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ARBORICULTURAL DEVELOPMENT IMPACT ASSESSMENT REPORT

1 Gatacre Avenue, Lane Cove NSW

REVISION E
22nd April 2024

Prepared for
Winim Developments

Prepared by

Birds Tree Consultancy

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Executive Summary

This Arboricultural Development Impact Assessment Report has been commissioned by Winim Developments to report on trees within the site of 1 Gatacre Avenue, 5 Allison Avenue Lane Cove NSW. The subject trees are located within the boundaries of this site. This site is currently a vacant motel facility with existing motel buildings present and an existing residential dwelling on 5 Allison Avenue. The site is proposed for redevelopment including the demolition of the existing buildings and construction of new multistory residential buildings, entry roads, and associated landscape works. This report has been commissioned to outline the health, condition and stability of these trees as well as their viability for retention within the scope of the proposed development. The scope of this report includes all trees within areas that may be impacted by the proposed development.

The subject Trees are preserved under Part J Section 2.2 of Lane Cove Development Control Plan 2010.

Trees 1, 2, 3, 4 are in fair and declining condition and consequently have reduced retention value.

The Tree protection Zone (TPZ) of Trees 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33 are encroached by the proposed construction and required earthworks by a total or major encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites*. These trees will not be viable to be retained and will be required to be removed due to the proposed development.

The TPZ of Tree 13 is encroached by slightly greater than a minor encroachment as defined by *AS4970-2009*. slightly greater than the minor encroachment as defined by *AS 4970-2009*. Based on consideration of existing structures and this species tolerance to root disturbance in accordance with clause 3.3.4 of *AS 4970-2009*, this tree will remain viable to be retained under the proposed development.

Demolition works are required within the TPZ of Tree 13. A site-specific Tree Protection Plan is required to be prepared prior to site works commencing outlining the tree protection measures to protect Trees 13, 14, 15 and 16 during demolition and construction works. These tree protection measures are required to comply with section 8.0 of this report, *AS4970-2009* and is to include the following:

1. Tree Protection Fencing in accordance with 8.4,
2. Trunk and branch protection in accordance with 8.7,
3. All demolition works within the TPZ are to be under the supervision and direction of the Project Arborist in accordance with 8.3,
4. All excavation within the TPZ is to be carried out using nondestructive methods including manual excavation, Air Spade or Vacuum truck operating at less than 1000Psi,
5. Removal of existing slabs and footings within the TPZ is to be conducted under the supervision of the Project Arborist with no mechanical excavation below the existing base levels, all concrete to be "peeled" or lifted from within the TPZ, do digging or dragging of concrete.

All other trees are viable to be retained and are to be protected as defined below.

Of the 32 trees located on the subject site, three (3) trees remain viable to be retained and 29 are not viable to be retained due to the proposed development. One tree within this report is located in the public domain in front of the proposed development and this tree remains viable to be retained. All trees on neighbouring adjacent sites remain viable to be retained.

Recommendations for tree retention or removal are summarised as follows:

Tree no.	Species	Recommendations	Comments
1.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
2.	<i>Thuja occidentalis</i>	Remove	Not viable to be retained due to the proposed development.
3.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
4.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
5.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
6.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
7.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
8.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
9.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
10.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
11.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
12.	<i>Cupressus sempervirens</i>	Remove	Not viable to be retained due to the proposed development.
13.	<i>Araucaria columnaris</i>	Retain	Viable to be retained and protected in accordance with 8.0.
14.	<i>Cupressus torulosa</i>	Retain	Viable to be retained and protected in accordance with 8.0.
15.	<i>Lophostemon confertus</i>	Retain	Viable to be retained and protected in accordance with 8.0.
16.	<i>Pittosporum undulatum</i>	Retain	Viable to be retained and protected in accordance with 8.0.
17.	<i>Viburnum odoratissimum</i>	Remove	Not viable to be retained due to the proposed development.

18.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
19.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
20.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
21.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
22.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
23.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
24.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
25.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
26.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
27.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
28.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
29.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
30.	<i>Glochidion ferdinandii</i>	Remove	Not viable to be retained due to the proposed development.
31.	<i>Michelia figo</i>	Remove	Not viable to be retained due to the proposed development.
32.	<i>Jacaranda mimosifolia</i>	Remove	Not viable to be retained due to the proposed development.
33.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
34.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
35.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
36.	<i>Livistona australis</i>	Retain	Viable to be retained and protected in accordance with 8.0.
37.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
38.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.

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1.0 Scope of Works

This Arboricultural Development Impact Assessment Report has been commissioned by Winim Developments to report on trees within the site of 1 Gatacre Avenue, 5 Allison Avenue Lane Cove NSW. It has been commissioned to outline the health, condition and stability of these trees as well as their viability for retention within the scope of the proposed development. The scope of this report includes all trees within areas that may be impacted by the proposed development.

On the 4th of November 2023, Glenn Bird of Birds Tree Consultancy attended site and inspected the subject trees from the ground. There was no aerial inspection carried out. A Visual Tree Assessment was undertaken in accordance with Visual Tree Assessment (VTA) guidelines (Mattheck and Breloer, 1994). Tree heights were measured using a Nikon Forestry 550 Heightmeter.

2.0 Site Analysis

2.1 Site

The subject site is 1 Gatacre Avenue, 5 Allison Avenue Lane Cove NSW. The subject trees are located within the boundaries of this site. This site is currently a vacant motel facility with existing motel buildings present and an existing residential dwelling on 5 Allison Avenue. The site is proposed for redevelopment including the demolition of the existing buildings and construction of new multistory residential buildings, entry roads, and associated landscape works.

2.2 Documentation

This Development Impact Assessment Report has been compiled based on the following documentation provided:

1. PBD Architects Basement 2 Floor Plan DA 100 Issue P7A Dated 12/04/2024
2. PBD Architects Basement 1 Floor Plan DA 101 Issue P7A Dated 12/04/2024
3. PBD Architects Ground Floor Plan DA 102 Issue P7A Dated 12/04/2024
4. PBD Architects Upper Ground Floor Plan DA 103 Issue P7A Dated 12/04/2024
5. PBD Architects Level 1 Plan DA 104 Issue P7A Dated 12/04/2024
6. PBD Architects Level 2 Plan DA 105 Issue P7A Dated 12/04/2024
7. PBD Architects Level 3 Plan DA 106 Issue P7A Dated 12/04/2024
8. PBD Architects Level 4 Plan DA 107 Issue P7A Dated 12/04/2024
9. PBD Architects Roof Plan DA 108 Issue P7A Dated 12/04/2024
10. Arcadia Landscape Architecture DA Pack issue C dated 05/04/2024
11. Civil Stormwater Engineering Group Site Plan SW-202 Rev 03 dated 05/04/2024.
12. Civil Stormwater Engineering Group Upper Ground Floor SW-203 Rev 03 dated 05/04/2024.

2.3 Topography

The site slopes significantly from the highest point on the northern boundary on the Gatacre Avenue frontage to the lowest point at the southern corner of the site on the Allison Avenue frontage. There is an existing masonry retaining wall on the boundary

between the subject site and the properties on 7 Allison Avenue and 2a Gatacre Avenue. Refer to detailed survey for detailed levels.

2.4 Identification

Trees are as identified in the attached inspection forms in Appendix C and shown in Tree location Plan A01 in Appendix D.

2.5 Soils

Soil material and horizons were not tested for this report.

3.0 Existing Trees

The following trees were inspected from the ground and the following items identified. Please refer also to the attached inspection data in Appendix C.

3.1. Tree 1. *Elaeocarpus reticulatus*

This mature tree is approximately 9m tall with a canopy spread of 4m. It has a single trunk with a prominent lean to the east and a diameter at breast height (DBH) of 190mm. This tree is in fair health and condition with a thinning canopy, moderate deadwood and minimal epicormic growth.

3.2. Tree 2. *Thuja occidentalis*

This mature tree is approximately 12m tall with a canopy spread of 6m. It has a single trunk with a DBH of 350mm. This tree is in fair health and condition, with minimal deadwood and epicormic growth.

3.3. Tree 3. *Elaeocarpus reticulatus*

This mature tree is approximately 6m tall with a canopy spread of 3m. It has a single trunk with a DBH of 120mm. This tree is in fair health and condition with a thinning canopy, moderate deadwood and minimal epicormic growth.

3.4. Tree 4. *Elaeocarpus reticulatus*

This mature tree is approximately 11m tall with a canopy spread of 5m. It has a single trunk with a DBH of 250mm. This tree is in fair health and condition with a thinning canopy, significant deadwood and minimal epicormic growth.

3.5. Tree 5. *Elaeocarpus reticulatus*

This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk with a DBH of 150mm. This tree is in fair health and condition, with minimal deadwood and epicormic growth.

3.6. Tree 6. *Cupressus sempervirens 'stricta'*

This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 120mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.

- 3.7. Tree 7. *Cupressus sempervirens 'stricta'***
This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 200mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.8. Tree 8. *Cupressus sempervirens 'stricta'***
This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 130mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.9. Tree 9. *Cupressus sempervirens 'stricta'***
This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 130mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.10. Tree 10. *Cupressus sempervirens 'stricta'***
This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 320mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.11. Tree 11. *Cupressus sempervirens 'stricta'***
This mature tree is approximately 11m tall with a canopy spread of 2m. It has a single trunk with a DBH of 120mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.12. Tree 12. *Cupressus sempervirens***
This mature tree is approximately 15m tall with a canopy spread of 5m. It has a single trunk with a DBH of 430mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.13. Tree 13. *Araucaria columnaris***
This mature tree is approximately 19m tall with a canopy spread of 6m. It has a single trunk with a DBH of 630mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.14. Tree 14. *Cupressus torulosa***
This mature tree is approximately 16m tall with a canopy spread of 6m. It has a single trunk with a DBH of 450mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.15. Tree 15. *Lophostemon confertus***
This mature tree is approximately 15m tall with a canopy spread of 8m. It has a single trunk with a DBH of 580mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.16. Tree 16. *Pittosporum undulatum***

This mature tree is approximately 7m tall with a canopy spread of 3m. It has a single trunk with a DBH of 100mm. This tree is in poor health and condition, with a sparse canopy, significant deadwood and minimal epicormic growth.

3.17. Tree 17. *Viburnum odoratissimum*

This mature tree is approximately m tall with a canopy spread of m. It has multiple co-dominant trunks from the base with an aggregate diameter at breast height (DBH) of mm. This tree is in good health and condition with minimal deadwood and epicormic growth.

3.18. Tree 18. *Syzygium luehmannii*

This mature tree is approximately 8m tall with a canopy spread of 4m. It has a single trunk with a DBH of 100mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.19. Tree 19. *Syzygium luehmannii*

This mature tree is approximately 8m tall with a canopy spread of 4m. It has a single trunk with a DBH of 190mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.20. Tree 20. *Camellia sasanqua*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 140mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.21. Tree 21. *Camellia sasanqua*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 150mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.22. Tree 22. *Camellia sasanqua*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 80mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.23. Tree 23. *Camellia sasanqua*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 130mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.24. Tree 24. *Syzygium luehmannii*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 90mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

3.25. Tree 25. *Camellia sasanqua*

This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 100mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.

- 3.26. Tree 26. *Camellia sasanqua***
This mature tree is approximately 6m tall with a canopy spread of 4m. It has a single trunk with a DBH of 80mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.
- 3.27. Tree 27. *Cupressocyparis leylandii***
This mature tree is approximately 12m tall with a canopy spread of 8m. It has a single trunk with a DBH of 380mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.
- 3.28. Tree 28. *Cupressocyparis leylandii***
This mature tree is approximately 12m tall with a canopy spread of 8m. It has a single trunk with a DBH of 270mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.
- 3.29. Tree 29. *Cupressocyparis leylandii***
This mature tree is approximately 12m tall with a canopy spread of 8m. It has a single trunk with a DBH of 340mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.
- 3.30. Tree 30. *Glochidion ferdinandii***
This mature tree is approximately 10m tall with a canopy spread of 6m. It has a single trunk with a DBH of 220mm. This tree is in poor health and condition, with minimal deadwood and epicormic growth.
- 3.31. Tree 31. *Michelia figo***
This mature tree is approximately 7m tall with a canopy spread of 6m. It has multiple co-dominant trunks from the base with an aggregate DBH of 251mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.32. Tree 32. *Jacaranda mimosifolia***
This mature tree is approximately 10m tall with a canopy spread of 12m. It has multiple co-dominant trunks from the base with an aggregate DBH of 627mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.33. Tree 33. *Elaeocarpus reticulatus***
This mature tree is approximately 9m tall with a canopy spread of 5m. It has a single trunk with a DBH of 180mm. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.34. Tree 34. *Archontophoenix cunninghamiana***
This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk. This tree is in good health and condition, with minimal deadwood and epicormic growth.

- 3.35. Tree 35. *Archontophoenix cunninghamiana***
 This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.36. Tree 36. *Livistona australis***
 This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.37. Tree 37. *Archontophoenix cunninghamiana***
 This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk. This tree is in good health and condition, with minimal deadwood and epicormic growth.
- 3.38. Tree 38. *Archontophoenix cunninghamiana***
 This mature tree is approximately 12m tall with a canopy spread of 4m. It has a single trunk. This tree is in good health and condition, with minimal deadwood and epicormic growth.

4.0 Landscape Significance of Trees

4.1 Landscape Significance

The significance of a tree within the landscape is a factor of the health and condition of the tree, vitality, the form of the tree, environmental, cultural, amenity and heritage value.

4.2 Methodology of Determining Landscape Significance

For the purpose of this report, the Significance of a Tree, Assessment Rating System (STARS) as developed by the Institute of Australian Consulting Arborists (IACA) has been implemented. Please refer to Appendix A for greater detail of this assessment system. This system defines Landscape Significance for individual trees as High, Medium or Low Significance.

4.3 Landscape Significance of Subject Trees

Based on our assessment of the subject trees and implementation of the IACA Significance of a Tree, Assessment Rating System, the Landscape Significance of the Subject Trees was determined as shown in Table 1.

Tree no.	Species	Landscape Significance
1.	<i>Elaeocarpus reticulatus</i>	Medium
2.	<i>Thuja occidentalis</i>	Medium
3.	<i>Elaeocarpus reticulatus</i>	Medium

4.	<i>Elaeocarpus reticulatus</i>	Medium
5.	<i>Elaeocarpus reticulatus</i>	Medium
6.	<i>Cupressus sempervirens 'stricta'</i>	Medium
7.	<i>Cupressus sempervirens 'stricta'</i>	Medium
8.	<i>Cupressus sempervirens 'stricta'</i>	Medium
9.	<i>Cupressus sempervirens 'stricta'</i>	Medium
10.	<i>Cupressus sempervirens 'stricta'</i>	Medium
11.	<i>Cupressus sempervirens 'stricta'</i>	Medium
12.	<i>Cupressus sempervirens</i>	Medium
13.	<i>Araucaria columnaris</i>	High
14.	<i>Cupressus torulosa</i>	Medium
15.	<i>Lophostemon confertus</i>	High
16.	<i>Pittosporum undulatum</i>	Medium
17.	<i>Viburnum odoratissimum</i>	Medium
18.	<i>Syzygium luehmannii</i>	Medium
19.	<i>Syzygium luehmannii</i>	Medium
20.	<i>Camellia sasanqua</i>	Medium
21.	<i>Camellia sasanqua</i>	Medium
22.	<i>Camellia sasanqua</i>	Medium
23.	<i>Camellia sasanqua</i>	Medium
24.	<i>Syzygium luehmannii</i>	Medium
25.	<i>Camellia sasanqua</i>	Medium
26.	<i>Camellia sasanqua</i>	Medium
27.	<i>Cupressocyparis leylandii</i>	Low
28.	<i>Cupressocyparis leylandii</i>	Low
29.	<i>Cupressocyparis leylandii</i>	Low
30.	<i>Glochidion ferdinandii</i>	Medium
31.	<i>Michelia figo</i>	Medium
32.	<i>Jacaranda mimosifolia</i>	Medium
33.	<i>Elaeocarpus reticulatus</i>	Medium
34.	<i>Archontophoenix cunninghamiana</i>	Medium
35.	<i>Archontophoenix cunninghamiana</i>	Medium
36.	<i>Livistona australis</i>	Medium
37.	<i>Archontophoenix cunninghamiana</i>	Medium
38.	<i>Archontophoenix cunninghamiana</i>	Medium

Table 1 - Landscape Significance

5.0 Subject Tree Retention Value

5.1 Tree Retention Value Methodology

For the purpose of this report, the Tree Retention Values have been assessed by incorporating Landscape Significance Values as determined in 4.0 with the Useful Life Expectancy of the subject trees and assessing the retention values based on the Tree Retention Value Priority Matrix as developed by the Institute of Australian Consulting Arborists (IACA). Please refer to Appendix B for greater detail on this Tree

Retention Value Priority Matrix. This matrix defines Landscape Significance for individual trees as High, Medium or Low Retention Value as well as Priority for Removal.

5.2 Retention Value of Subject Trees

Based on our assessment of the subject trees and implementation of the IACA Tree Retention Value Priority Matrix, the Retention Values of the Subject Trees were determined as shown in Table 2.

Tree no.	Species	Retention Value
1.	<i>Elaeocarpus reticulatus</i>	Medium
2.	<i>Thuja occidentalis</i>	Medium
3.	<i>Elaeocarpus reticulatus</i>	Medium
4.	<i>Elaeocarpus reticulatus</i>	Medium
5.	<i>Elaeocarpus reticulatus</i>	Medium
6.	<i>Cupressus sempervirens 'stricta'</i>	Medium
7.	<i>Cupressus sempervirens 'stricta'</i>	Medium
8.	<i>Cupressus sempervirens 'stricta'</i>	Medium
9.	<i>Cupressus sempervirens 'stricta'</i>	Medium
10.	<i>Cupressus sempervirens 'stricta'</i>	Medium
11.	<i>Cupressus sempervirens 'stricta'</i>	Medium
12.	<i>Cupressus sempervirens</i>	Medium
13.	<i>Araucaria columnaris</i>	High
14.	<i>Cupressus torulosa</i>	Medium
15.	<i>Lophostemon confertus</i>	High
16.	<i>Pittosporum undulatum</i>	Low
17.	<i>Viburnum odoratissimum</i>	Medium
18.	<i>Syzygium luehmannii</i>	Medium
19.	<i>Syzygium luehmannii</i>	Medium
20.	<i>Camellia sasanqua</i>	Medium
21.	<i>Camellia sasanqua</i>	Medium
22.	<i>Camellia sasanqua</i>	Medium
23.	<i>Camellia sasanqua</i>	Medium
24.	<i>Syzygium luehmannii</i>	Medium
25.	<i>Camellia sasanqua</i>	Medium
26.	<i>Camellia sasanqua</i>	Medium
27.	<i>Cupressocyparis leylandii</i>	Low
28.	<i>Cupressocyparis leylandii</i>	Low
29.	<i>Cupressocyparis leylandii</i>	Low
30.	<i>Glochidion ferdinandii</i>	Medium
31.	<i>Michelia figo</i>	Medium
32.	<i>Jacaranda mimosifolia</i>	Medium
33.	<i>Elaeocarpus reticulatus</i>	Medium
34.	<i>Archontophoenix cunninghamiana</i>	Medium
35.	<i>Archontophoenix cunninghamiana</i>	Medium

36.	<i>Livistona australis</i>	Medium
37.	<i>Archontophoenix cunninghamiana</i>	Medium
38.	<i>Archontophoenix cunninghamiana</i>	Medium

Table 2 – Tree Retention Value

6.0 Impact of Development

6.1 Tree Protection Zone

Tree Protection Zones (TPZs) have been defined for the subject trees in order to define the encroachment of the proposed development in accordance with AS4970-2009. The TPZs required have been taken as a circular area with a radius 12 x the diameter at breast height of the tree. This requirement is in line with Australian Standard AS 4970-2009 Protection of Trees on Development Sites. This standard defines a maximum of 10% encroachment to be minimal encroachment. Any encroachment over 10% requires the site arborist to give consideration as to the viability of the tree due to the proposed development.

6.2 Structural Root Zone

Structural Root Zone (SRZs) are defined by AS4970-2009 as the area of root development required for the structural stability of the tree. The SRZ is required to be assessed only when an encroachment greater than 10% is considered.

Tree no.	Species	TPZ Radius (m)	Encroachment (%)	SRZ Radius (m)
1.	<i>Elaeocarpus reticulatus</i>	2.28	100	1.85
2.	<i>Thuja occidentalis</i>	4.2	100	2.43
3.	<i>Elaeocarpus reticulatus</i>	2	100	1.45
4.	<i>Elaeocarpus reticulatus</i>	3	100	2
5.	<i>Elaeocarpus reticulatus</i>	2	100	1.94
6.	<i>Cupressus sempervirens 'stricta'</i>	2	100	1.61
7.	<i>Cupressus sempervirens 'stricta'</i>	2.4	100	1.94
8.	<i>Cupressus sempervirens 'stricta'</i>	2	100	1.61
9.	<i>Cupressus sempervirens 'stricta'</i>	2	100	1.68
10.	<i>Cupressus sempervirens 'stricta'</i>	3.84	100	2.15

11.	<i>Cupressus sempervirens 'stricta'</i>	2	100	1.53
12.	<i>Cupressus sempervirens</i>	5.16	100	2.43
13.	<i>Araucaria columnaris</i>	7.56	14	2.9
14.	<i>Cupressus torulosa</i>	5.4	8	2.51
15.	<i>Lophostemon confertus</i>	6.96	0	2.76
16.	<i>Pittosporum undulatum</i>	2	0	1.45
17.	<i>Viburnum odoratissimum</i>	3.24	100	2.13
18.	<i>Syzygium luehmannii</i>	2	100	1.49
19.	<i>Syzygium luehmannii</i>	2.28	100	1.85
20.	<i>Camellia sasanqua</i>	2	100	1.68
21.	<i>Camellia sasanqua</i>	2	100	1.68
22.	<i>Camellia sasanqua</i>	2	100	1.45
23.	<i>Camellia sasanqua</i>	2	100	1.68
24.	<i>Syzygium luehmannii</i>	2	100	1.4
25.	<i>Camellia sasanqua</i>	2	100	1.49
26.	<i>Camellia sasanqua</i>	2	100	1.36
27.	<i>Cupressocyparis leylandii</i>	4.56	100	2.37
28.	<i>Cupressocyparis leylandii</i>	3.24	100	2.1
29.	<i>Cupressocyparis leylandii</i>	4.08	100	2.25
30.	<i>Glochidion ferdinandii</i>	2.64	100	1.94
31.	<i>Michelia figo</i>	3.01	100	2.13
32.	<i>Jacaranda mimosifolia</i>	7.52	100	2.76
33.	<i>Elaeocarpus reticulatus</i>	2.16	100	
34.	<i>Archontophoenix cunninghamiana</i>	2.5	0	N/A
35.	<i>Archontophoenix cunninghamiana</i>	2.5	0	N/A
36.	<i>Livistona australis</i>	2.5	0	N/A
37.	<i>Archontophoenix cunninghamiana</i>	2.5	0	N/A
38.	<i>Archontophoenix cunninghamiana</i>	2.5	0	N/A

7.0 Recommendations

The subject Trees are preserved under Part J Section 2.2 of Lane Cove Development Control Plan 2010.

Trees 1, 2, 3, 4 are in fair and declining condition and consequently have reduced retention value.

The Tree protection Zone (TPZ) of Trees 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33 are encroached by the proposed construction and required earthworks by a total or major encroachment as defined by *AS4970-2009 Protection of Trees on Development Sites*. These trees will not be viable to be retained and will be required to be removed due to the proposed development.

The TPZ of Tree 13 is encroached by slightly greater than a minor encroachment as defined by AS4970-2009. slightly greater than the minor encroachment as defined by AS 4970-2009. Based on consideration of existing structures and this species tolerance to root disturbance in accordance with clause 3.3.4 of AS 4970-2009, this tree will remain viable to be retained under the proposed development.

Demolition works are required within the TPZ of Tree 13. A site-specific Tree Protection Plan is required to be prepared prior to site works commencing outlining the tree protection measures to protect Trees 13, 14, 15 and 16 during demolition and construction works. These tree protection measures are required to comply with section 8.0 of this report, *AS4970-2009* and is to include the following:

1. Tree Protection Fencing in accordance with 8.4,
2. Trunk and branch protection in accordance with 8.7,
3. All demolition works within the TPZ are to be under the supervision and direction of the Project Arborist in accordance with 8.3,
4. All excavation within the TPZ is to be carried out using nondestructive methods including manual excavation, Air Spade or Vacuum truck operating at less than 1000Psi,
5. Removal of existing slabs and footings within the TPZ is to be conducted under the supervision of the Project Arborist with no mechanical excavation below the existing base levels, all concrete to be "peeled" or lifted from within the TPZ, do digging or dragging of concrete.

All other trees are viable to be retained and are to be protected as defined below.

Recommendations for tree retention or removal are summarised as follows:

Tree no.	Species	Recommendations	Comments
1.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
2.	<i>Thuja occidentalis</i>	Remove	Not viable to be retained due to the proposed development.
3.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.

4.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
5.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
6.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
7.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
8.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
9.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
10.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
11.	<i>Cupressus sempervirens</i> 'stricta'	Remove	Not viable to be retained due to the proposed development.
12.	<i>Cupressus sempervirens</i>	Remove	Not viable to be retained due to the proposed development.
13.	<i>Araucaria columnaris</i>	Retain	Viable to be retained and protected in accordance with 8.0.
14.	<i>Cupressus torulosa</i>	Retain	Viable to be retained and protected in accordance with 8.0.
15.	<i>Lophostemon confertus</i>	Retain	Viable to be retained and protected in accordance with 8.0.
16.	<i>Pittosporum undulatum</i>	Retain	Viable to be retained and protected in accordance with 8.0.
17.	<i>Viburnum odoratissimum</i>	Remove	Not viable to be retained due to the proposed development.
18.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
19.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
20.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
21.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
22.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
23.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
24.	<i>Syzygium luehmannii</i>	Remove	Not viable to be retained due to the proposed development.
25.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.
26.	<i>Camellia sasanqua</i>	Remove	Not viable to be retained due to the proposed development.

27.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
28.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
29.	<i>Cupressocyparis leylandii</i>	Remove	Not viable to be retained due to the proposed development.
30.	<i>Glochidion ferdinandii</i>	Remove	Not viable to be retained due to the proposed development.
31.	<i>Michelia figo</i>	Remove	Not viable to be retained due to the proposed development.
32.	<i>Jacaranda mimosifolia</i>	Remove	Not viable to be retained due to the proposed development.
33.	<i>Elaeocarpus reticulatus</i>	Remove	Not viable to be retained due to the proposed development.
34.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
35.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
36.	<i>Livistona australis</i>	Retain	Viable to be retained and protected in accordance with 8.0.
37.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.
38.	<i>Archontophoenix cunninghamiana</i>	Retain	Viable to be retained and protected in accordance with 8.0.

8.0 Pre-Construction Tree Protection Measures

8.1 General

All tree protection works shall be carried out before excavation, grading and site works commence. Tree protection works shall be inspected and approved by a Consulting Arborist meeting AQF Level 5 prior to construction works commencing.

Storage of materials, mixing of materials, vehicle parking, disposal of liquids, machinery repairs and refueling, site office and sheds, and the lighting of fires, stockpiling of soil, rubble or any debris shall not be carried out within the TPZ of existing trees. No backfilling shall occur within the TPZ of existing trees. Trees shall not be removed or lopped unless specific instruction is given in writing by the Superintendent.

8.2 Identification

All trees to be protected shall be clearly identified and all TPZs surveyed.

8.3 Site Arborist

Prior to all site works commencing, a Site Arborist is to be appointed with the responsibility of implementing all Tree Protection Measures in this report as well as compliance with AS4970-2009 Protection of Trees on Development Sites. The Site Arborist is to hold qualifications equivalent of AQF Level 5.

8.4 Protective Fence

Fencing is to be erected around existing trees to be retained. In addition to this protective fencing within the site, Protective Fencing is to be installed to the full extent of the TPZs within the site. This fencing is to be erected prior to any materials being brought on site or before any site, civil works or construction works commence. The fence shall enclose a sufficient area so as to prevent damage to the TPZ as defined on Appendix D Tree Protection Plan and as defined in 5.1 above. Fence to comprise 1800mm high chain wire mesh fixed to 50mm diameter Galvanised steel posts. Panels should be securely fixed top and bottom to avoid separation. No storage of building materials, tools, paint, fuel or contaminants and the like shall occur within the fenced area.

8.5 Mulching

Install mulch to the extent of all tree protection fencing. Use a leaf mulch conforming to AS 4454 which is free of deleterious and extraneous matter such as soil, weeds, sticks and stones and consisting of a minimum of 90% recycled content compliant with AS 4454 (1999) and AS 4419 (1998). All trees marked as to be removed on the proposed development are to be chipped and reused for this purpose. Place mulch evenly and to a depth of 100mm.

8.6 Signage

Prior to works commencing, tree protection signage is to be attached to each tree protection zone, displayed in a prominent position and the sign repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

Tree protection zone.

- This fence has been installed to prevent damage to the trees and their growing environment both above and below ground and access is restricted.
- No Access within Tree Protection Zone
- The name, address, and telephone number of the developer.

The name and telephone number of the Site Arborist.

8.7 Trunk and Branch Protection

Where a tree is to be retained and a Tree Protection Zone cannot be adequately established due to restricted access, the trunk and branches in the lower crown will be protected by wrapping 2 layers of hessian or carpet underfelt around the trunk and branches for a minimum of 2 m or as lower branches permit, then metal strapping secures 38x50 x2000 mm timber battens together around the trunk (do not nail or screw to the trunk or branches). The number of battens to be used is as required to encircle the trunk and the battens are to extend to the base of the tree (AS4970 2009 Protection of trees on development sites, Figure 3 Examples of Trunk, Branch and ground protection).

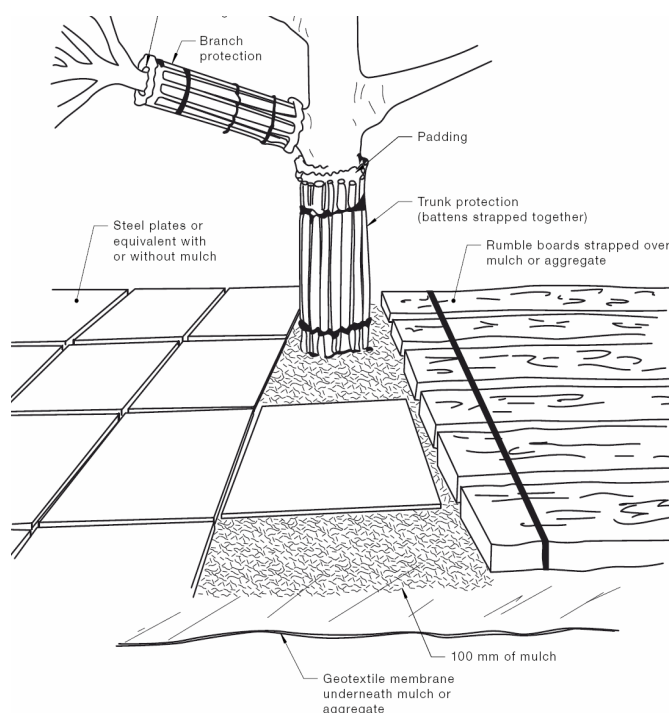


Figure 1 - Trunk Protection

9.0 Site Management Issues

9.1 Soil Compaction

Plant and pedestrian traffic during the construction period will cause significant soil compaction. This will be exacerbated by increased water expected on these soils as result of adjacent construction and weather. Compaction of the soil within the TPZ will reduce the voids between soil peds or particles therefore will reduce the gaseous exchange capacity of the root system which will slow critical metabolic processes. No pedestrian or plant access is permissible to the TPZ.

9.2 Site Access

Sufficient access is required to enable efficient construction. It is essential to delineate access zones or corridors which will provide suitable access without damaging the existing trees to be retained or causing compaction to the root zone.

9.3 Excavation within Tree Protection Area

No excavation is to be carried out within the TPZs of retained trees without the permission and supervision of the Site Arborist (AQF5)

9.4 Possible Contamination / Storage of Materials

The construction site will require the use of many chemicals and materials that are possible contaminants which if not managed will pose a risk to the existing trees. These possible contaminants include fuels, herbicides, solvents and the like. A site-specific Environmental Management Plan shall be provided, and this specific risk identified and addressed.

10.0 Tree Protection Measures During Construction

10.1 Maintenance of Pre-Construction Tree Protection Measures

The Pre-Construction Tree Protection Measures identified in 5.0 above are to be maintained in good and serviceable condition throughout the construction period.

10.2 Possible Contaminants

Do not store or otherwise place bulk materials and harmful materials under or near trees. Do not place spoil from excavations within the TPZs. Prevent wind-blown materials such as cement from harming trees. All possible contaminants are to be stored in a designated and appropriate area with secure chemical spill measures such as a bund in place.

10.3 Physical Damage

Prevent damage to tree. Do not attach stays, guys and the like to trees. No personnel, plant, machinery or materials are to be allowed within the tree protection fencing.

10.4 Compaction

No filling or compaction shall occur over tree roots zones within tree protection fenced areas. Where construction occurs close to or the TPZ of trees to be retained it shall be necessary to install protection to avoid compaction of the ground surface. This protection is to be planks supported clear of the ground fixed to scaffolding.

10.5 Trenching

No Trenching should be necessary within the TPZs or within tree protection fencing. No further trenching is to be carried out without the approval of the Site Arborist. Should any further trenching be required within the TPZs identified, this work is to be carried out by hand and under the supervision of a qualified Arborist.

10.6 Irrigation/Watering

Contractor is to ensure that soil moisture levels are adequately maintained. Apply water at an appropriate rate suitable for the species during periods of little or no rainfall.

10.7 Site Sheds / Amenities/ Storage

Site sheds, site amenities, ablutions and site storage shall be in the area clear of all TPZ. Chemicals and potential contaminants are to be stored appropriately and this

storage area is to be enclosed by a chemical spill bund to prevent the potential run off of contaminants in the event of a spillage or accident.

11.0 Environmental / Heritage/ Legislative Considerations

None of the subject trees are identified as threatened species or elements of endangered ecological communities within the NSW Biodiversity Conservation Act 2016.

12.0 References

Mattheck, C. Breloer, K. 1993, The Body Language of Trees: A Handbook for Failure Analysis, 12th Impression 2010 The Stationery Office.
AS4970-2009 Protection of Trees on Development Sites: Standards Australia

13.0 Disclaimer

This Appraisal has been prepared for the exclusive use of the Client and Birds Tree Consultancy.

Birds Tree Consultancy accepts no responsibility for its use by other persons. The Client acknowledges that this Appraisal, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data inspections, measurements and analysis carried out or obtained Birds Tree Consultancy and referred to in the Appraisal. The Client should rely on the Appraisal, and on its contents, only to that extent.

Every effort has been made in this report to include, assess and address all defects, structural weaknesses, instabilities and the like of the subject trees. All inspections were made from ground level using only visual means and no intrusive or destructive means of inspection were used. For many structural defects such as decay and inclusions, internal inspection is required by means of Resistograph or similar. No such investigation has been made in this case. Trees are living organisms and are subject to failure through a variety of causes not able to be identified by means of this inspection and report.

IACA Significance of a Tree, Assessment Rating System (STARS) © (IACA 2010) ©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria* and *Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

Tree Significance - Assessment Criteria



1. High Significance in landscape

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa *in situ* - tree is appropriate to the site conditions.

2. Medium Significance in landscape

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa *in situ*.

3. Low Significance in landscape

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.


Environmental Pest / Noxious Weed Species

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
 - The tree is a declared noxious weed by legislation.
- Hazardous/Irreversible Decline**
- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
 - The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

Appendix B Tree Retention Values

		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					
<p><u>Legend for Matrix Assessment</u></p> 						
	<p>Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i>. Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.</p>					
	<p>Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.</p>					
	<p>Consider for Removal (Low) - These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.</p>					
	<p>Priority for Removal - These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.</p>					

REFERENCES

Australia ICOMOS Inc. 1999, *The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance*, International Council of Monuments and Sites, www.icomos.org/australia

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, www.footprintgreen.com.au

Appendix C - Tree Inspection Data

Birds Tree Consultancy

Consulting Arborist • Project Management • Horticultural Consultancy • Landscape Management

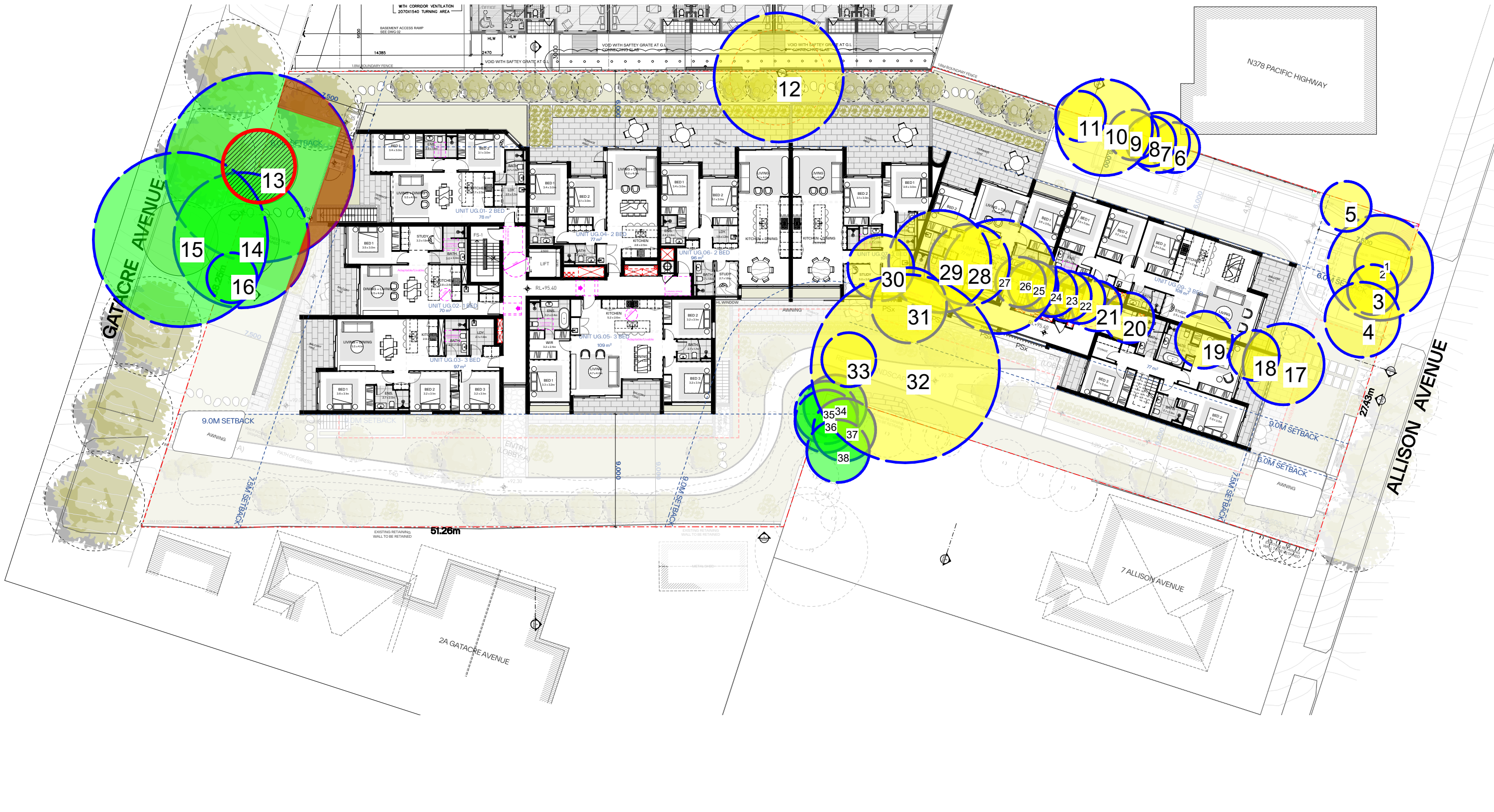
Inspection Data
1 Gatacre Avenue Lane Cove






4-Nov-23

Tree no.	Species	Common Name	Height	Spread(m)	Trunk (single, twin, multiple @)	DBH (mm)	TPZ Radius (m)	Diameter at Root Flare (DRF) (mm)	SRZ radius (m)	Trunk lean	Tree Age	Overall Health & Vigour	Crown Distribution	Structure	Pruning History	Defects	Pest Infestation	Canopy Density	Deadwood	Epicormic Growth	Life expectancy	Env. & Landscape significance	Retention Value	Notes
1	Elaeocarpus reticulatus	Blueberry Ash	9	4	1	190	2.28	250	1.85	Prominent E	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Thinning	30%	<5%	5-10 Years	Medium	Low	
2	Thuja occidentalis	Northern White Cedar	12	6	1	350	4.2	480	2.43	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	5-10 Years	Medium	Low	
3	Elaeocarpus reticulatus	Blueberry Ash	6	3	1	120	2	140	1.45	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Thinning	20%	<5%	5-10 Years	Medium	Low	
4	Elaeocarpus reticulatus	Blueberry Ash	11	5	1	250	3	300	2	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Thinning	40%	<5%	5-10 Years	Medium	Low	
5	Elaeocarpus reticulatus	Blueberry Ash	12	4	1	150	2	280	1.94	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	20%	<5%	5-10 Years	Medium	Low	
6	Cupressus sempervirens 'Stricta'		11	2	1	120	2	180	1.61	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
7	Cupressus sempervirens 'Stricta'		11	2	1	200	2.4	280	1.94	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
8	Cupressus sempervirens 'Stricta'		11	2	1	130	2	180	1.61	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
9	Cupressus sempervirens 'Stricta'		11	2	1	130	2	200	1.68	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
10	Cupressus sempervirens 'Stricta'		11	2	1	320	3.84	360	2.15	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
11	Cupressus sempervirens 'Stricta'		11	2	1	120	2	160	1.53	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
12	Cupressus sempervirens	Mediterranean Cypress	15	5	1	430	5.16	480	2.43	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
13	Araucaria columnaris	Cook Pine	19	6	1	630	7.56	730	2.9	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	High	High	
14	Cupressus torulosa		16	6	1	450	5.4	520	2.51	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
15	Lophostemon confertus	Brushbox	15	8	1	580	6.96	650	2.76	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	High	High	
16	Pittosporum undulatum	Sweet Pittosporum	7	3	1	100	2	140	1.45	Nil	Mature	Poor (50-59)	Symmetrical	Good	Line Clearance	No Evidence	No Evidence	Sparse	40%	<5%	21-40 years	Medium	Low	
17	Viburnum odoratissimum		9	7	1	270	3.24	350	2.13	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
18	Syzygium luehmannii	Small Leaved Lilly Pilly	8	4	1	100	2	150	1.49	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	

Tree no.	Species	Common Name	Height	Spread(m)	Trunk (single, twin, multiple @)	DBH (mm)	TPZ Radius (m)	Diameter at Root Flare (DRF) (mm)	SRZ radius (m)	Trunk lean	Tree Age	Overall Health & Vigour	Crown Distribution	Structure	Pruning History	Defects	Pest Infestation	Canopy Density	Deadwood	Epicormic Growth	Life expectancy	Env. & Landscap e significance	Retention Value	Notes
19	Syzygium luehmannii	Small Leaved Lilly Pilly	8	4	1	190	2.28	250	1.85	Nil	Mature	Fair (60-69)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
20	Camellia sasanqua		6	4	1	140	2	200	1.68	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
21	Camellia sasanqua		6	4	1	150	2	200	1.68	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
22	Camellia sasanqua		6	4	1	80	2	140	1.45	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
23	Camellia sasanqua		6	4	1	130	2	200	1.68	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
24	Syzygium luehmannii	Small Leaved Lilly Pilly	6	4	1	90	2	130	1.4	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
25	Camellia sasanqua		6	4	1	100	2	150	1.49	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
26	Camellia sasanqua		6	4	1	80	2	120	1.36	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
27	Cupressus leylandii	Leyland Cypress	12	8	1	380	4.56	450	2.37	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Low	Low	
28	Cupressus leylandii	Leyland Cypress	12	8	1	270	3.24	340	2.1	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Low	Low	
29	Cupressus leylandii	Leyland Cypress	12	8	1	340	4.08	400	2.25	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Low	Low	
30	Glochidion ferdinandii	Pencil Cedar, Cheese Tree	10	6	1	220	2.64	280	1.94	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
31	Michelia figo		7	6	Multiple Stems	251.2	3.01	350	2.13	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
32	Jacaranda mimosifolia	Jacaranda	10	12	Multiple Stems	626.8	7.52	650	2.76	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
33	Elaeocarpus reticulatus	Blueberry Ash	9	5	1	180	2.16	0		Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
34	Archontophoenix cunninghamiana	Bangalow Palm	12	4	1	N/A	2.5	N/A	N/A	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
35	Archontophoenix cunninghamiana	Bangalow Palm	12	4	1	N/A	2.5	N/A	N/A	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
36	Livistona australis		12	4	1	N/A	2.5	N/A	N/A	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
37	Archontophoenix cunninghamiana	Bangalow Palm	12	4	1	N/A	2.5	N/A	N/A	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	
38	Archontophoenix cunninghamiana	Bangalow Palm	12	4	1	N/A	2.5	N/A	N/A	Nil	Mature	Good (70-79)	Symmetrical	Good	No Evidence	No Evidence	No Evidence	Normal	<5%	<5%	21-40 years	Medium	Medium	

Appendix D - Tree Location Plan



- Legend**
-  Tree to be Retained and Protected
 -  Tree Not Viable to be Retained due to Proposed Development
 -  Extent of encroachment in TPZ where less than 100%
 -  Tree Protection Zone (TPZ) in accordance with AS4970-2009
 -  Structural Root Zone (SRZ) in accordance with AS4970-2009

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Project: 1 Gatacre Ave Lane Cove
 Client: Winim
 DWG: A01 REV E
 Plan: Tree Location Plan
 Date: 22 April 2024 Scale : 1:300 @ A3