arborman® tree solutions
PROFESSIONALS IN ARBORICULTURE

Tree Risk Assessment and Management Report

Site: Tree Climb, Botanic Gardens Bat Loop

Date: Friday, 21 July 2023

ATS7341-ABGBatLoopTRAM

Contents

Report Reference Number: ATS7341-ABGBatLoopTRAM

Report prepared for
Peter Corrie, Tree Climb (Botanic Gardens)

Author
Marcus Lodge, Consulting Arborist, Arborman Tree Solutions Pty Ltd

Executive Summary

Arborman Tree Solutions was asked to inspect all trees within Tree Climb, Botanic Gardens Bat Loop with a height greater than three metres to determine the levels of risk the trees represent to users of the area and to recommend risk management strategies.

The assessment considered twenty-three trees which are identified as a mix of one indigenous species, one native species and five exotic species. The trees are located in Botanic Park and are all planted amenity specimens forming part of the Adelaide Botanic Garden collection. The trees are considered to be in Good (19 trees) to Fair (4 trees) overall condition and have extended useful life expectancies. Tree 9 retains a dead hanging branch over the creek line and Tree 104 has one dead scaffold branch, if these trees are to be used in the course, they will require management to prevent these parts failing onto the infrastructure.

The trees are within Botanic Park and are under the care and control of the Board of the Botanic Gardens and State Herbarium and their removal is therefore exempt from control under the *Planning, Development and Infrastructure Act 2016* as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the *Planning, Development and Infrastructure (General) Regulations 2017*.

Using the International Society of Arboriculture (ISA) Tree Risk Assessment methodology (see Appendix A – Methodology) the subject trees were identified as having a Low Risk Rating. This methodology considers the Likelihood of Failure and Impact and the Consequences of such an event happening.

The assessment has considered twenty-three trees in the area of the proposed Tree Climb course, all of which are suitable for inclusion in the course. The trees are generally open crowned specimens with single straight trunks that will facilitate the installation of the required infrastructure.

To facilitate the installation and function of the proposed courses there are a number of recommendations that should be implemented. Trees 9 and 104 require Hazard Pruning to remove the hanging branch and the dead branch respectively.

The remaining trees do not require specific maintenance, however Trees 11 and 111 should be Monitored for further health decline on an annual basis. Additionally, it is recommended that consideration be given to improving their root zones through the installation of an irrigation system and organic mulch. Using mulch below the infrastructure will also reduce pedestrian usage and minimise compaction of the ground below the infrastructure and around the trees.

Brief

Arborman Tree Solutions was engaged to undertake a visual tree assessment and risk assessment of the identified trees within the survey area at Tree Climb, Botanic Gardens Bat Loop and provide guidance to manage the tree population and risk.

- Assess the health and structure of the subject trees.
- Assess the trees against the *Planning, Development and Infrastructure Act* 2016 (*PDI Act 2016*).
- Assessment of the Tree Risk Rating for the trees considering factors such as likelihood of failure, likelihood of impact and the consequences should these occur.
- Recommend management for the trees potentially including crown and root zone treatment and management principles.
- Provide any additional relevant information.

Findings of this assessment and recommendations are provided within Appendix B - Tree Assessment Findings as well as a map showing the location of the tree in Appendix C - Mapping.

Documents and Information Provided

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

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

Site Location

The trees are within the proposed course for the Tree Climb, Botanic Gardens Bat Loop.

Figure 1: Site Location - Tree Climb, Botanic Gardens Bat Loop

Methodology

Tree Management Framework

Trees are valuable environmental and amenity assets fostering a pleasing environment. However, trees, like all assets, have a useful life expectancy and require ongoing management to ensure they continue to provide value to the community. Arborman Tree Solutions Tree Management Framework© methodology has been used to assess the identified trees at Tree Climb, Botanic Gardens Bat Loop in July 2023. The framework is modelled on AS/NZS ISO 4360-1999 and is shown below in Figure 2. Risk Assessments are conducted by Qualified Arborists certified in the International Society of Arboriculture (ISA) "Tree Risk Assessment" methodology.

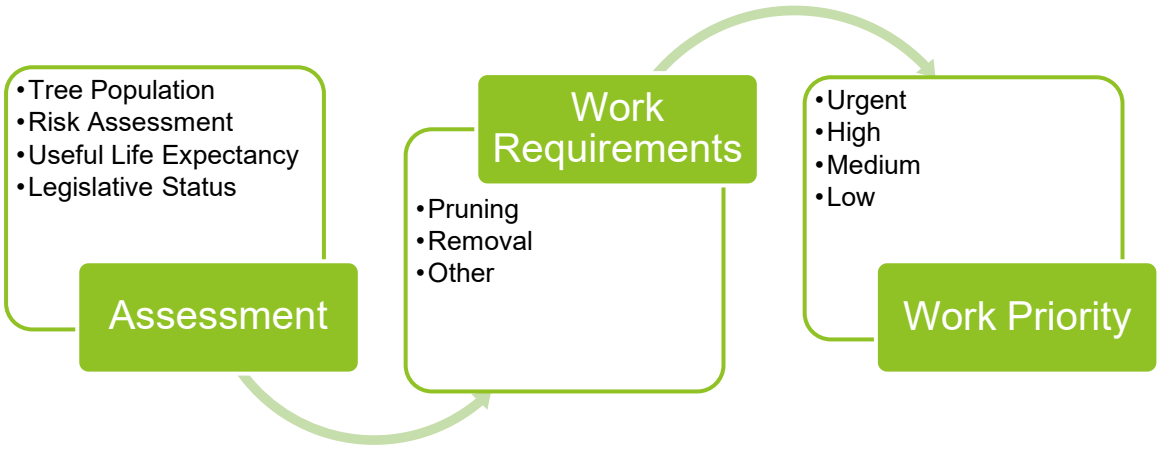


Figure 2 - Arborman Tree Solutions Tree Management Framework

The tree population was assessed and recorded using TreePlotter Software and Arborman Tree Solutions Assessment Form (See Appendix B - Tree Assessment Findings). Risk was identified using the International Society of Arboriculture (ISA) Tree Risk Assessment methodology. The Useful Life Expectancy of each tree was determined using the Table shown in Appendix A Methodology. Legislative requirements are determined under the *Planning, Development and Infrastructure Act 2016*. Work priority was determined based on the Risk Rating and urgency to reduce risk.

Assessment

Arborman Tree Solutions was asked to inspect all trees within Tree Climb, Botanic Gardens Bat Loop with a height greater than three metres to determine the levels of risk the trees represent to users of the area and to recommend risk management strategies.

Tree Assessment

The assessment considered twenty-three trees which are identified as a mix of one indigenous species, one native species and five exotic species. The trees are located in Botanic Park and are all planted amenity specimens forming part of the Adelaide Botanic Garden collection. The trees are considered to be in Good (19 trees) to Fair (4 trees) overall condition and have extended useful life expectancies. Tree 9 retains a dead hanging branch over the creek line and Tree 104 has one dead scaffold branch, if these trees are to be used in the course, they will require management to prevent these parts failing onto the infrastructure.

The assessment considered two groups of trees, group one included the trees that have been identified and numbered, Trees 1-6 and 8-12, for inclusion within the proposed Tree Climb course and ten trees, Trees 100-110, that had not been numbered but are suitable for inclusion within the courses if required.

Table 1 – Tree Identification

Botanic Name	Common Name	Number of Trees	Origin	Tree Numbers
Eucalyptus camaldulensis	River Red Gum	1	Indigenous	11
Eucalyptus tricarpa	Mugga Ironbark	1	Native	111
Pinus canariensis	Canary Island Pine	3	Exotic	6, 105 and 106
Pinus halepensis	Aleppo Pine	8	Exotic	8-10, 103 and 107-110
Pinus pinea	Stone Pine	1	Exotic	15
Pinus torreyana	Torrey Pine	2	Exotic	12 and 104
Platanus x acerifolia	London Plane	7	Exotic	1-5, 101 and 102

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

Legislative Assessment

The trees are within Botanic Park and are under the care and control of the Board of the Botanic Gardens and State Herbarium and their removal is therefore exempt from control under the *Planning, Development and Infrastructure Act 2016* as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the *Planning, Development and Infrastructure (General) Regulations 2017*.

Tree Risk Assessment

Using the International Society of Arboriculture (ISA) Tree Risk Assessment methodology (see Appendix A – Methodology) the subject tree was identified as having a Low Risk Rating. This methodology considers the Likelihood of Failure and Impact and the Consequences of such an event happening. In this case the following has been considered:-

Likelihood of Failure – Possible A failure that is likely to result in damage a person or infrastructure in the area is not expected in the next 36-60 months under normal weather conditions, however it may occur in extreme weather conditions.

Likelihood of Impact – Medium There is a moderate chance a failure will impact a target but is not expected to do so. This rating is used where the target includes frequently used area where people and/or infrastructure are likely to be impacted.

When combined in the Likelihood of Failure and Impact matrix a rating of **Unlikely** is achieved. The area around the tree is also weather affected and in storm conditions, when a failure is most likely, it is less likely that a person will be in the vicinity of the tree.

Consequence of Failure – Significant The consequences of an impact will potentially result in an injury to a person requiring medical attention or moderate monetary damage to a building.

A Likelihood of Failure and Impact of **Unlikely** and a Consequence of **Significant** when combined in the Risk matrix achieve a **Low Risk Rating**.

In order to achieve a Risk Rating of High the Likelihood of a Failure and Impact would have to raise to Likely or Very Likely, this would require the Likelihood of Failure to be raised to Probable or Imminent and/or the Likelihood of Impact raised to High either of which would be inappropriate and unreasonable.

Recommendations to manage risk are provided within Appendix B - Tree Assessment Findings and summarised in the Appendix D - Tree Assessment Summary.

Conclusion

The assessment has considered twenty-three trees in the area of the proposed Tree Climb course, all of which are suitable for inclusion in the course. The trees are generally open crowned specimens with single straight trunks that will facilitate the installation of the required infrastructure.

Recommendation

To facilitate the installation and function of the proposed courses, there are a number of recommendations that should be implement. Trees 9 and 104 require Hazard Pruning to remove the hanging branch and the dead branch respectively.

The remaining trees do not require specific maintenance, however Trees 11 and 111 should be Monitored for further health decline on an annual basis. Additionally, it is recommended that consideration be given to improving their root zones through the installation of an irrigation system and organic mulch. Using mulch below the infrastructure will also reduce pedestrian usage and minimise compaction of the ground below the infrastructure and around the trees.

Table 2 - Recommended Works

Recommended Work	Number of Trees	Tree Numbers
Hazard Prune	2	9 and 104
Monitor	2	11 and 111

Thank you for the opportunity to provide this report. Should you require further information, please contact me and I 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
ISA – Tree Risk Assessment Qualification
VALID Tree Risk Assessment (VALID)
Native Vegetation Council Trained Arborist

Definitions

Size: approximate height and width of tree in metres.

Age: identification of the maturity of the subject tree.

Useful Life Expectancy: expected number of the years that the subject specimen will remain alive and sound and/or continues to achieve the relevant *Principles of Development Control*.

Health: visual assessment of tree health.

Structure: visual assessment of tree structure.

Circumference: trunk circumference measured at one metre above ground level. This measurement is used to determine the status of the tree in relation to the *Planning, Development and Infrastructure Act 2016*.

Tree Damaging Activity Tree damaging activity includes those activities described within the *Planning, Development and Infrastructure Act 2016* 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. This can also include forms of pruning above and below the ground.

Root Buttressing: area of root development as it joins to the trunk base.

Bifurcation: a stem union supporting ascending stems and potentially containing included bark.

Included Bark Union: a poorly formed stem or branch union where bark becomes trapped between the structural fibres causing a weakness in the supporting structure.

Epicormic Growth: regrowth developing from dormant buds located beneath the bark. Often developing as a result of inappropriate pruning or tree related stress. Such growth can be associated with poor attachment and therefore an increased potential for failure.

Remove: Trees recommended for removal have been so due to poor form, structure or declining health. Unless specified, these trees are low risk and priority. Trees that are removed should be replaced with a suitable species.

Reduction Prune: Trees recommended for reduction pruning should have branches shortened that are overextended. The purpose of reduction pruning is to reduce the likelihood of branch failure in overextended branches and therefore reducing risk or maintaining low risk.

Clearance Prune: One tree has been recommended for a clearance prune. This involves pruning branches that may be impacting structures such as buildings, signs or for pedestrian and vehicle clearance.

Maintenance Prune: Trees recommended for maintenance pruning require whole tree maintenance and should include the removal of deadwood, diseased branches, broken or damaged branches, rubbing/crossing branches, basal growth and epicormic shoots. Additional pruning of live tissue may be required if the Arborist undertaking the works identifies issues that were not identified in the initial assessment.

References

Australian Standards Risk Management AS/NZS 4360:1999 Standards Australia, Standards New Zealand

Dunster J.A., Smiley E.T., Metheny N. and Lilly S. 2013. *Tree Risk Assessment Manual*. Champaign, Illinois: International Society of Arboriculture.

Draper, D & Richards P, A Dictionary for Managing Trees in Urban Environments. CSIRO Publishing, Institute of Australian Consulting Arborists.

Australian Standard AS4373–2007 *Pruning of amenity trees*: Standards Australia.

Keane P.J. Kile G.D. Podger F.D. Brown B.N. 2000: *Diseases and Pathogens of Eucalypts*: CSIRO Publishing, 150 Oxford Street, Collingwood, Victoria 3066 Australia

Julius A. Kocher W. Liefheit K. Lilly S. et al 2013: ***Tree Risk Assessment Qualification***: International Society of Arboriculture, Champaign, Illinois, USA.

Appendix A - Tree Assessment Methodology

Tree Assessment Form (TAF©)

Record	Description
Tree	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.
Genus and Species	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. *Eucalyptus, Fraxinus* and *Melaleuca*. Species identifies the specific tree within the genus e.g. *Eucalyptus camaldulensis*, *Fraxinus griffithi* or *Melaleuca styphelioides*. 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. *Melia azedarach* 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 *Casuarina, Eucalyptus* and *Quercus* genus's respectively.
Height	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.
Spread	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.
Health	Tree health is assessed using the Arborman Tree Solutions - Tree Health Assessment Method that is based on international best practice.
Structure	Tree structure is assessed using Arborman Tree Solutions - Tree Structure Assessment Method that is based on international best practice.
Tree Risk Assessment	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.
Legislative Status	Legislation status is identified through the interpretation of the *Development Act 1993*, the *Natural Resource Management Act 2004,* the *Native Vegetation Act 1991* and/or any other legislation that may apply.
Mitigation	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 *Pruning amenity trees* 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 *Acacia sp*. 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 Risk Assessment

The risk assessment was conducted using the principles and guidelines of the International Society of Arboriculture - Tree Risk Assessment Qualification (TRAQ).

TRAQ assesses the Tree Risk Rating in three parts that are divided into two stages Likelihood and Consequence; the Likelihood assessment considers two parts Likelihood of Failure and Likelihood of Impact which are combined in a matrix to determine the Likelihood of Impacting a Target. The following categories are used to determine the Likelihood of Impacting a Target for a given tree:-

1. **Likelihood of Failure** – this is the assessment potential for branch failure. The likelihood of failure uses the following categories:-
   - a. Imminent — the tree is failing or is about to fail i.e.: >90% chance.
   - b. Probable — a failure is likely to occur within the inspection period i.e.: >50% chance.
   - c. Possible — a failure may occur within the inspection period i.e.: <50% chance.
   - d. Improbable — a failure is unlikely to occur within the inspection period i.e.: <10% chance.

2. **Likelihood of Impact** – this is an assessment of the potential for a failed branch to contact a person, vehicle, property or other target within the target area. The likelihood of failure uses the following categories:
   - a. High — a failure will almost definitely impact a target.
   - b. Medium — a failure will probably impact a target.
   - c. Low — a failure will possibly impact a target.
   - d. Very Low — a failure is unlikely to impact a target.

The results of the Likelihood assessment are placed into the following matrix to determine the **Likelihood of Impacting a Target**.

Likelihood Matrix				
Likelihood of Failure	**Likelihood of Impacting Target**			
	Very Low	**Low**	**Medium**	**High**
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

The Consequence of Failure section of the assessment considers the result of a failure on the target. The following categories are used to determine the Consequences of a failure impacting a Target for a given tree.

3. **Consequence of Failure** – This is an assessment of the consequence of the branch failure on the target. Consequence of Failure includes factors such as size of part, the level of damage or injury, target protection and target value (monetary or otherwise). The following categories are used to determine the Consequences of Failure for a given tree:-
   - a. Severe — The consequences of an impact will be severe potentially involving serious injury or death or serious damage to or loss of property or infrastructure.
   - b. Significant — The consequences of an impact will be significant potentially involving major injury or damage to property or infrastructure.
   - c. Minor — The consequences of an impact will be minor potentially involving minor injury or minimal damage to property or infrastructure.
   - d. Negligible — The consequences of an impact will be negligible potentially involving no or inconsequential injury or damage to property or infrastructure.

The **Likelihood of Impact** and **Consequence of Failure** are then placed into the following matrix to determine the **Tree Risk Rating**.

Tree Risk Rating Matrix				
Likelihood of Failure and Impact	**Consequences of Failure**			
	Negligible	**Minor**	**Significant**	**Severe**
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

This Tree Risk Rating is used to qualify the risk so that suitable mitigation strategies can be implemented.

Appendix B - Tree Assessment Findings

Platanus x acerifolia

Tree No: 1

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

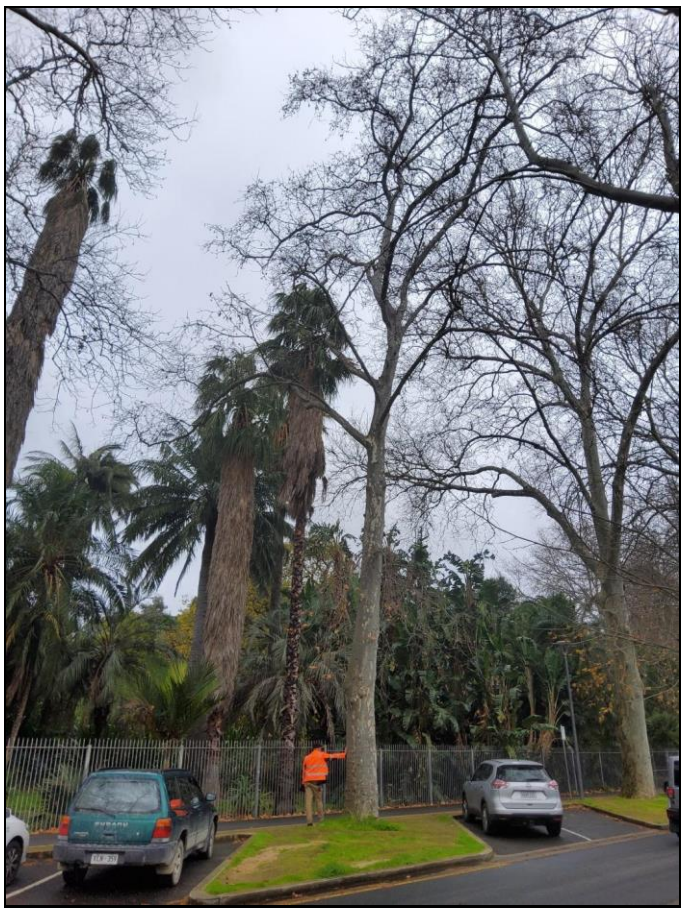
No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 2

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years



Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 3

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 4

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There are hollows high in the leading stem however this is not impacting the overall structure of the tree.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

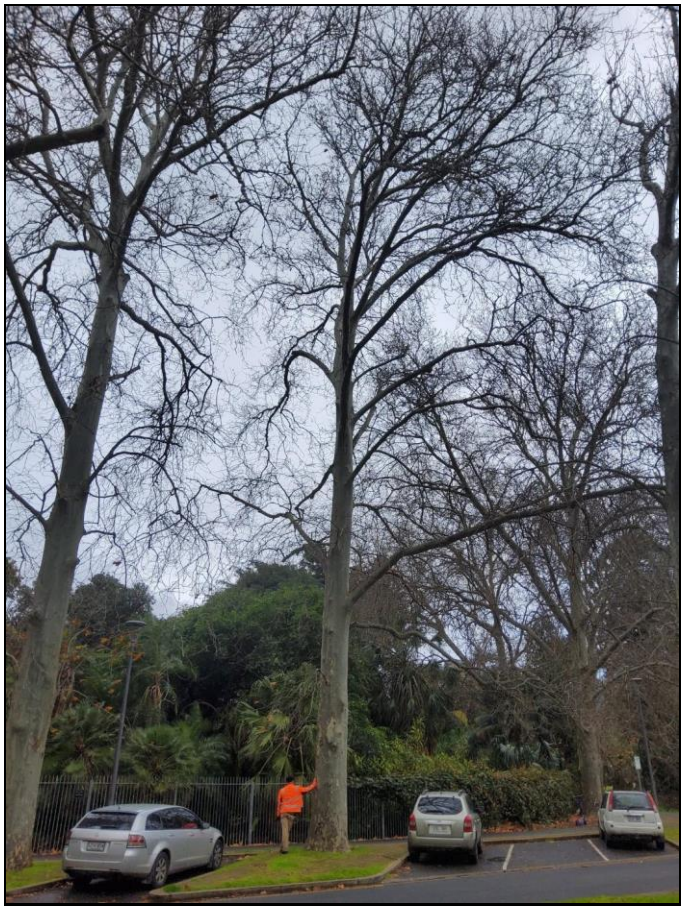
No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 5

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years



Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus canariensis

Tree No: 6

Canary Island Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 154.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

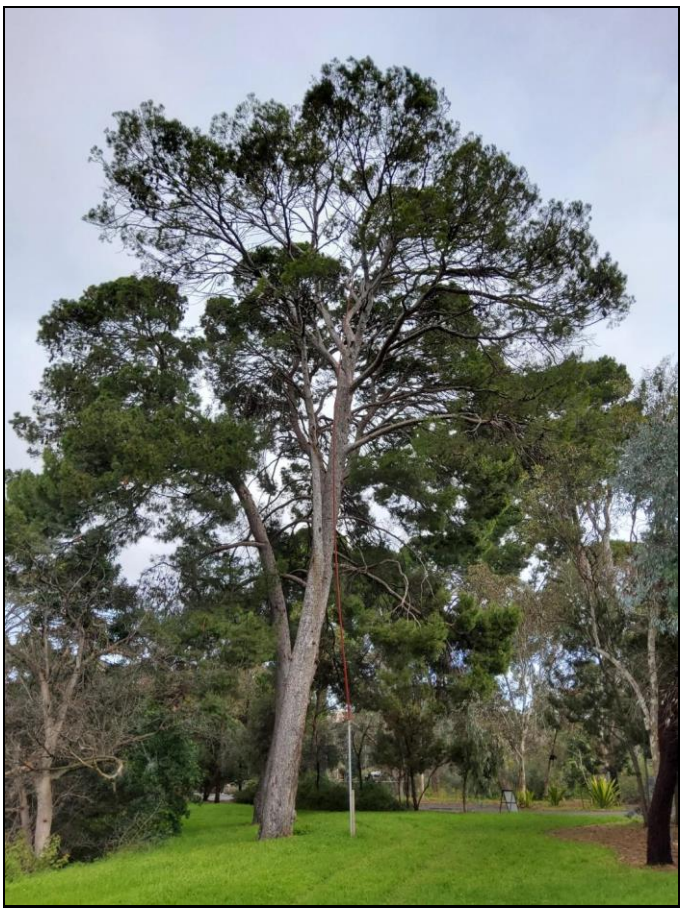
No remedial action is currently recommended.

Pinus halepensis

Tree No: 8

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Fair
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>10 years



Observations

This tree is considered to be in fair overall condition due to its moderately reduced health rating associated the impact of bat activity in the upper sections of the crown. This tree is identified as part of the bat roost and is marked as Tree 143.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 9

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

This tree displays a minor history of branch failure however this has not noticeably impacted the tree's structure and it displays good health indicating it is in otherwise good condition. This tree is identified as part of the bat roost and is marked as Tree 132. A large failed branch is hanging in the upper crown on the river side of this tree.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Somewhat Likely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	Hazard Prune

Hazard Pruning is recommended for this tree to remove the partially failed branch whilst maintaining the habitat value of the tree.

Pinus halepensis

Tree No: 10

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 120.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Eucalyptus camaldulensis

Tree No: 11

River Red Gum

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Fair
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>10 years

Observations

This tree is considered to be in fair overall condition due to its moderately reduced health rating associated with the impact of bat activity in the upper sections of the crown.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	Monitor

This tree should be monitored on an annual basis for further decline in health.

Pinus torreyana

Tree No: 12

Torrey Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

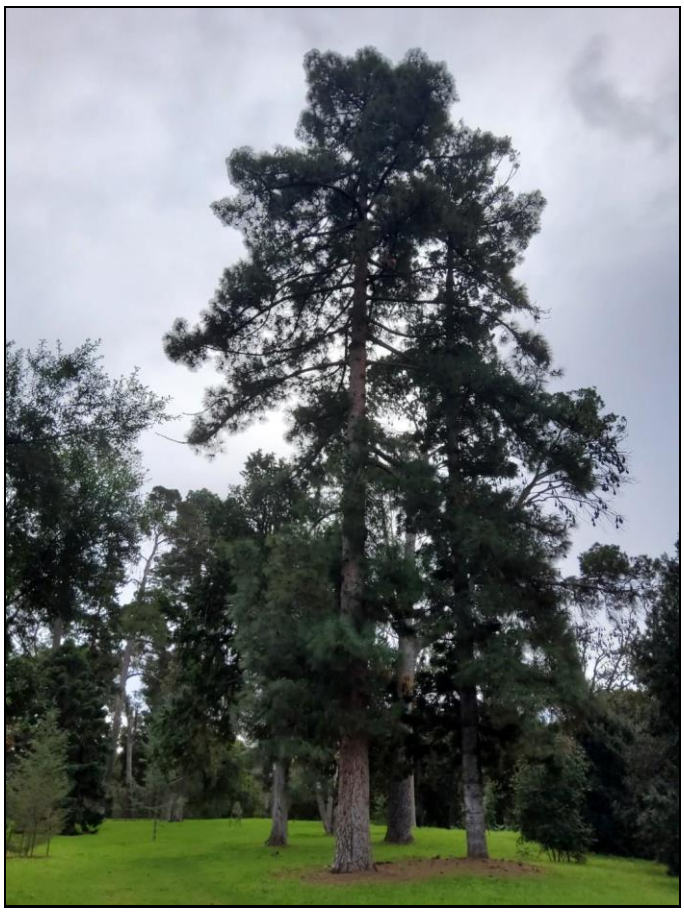
No remedial action is currently recommended.

Pinus pinea

Tree No: 15

Stone Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years



Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 101

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Platanus x acerifolia

Tree No: 102

London Plane

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 103

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 152. There is a wound at the base of this tree with good response wood surrounding it and no evidence of decay.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus torreyana

Tree No: 104

Torrey Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Fair
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>10 years

Observations

This tree is considered to be in fair overall condition due to the volume of deadwood, reduced foliage density and level of dieback in parts of the crown. Additionally, one of the primary branches has died.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Significant" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	Hazard Prune

Hazard Pruning is recommended for this tree to remove the large dead branch whilst maintaining the habitat value of the tree.

Pinus canariensis

Tree No: 105

Canary Island Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Fair
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>20 years

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. The Form rating is reduced to Fair as it has co-dominant leading stems. This tree is identified as part of the bat roost and is marked as Tree 101.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus canariensis

Tree No: 106

Canary Island Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 06.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 107

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 121.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 108

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	<2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 122.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 109

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	<5 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 133.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Pinus halepensis

Tree No: 110

Aleppo Pine

Inspected:	6 July 2023
Height:	>20 metres
Spread:	>20 metres
Health:	Good
Structure:	Good
Form:	Good
Trunk Circumference:	>2 metres
Useful Life Expectancy:	>20 years

Observations

The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 134.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	No Action

No remedial action is currently recommended.

Eucalyptus tricarpa

Tree No: 111

Mugga Ironbark

Inspected:	6 July 2023
Height:	>20 metres
Spread:	15-20 metres
Health:	Fair
Structure:	Good
Form:	Good
Trunk Circumference:	>3 metres
Useful Life Expectancy:	>10 years

Observations

This tree is considered to be in fair overall condition as evidenced by the slightly reduced foliage density and moderate history of small to medium diameter branch failure. This tree is identified as part of the bat roost and is marked as Tree 151.

Legislative Status	Exempt

Trees on this site are exempt from control under the Planning, Development and Infrastructure Act 2016 as per Schedule 4—Exclusions from definition of development—general, Part 18, (1), (d) of the Planning, Development and Infrastructure (General) Regulations 2017.

Risk Rating	Low

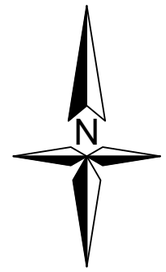
A Likelihood of Failure and Impact of "Unlikely" and a Consequence of "Minor" when combined in the Risk matrix achieve a Risk Rating of "Low".

Action	Monitor

This tree should be monitored for further health decline on an annual basis. Additionally, improvements to the root zone of this tree are recommended.

arborman tree solutions
PROFESSIONALS IN ARBORICULTURE

Appendix C - Mapping



Legend

Tree Location

Date: 21/07/2023
Ref: ATS7341-ABGBatLoopTRAM

Arborman Tree Solutions
23 Aberdeen Street
Port Adelaide SA 5015
0418 812 967
www.arborman.com.au

Tree Location Map

Tree Climb, Botanic Gardens Bat Loop

0 50 100 m

1:1250 @ A3

arborman® tree solutions
PROFESSIONALS IN ARBORICULTURE

Appendix D – Tree Assessment Summary

arborman tree solutions
PROFESSIONALS IN ARBORICULTURE

Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Risk Rating	Comments	Action
1	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.	No Action
2	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.	No Action
3	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.	No Action
4	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There are hollows high in the leading stem however this is not impacting the overall structure of the tree.	No Action
5	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.	No Action
6	*Pinus canariensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 154.	No Action
8	*Pinus halepensis*	Exempt	Low	This tree is considered to be in fair overall condition due to its moderately reduced health rating associated the impact of bat activity in the upper sections of the crown. This tree is identified as part of the bat roost and is marked as Tree 143.	No Action

Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Risk Rating	Comments	Action
9	*Pinus halepensis*	Exempt	Low	This tree displays a minor history of branch failure however this has not noticeably impacted the tree's structure and it displays good health indicating it is in otherwise good condition. This tree is identified as part of the bat roost and is marked as Tree 132. A large failed branch is hanging in the upper crown on the river side of this tree.	Hazard Prune
10	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 120.	No Action
11	*Eucalyptus camaldulensis*	Exempt	Low	This tree is considered to be in fair overall condition due to its moderately reduced health rating associated with the impact of bat activity in the upper sections of the crown.	Monitor
12	*Pinus torreyana*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.	No Action
15	*Pinus pinea*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment.	No Action
101	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.	No Action

Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Risk Rating	Comments	Action
102	*Platanus x acerifolia*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. There is some damage from bird activity to the leading stem and primary branch unions in the upper crown however this is not impacting the overall structure of the tree.	No Action
103	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 152. There is a wound at the base of this tree with good response wood surrounding it and no evidence of decay.	No Action
104	*Pinus torreyana*	Exempt	Low	This tree is considered to be in fair overall condition due to the volume of deadwood, reduced foliage density and level of dieback in parts of the crown. Additionally, one of the primary branches has died.	Hazard Prune
105	*Pinus canariensis*	Exempt	Low	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. The Form rating is reduced to Fair as it has co-dominant leading stems. This tree is identified as part of the bat roost and is marked as Tree 101.	No Action
106	*Pinus canariensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 06.	No Action

Tree Assessment Summary

Tree Number	Botanic Name	Legislative Status	Risk Rating	Comments	Action
107	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 121.	No Action
108	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 122.	No Action
109	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 133.	No Action
110	*Pinus halepensis*	Exempt	Low	The health and structure of this tree indicate it is in good overall condition and has adapted to its local environment. This tree is identified as part of the bat roost and is marked as Tree 134.	No Action
111	*Eucalyptus tricarpa*	Exempt	Low	This tree is considered to be in fair overall condition as evidenced by the slightly reduced foliage density and moderate history of small to medium diameter branch failure. This tree is identified as part of the bat roost and is marked as Tree 151.	Monitor