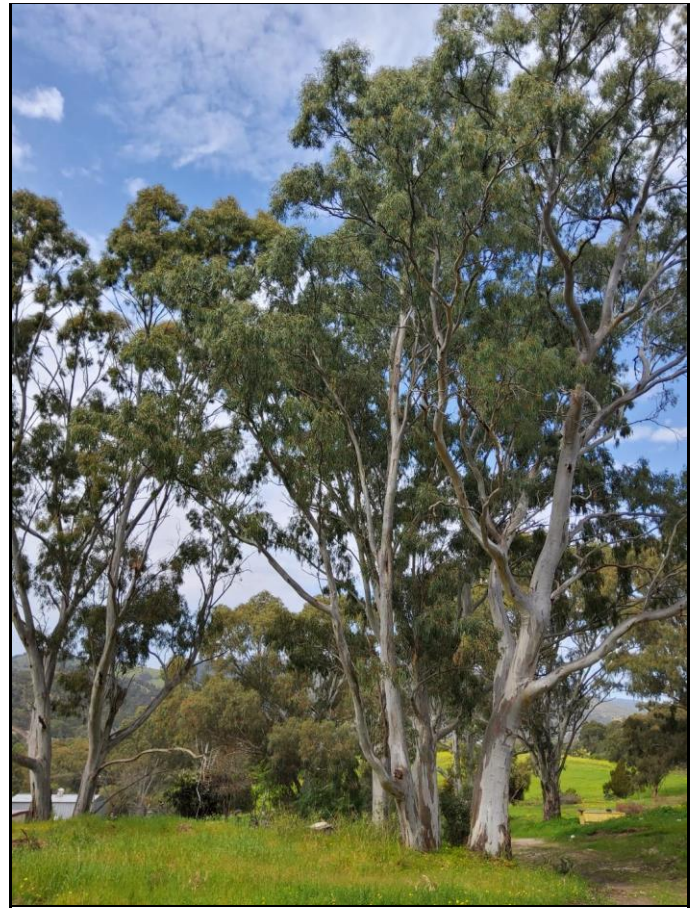
This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>High</b>
-------------------------	-------------

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.

## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	10-15 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Fair
<b>Trunk Circumference:</b>	>3 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	8.92 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	15-20 metres
<b>Spread:</b>	15-20 metres
<b>Health:</b>	Good
<b>Structure:</b>	Good
<b>Form:</b>	Fair
<b>Trunk Circumference:</b>	>3 metres
<b>Useful Life Expectancy:</b>	>20 years
<b>Tree Protection Zone:</b>	9.01 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Size estimated, unable to walk around base of tree.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.

## River Red Gum

Inspected:	18 September 2023
Height:	15-20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Fair
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	15.00 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

### Retention Rating

Moderate

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	>20 metres
Spread:	15-20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	14.28 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

<b>Legislative Status</b>	<b>Significant</b>
---------------------------	--------------------

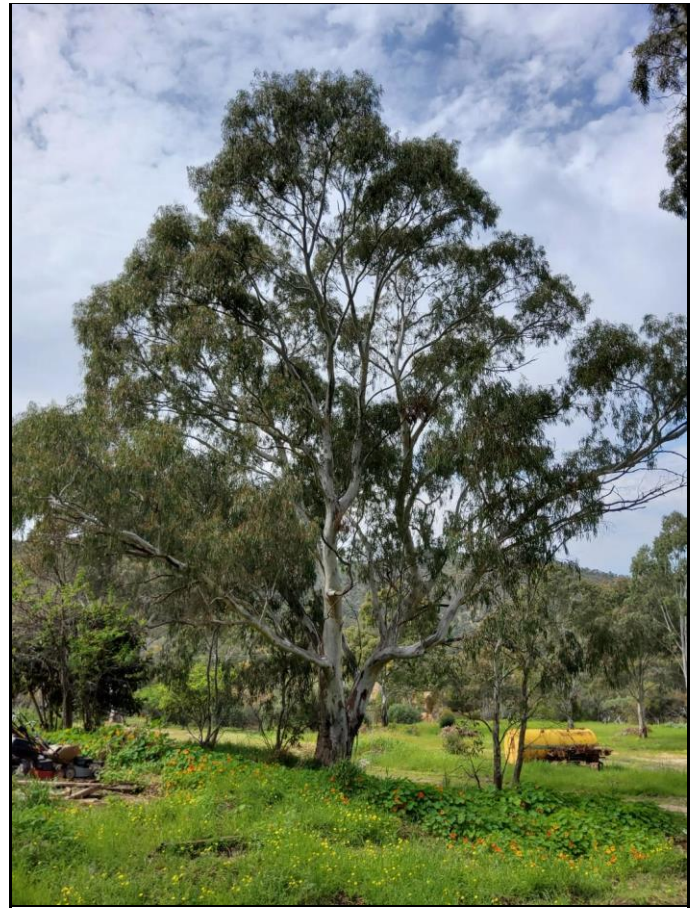
This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>High</b>
-------------------------	-------------

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.

## River Red Gum

Inspected:	18 September 2023
Height:	10-15 metres
Spread:	15-20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	10.80 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Additionally, there is obvious mechanical damage to the trunk.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>High</b>
-------------------------	-------------

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.



## River Red Gum

Inspected:	18 September 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	15.00 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. There is also a wound on the primary stem from historic branch failure which has almost occluded.

### Legislative Status

Significant

This tree has a trunk circumference greater than three metres and is not subject to any exemption from regulation and therefore it is identified as a Significant Tree as defined in the PDI Act 2016.

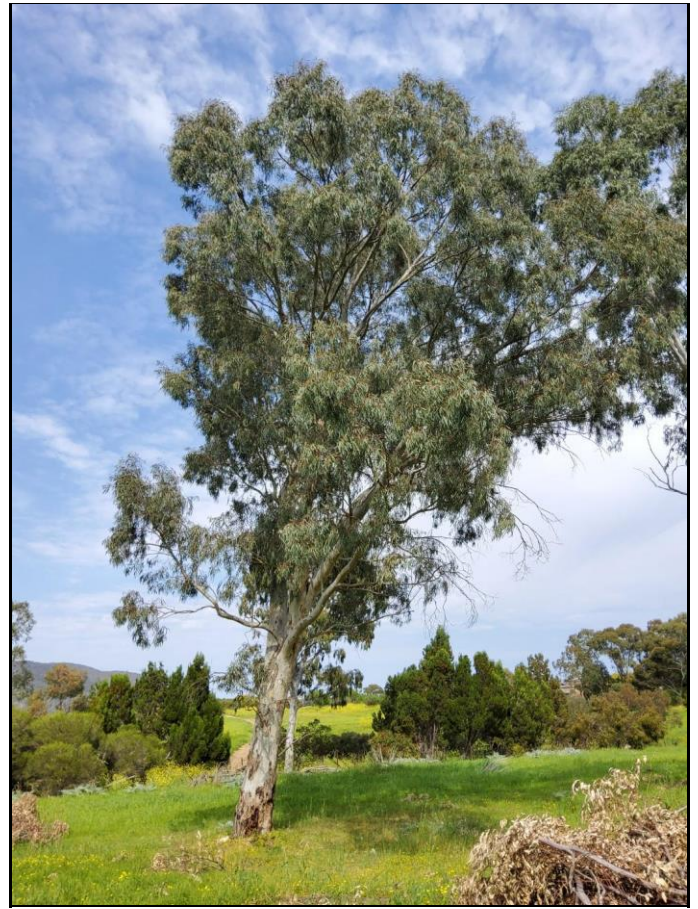
### Retention Rating

High

This tree has a High Retention Rating and all reasonable design considerations should be employed to retain it wherever possible. It is unlikely that tree damaging activity, including removal, will be approved in relation to the management of this tree.

## River Red Gum

Inspected:	18 September 2023
Height:	10-15 metres
Spread:	10-15 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years
Tree Protection Zone:	8.04 metres



### Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Moderate</b>
-------------------------	-----------------

This tree has a Moderate Retention Rating and could be considered for retention if it can be protected. Tree damaging activity, including removal, may be approved if it is shown that reasonable alternative design solutions are not available.



## River Red Gum

Inspected:	18 September 2023
Height:	10-15 metres
Spread:	5-10 metres
Health:	Good
Structure:	Fair
Form:	Fair
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>10 years
Tree Protection Zone:	5.36 metres



### Observations

This tree is in good overall condition, however it appears to be regrowth from a previously removed tree.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Low</b>
-------------------------	------------

This tree has a Low Retention Rating and should not form a material constraint to the redevelopment of this site. Tree damaging activity, including removal, is likely to be approved as part of an otherwise reasonable development.



## River Red Gum

<b>Inspected:</b>	18 September 2023
<b>Height:</b>	5-10 metres
<b>Spread:</b>	10-15 metres
<b>Health:</b>	Good
<b>Structure:</b>	Poor
<b>Form:</b>	Poor
<b>Trunk Circumference:</b>	>2 metres
<b>Useful Life Expectancy:</b>	<10 years
<b>Tree Protection Zone:</b>	5.71 metres



### Observations

This tree has been regularly pruned to reduce their height, this pruning is severe and has destroyed the their natural form.

<b>Legislative Status</b>	<b>Regulated</b>
---------------------------	------------------

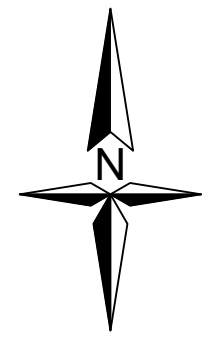
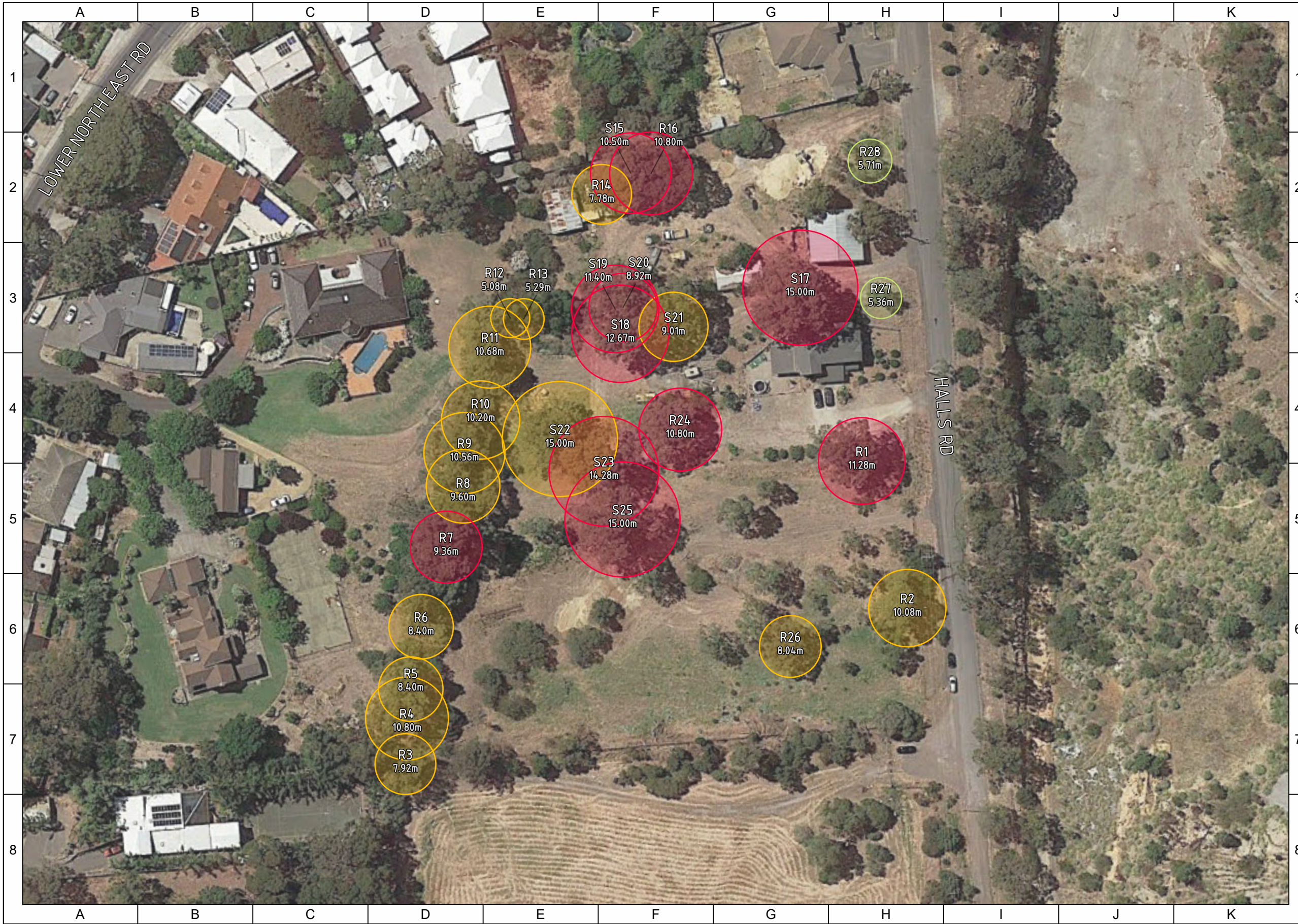
This tree has a trunk circumference greater than two metres but less than three metres and is not subject to any exemption from regulation and therefore it is identified as a Regulated Tree as defined in the PDI Act 2016.

<b>Retention Rating</b>	<b>Low</b>
-------------------------	------------

This tree has a Low Retention Rating and should not form a material constraint to the redevelopment of this site. Tree damaging activity, including removal, is likely to be approved as part of an otherwise reasonable development.

## Appendix C - Mapping





**Legislative Status**

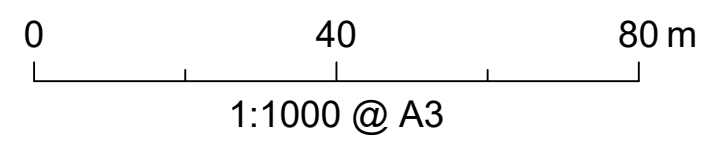
- S Significant
- R Regulated
- E Exempt
- U Unregulated

**Retention Rating**

- Special Value
- High
- Moderate
- Low

Date: 29/09/2023  
 Ref: ATS7424-10-20HalRdPTA  
 Arborman Tree Solutions  
 23 Aberdeen Street  
 Port Adelaide SA 5015  
 0418 812 967  
[www.arborman.com.au](http://www.arborman.com.au)

**Preliminary Tree Assessment**  
 10-20 Halls Road, Highbury





## Appendix D - Tree Assessment Summary

# Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Retention Rating	TPZ Radius	Observations
1	<i>Eucalyptus camaldulensis</i>	Regulated	High	11.28 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.
2	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	10.08 metres	This tree has been subject powerline clearance otherwise it displays good health and structure. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. The crown of this tree has been significantly modified for powerline clearance.
3	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	7.92 metres	This tree is in good overall condition and has adapted to its local environment.
4	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	10.80 metres	This tree is in good overall condition and has adapted to its local environment.
5	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	8.40 metres	The tree is in good health, although it does retain an increased percentage of deadwood, and has a reduced structure rating due to an included bark union in the primary trunk division, and a history of multiple branch failures.
6	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	8.40 metres	This tree is in good overall condition and has adapted to its local environment.
7	<i>Corymbia citriodora</i>	Regulated	Moderate	9.36 metres	This tree is considered to be in fair overall condition due to a moderate history of branch failure and a low level of deadwood within the crown. Branch failures and deadwood are in the lower half of the crown with failed branch sizes from 100-200mm in diameter

# Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Retention Rating	TPZ Radius	Observations
8	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	9.60 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Additionally, there is evidence of borer insect activity at the base of the trunk, however it does not appear to be effecting the health of the tree.
9	<i>Eucalyptus cladocalyx</i>	Regulated	Moderate	10.56 metres	This tree is considered to be in fair overall condition due to a moderate history of primary and secondary branch failure and a low level of deadwood within the crown.
10	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	10.20 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. This tree has a bias phototropic lean due to proximity with adjacent trees.
11	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	10.68 metres	This tree is considered to be in poor overall condition as evidenced by the unstable and partially failed union in the primary structure and the substantial level of associated decay. This tree has an increased volume of deadwood and history of large diameter branch failures. Additionally, there are two wounds with decay on the trunk, one at the base and the other approximately 5m above ground level.
12	<i>Callitris gracilis</i>	Regulated	Moderate	5.08 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is evidence of early stage included bark however this is not significant or impacting the structural rating for this tree.



# Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Retention Rating	TPZ Radius	Observations
13	<i>Callitris gracilis</i>	Regulated	Moderate	5.29 metres	This tree is considered to be in poor overall condition due to the presence of an unstable included bark union in the primary structure.
14	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	7.78 metres	This tree is in good health however has fair overall condition due to the presence of stable included bark in the primary trunk division. There is deadwood within the crown but not at a level that would indicate reduced health. Additionally there is obvious mechanical damage on the trunk.
15	<i>Eucalyptus camaldulensis</i>	Significant	Moderate	10.50 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.
16	<i>Eucalyptus camaldulensis</i>	Regulated	High	10.80 metres	This tree is in good overall condition and has adapted to its local environment. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.
17	<i>Eucalyptus camaldulensis</i>	Significant	High	15.00 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Lower primary limbs removed 3-6 years ago.
18	<i>Eucalyptus camaldulensis</i>	Significant	Moderate	12.67 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.

# Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Retention Rating	TPZ Radius	Observations
19	<i>Eucalyptus camaldulensis</i>	Significant	High	11.40 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.
20	<i>Eucalyptus camaldulensis</i>	Significant	Moderate	8.92 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Scratch marks on the trunk of this tree indicate that this tree is part of active koala habitat.
21	<i>Eucalyptus camaldulensis</i>	Significant	Moderate	9.01 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Size estimated, unable to walk around base of tree.
22	<i>Eucalyptus camaldulensis</i>	Significant	Moderate	15.00 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.
23	<i>Eucalyptus camaldulensis</i>	Significant	High	14.28 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.

# Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Retention Rating	TPZ Radius	Observations
24	<i>Eucalyptus camaldulensis</i>	Regulated	High	10.80 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. Additionally, there is obvious mechanical damage to the trunk.
25	<i>Eucalyptus camaldulensis</i>	Significant	High	15.00 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health. There is also a wound on the primary stem from historic branch failure which has almost occluded.
26	<i>Eucalyptus camaldulensis</i>	Regulated	Moderate	8.04 metres	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is obvious deadwood within the crown however this is within normal levels and not an indicator of reduced health.
27	<i>Eucalyptus camaldulensis</i>	Regulated	Low	5.36 metres	This tree is in good overall condition, however it appears to be regrowth from a previously removed tree.
28	<i>Eucalyptus camaldulensis</i>	Regulated	Low	5.71 metres	This tree has been regularly pruned to reduce their height, this pruning is severe and has destroyed their natural form.