

Arboricultural Impact Assessment Report



49 Blackbutts Road, Frenchs Forest, NSW, 2086

Prepared for
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Version 2.0

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2.0 INTRODUCTION

This report was commissioned by Joseph Mourched of Sekisui House Services (NSW) Pty Ltd to accompany the Development Application for the Subdivision of land currently known as 49 Blackbutts Road, Frenches Forest, NSW, 2086. Version 2.0 of the report addresses updates to approved D.A's pertaining to the site.

The purpose of this report is to assess the current health and condition of individual trees within the site and any tree outside the site (including trees in neighbouring properties, street trees, and park trees) that may be impacted by the proposed development.

The report has been prepared in accordance with the State Environmental Planning Policy (Biodiversity and Conservation) 2021, Warringah Development Control Plan 2011 Part E The Natural Environment, the Australian Standards 'AS4970:2009 - Protection of Trees on Development Sites' and the Australian Standards 'AS4373:2007 – Pruning of Amenity Trees'.

3.0 METHODOLOGY

An assessment of any tree contained within this report was limited to a visual assessment from ground level. A summary of the findings from the assessment are detailed in the Tree Assessment Schedule appended to this report. Information included in the table which will be relied upon throughout the report and form the basis of the discussions and recommendations includes:

- Species Name
- Height and Spread (metres)
- Diameter at Breast height (DBH)
- Age Class
- Health
- Structure

- Landscape Significance
- Remaining Life Expectancy
- Retention Value
- Tree Protection Zone (TPZ)
- Structural Root Zone (SRZ)

(See Appendix A - Definition and Criteria for further explanation)

The height and canopy spread of each tree was estimated. A metric diameter measuring tape was used to establish the trunk Diameter at Breast Height (DBH) and is recorded in millimetres.

A Smart Phone was used for the purpose of providing photographic evidence which may be cross referenced by persons who have obtained this report for the purpose of reading and analysing the information that has been discussed throughout.

Aerial inspection, root or soil analysis, exploratory root trenching and internal diagnostic testing has not been undertaken.

3.1 Tree Protection Zone and Structural Root Zone

The Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) has been calculated in accordance with the *Australian Standard AS 4970-2009, 'Protection of Trees on Development Sites'*.



4.0 SITE DESCRIPTION

The subject site is known as 49 Blackbutts Road, Frenchs Forest, NSW, 2086. The subject site is irregular in shape and is approximately 9975m2 in land size. The site land is zoned category R2: Low Density Residential pursuant to the *Warringah Local Environmental Plan 2011 (pub. 14-2-2014)* and is legally defined as Lot 1 in Deposited Plan 1298188.

Soil of this area is typical of the Lambert Landscape Group (as classified in the Soil Landscapes of Sydney – Port Hacking 1:100,000 Sheet). Lambert soils consisting of shallow (<50cm) discontinuous Earthy Sands and Yellow Earths on crests and insides of benches, shallow (<20cm) Siliceous Sands/Lithosols on leading edges, shallow to moderately deep (<150cm) Leached Sands, Grey Earths and Gleyed Podzolic Soils in poorly drained areas, localised Yellow Podzolic Soils associated with shale lenses.



Figure 1 - Aerial view of subject site (source: SIX Maps)

4.1 Legislation and Planning Controls

Planning Control	Relevant	Not Relevant
Land Zoning	R2	
10/50 Vegetation Clearing Entitlement Area		✓
Acid Sulfate Soils		✓
Foreshore Building Line		✓
Flood Prone Land		✓
Heritage Conservation Area		✓
Heritage Listed Site		✓
Landslide Risk Land	✓	

5.0 OBSERVATIONS

5.1 Trees

A total of 149 trees were inspected between the 13th and 14th of June 2023. The general health of the trees has been assessed as ranging from good to very poor with their structural condition assessed as ranging from good to poor. Individual assessment findings are detailed in Appendix C - Tree Assessment Schedule.

5.2 Tree Significance

Determined by an assessment of the cultural, environmental and aesthetic value of individual trees - Appendix B, the following Landscape Significance findings were made for the 149 assessed trees.

Significance Scale:

- 1 High
- 2 Medium
- 3 Low
- 4 Insignificant

Significance	High	Medium	Low	Insignificant
Tree Number	4, 42, 55, 71, 83	1, 2, 3, 5, 7, 8, 9, 11, 12,	6, 10, 13, 15, 18, 21, 23, 24,	-
	& 119	14, 16, 17, 19, 20, 22, 27,	25, 26, 28, 29, 30, 32, 34,	
		31, 33, 36, 38, 39, 40, 41,	35, 37, 45, 48, 50, 53, 61,	
		43, 44, 46, 47, 49, 51, 52,	62, 63, 64, 66, 68, 69, 70,	
		54, 56, 57, 58, 59, 60, 65,	72, 73, 74, 76, 77, 78, 79,	
		67, 75, 84, 86, 90, 91, 96,	80, 81, 82, 85, 87, 88, 89,	
		98, 99, 103, 104, 105,	94, 95, 97, 100, 101, 102,	
		107, 108, 110, 111, 113,	106, 109, 112, 115, 116,	
		114, 126, 127, 128, 131,	117, 118, 120, 121, 122,	
		140, 141, 142, 145 & 147	123, 124, 125, 129, 130,	
			132, 133, 134, 135, 136,	
			137, 138, 139, 143, 144,	
			146, 148 & 149	

5.3 Tree Retention Values

Determined by combining the Useful Life Expectancy and Landscape Significance Rating into the Retention Value Matrix - Appendix B, the following Retention Values were given for the 149 assessed trees.

Retention Value

High – Priority for Retention **Medium** – Consider for Retention **Low** – Consider for Removal

Insignificant – Priority for Removal

Retention Value	High	Medium	Low
Tree Number	4, 42, 55, 71, 83	1, 2, 3, 5, 7, 8, 9, 11,	6, 10, 13, 15, 18, 21, 23,
	& 119	12, 14, 16, 17, 19, 20,	24, 25, 26, 28, 29, 30,



22, 27, 31, 33, 36, 38,	32, 34, 35, 37, 45, 48,
39, 40, 41, 43, 44, 46,	50, 53, 61, 62, 63, 64,
47, 49, 51, 52, 54, 56,	66, 68, 69, 70, 72, 73,
57, 58, 59, 60, 65, 67,	74, 76, 77, 78, 79, 80,
75, 84, 86, 90, 91, 92,	81, 82, 85, 87, 88, 89,
93, 96, 98, 99, 103,	94, 95, 97, 100, 101,
104, 105, 107, 110,	102, 106, 108, 109, 112,
111, 113, 126, 127,	114, 115, 116, 117, 118,
128, 131, 140*, 141*,	120, 121, 122, 123, 124,
142*, 145* & 147*	125, 129, 130, 132, 133,
	134, 135, 136, 137, 138,
	139, 143*, 144* 146*,
	148* & 149*

^{*}Trees within neighbouring property should be retained and protected regardless of retention value

6.0 THE PROPOSAL

The proposed development includes:

• Subdivision of existing land.

The following plans have been reviewed:

Dwg No.	Revision	Plan Name	Date	Prepared by
C01.01	1	Cover Sheet & Drawing	7/03/2024	Enspire Solutions Pty Ltd
		Schedule		
C01.21	1	Specification Notes 01	7/03/2024	Enspire Solutions Pty Ltd
C01.22	1	Specification Notes 02	7/03/2024	Enspire Solutions Pty Ltd
C01.41	1	General Arrangement Plan	7/03/2024	Enspire Solutions Pty Ltd
C02.01	1	Demolition Plan	7/03/2024	Enspire Solutions Pty Ltd
C03.01	1	Erosion & Sediment Control	7/03/2024	Enspire Solutions Pty Ltd
		Plan		
C03.21	1	Erosion & Sediment Control	7/03/2024	Enspire Solutions Pty Ltd
		Details		
C04.01	1	Earthworks Cut & Fill Plan	7/03/2024	Enspire Solutions Pty Ltd
C04.21	1	Earthworks Cut & Fill Sections	7/03/2024	Enspire Solutions Pty Ltd
C05.01	1	Siteworks & Stormwater	7/03/2024	Enspire Solutions Pty Ltd
		Management Plan		
C05.02	1	Siteworks & Stormwater	7/03/2024	Enspire Solutions Pty Ltd
		Management Plan Sheet 2		
C06.01	1	Road Typical Cross Sections	7/03/2024	Enspire Solutions Pty Ltd
C07.01	1	Road Longitudinal Section	7/03/2024	Enspire Solutions Pty Ltd
C11.01	1	Pavement, Signage and	7/03/2024	Enspire Solutions Pty Ltd
		Linemarking Plan Sheet 1		
C11.02	1	Pavement, Signage and	7/03/2024	Enspire Solutions Pty Ltd
		Linemarking Plan Sheet 2		
C14.01	1	Siteworks Details	7/03/2024	Enspire Solutions Pty Ltd
C17.01	1	OSD Tank Plan & Section	7/03/2024	Enspire Solutions Pty Ltd
C18.01	1	Stormwater Details	7/03/2024	Enspire Solutions Pty Ltd

Dwg No.	Revision	Plan Name	Date	Prepared by
C20.01	1	Pre-Development	7/03/2024	Enspire Solutions Pty Ltd
		Catchment Plan		
C20.21	1	Post-Development	7/03/2024	Enspire Solutions Pty Ltd
		Catchment Plan		
C22.01	1	Turning Path Plan	7/03/2024	Enspire Solutions Pty Ltd
-	1.0	Arboricultural Impact	14/03/2024	The Tree Guardian
		Assessment Report		
		(Demolition)		
1/4	В	Master Plan	31/01/2023	CLD Studio
2/4	В	Building Envelope Plan	31/01/2023	CLD Studio
3/4	В	Building Envelope Plan	31/01/2024	CLD Studio
4/4	В	Building Envelope Plan	31/01/2024	CLD Studio
DA2024/0081	-	Notice of Determination	25/06/2024	Northern Beaches
				Council
DA2024/0492	-	Landscape Referral	16/05/2024	Northern Beaches
		Response		Council

7.0 TREE PROTECTION STANDARDS

This report adopts the Australian Standard 'AS4970-2009, Protection of Trees on Development Sites' as a point of reference and guide for the recommended minimum setbacks from the centre of a tree's trunk to development works.

7.1 Tree Protection Zone (TPZ)

The Tree Protection Zone (TPZ) is a radial distance measured from the centre of the tree trunk at 1.4 metres in height and are specified for each tree in Appendix D – Tree Impact Schedule. These have been calculated in accordance with 'AS4970-2009 - Protection of Trees on Development Sites'

The purpose of the TPZ is to ensure the tree's root area and crown area are protected during construction works. It is an area that is to be isolated from construction disturbances such as excavation, level changes, ripping of soil, trenching and movement of construction machinery, so that the tree remains viable into the future.

7.2 Structural Root Zone (SRZ)

The Structural Root Zone is an area which provides a trees structural stability. This is a radial distance calculated by formula (D \times 50) 0.42 \times 0.64. An SRZ should not be less than 1.5 metres.

This area should be completely restricted from construction activities unless clearly demonstrated that the works will not adversely impact on a trees stability or viability.

7.3 Incursion into TPZ

Encroachments into a TPZ may be possible where it is assessed by a suitable qualified AQF Level 5 Arborist and deemed to be acceptable without being detrimental to the ongoing vigour of a tree.

- Minor Encroachment of 10% or less of the TPZ area and outside of the Structural Root Zone (SRZ) is generally considered acceptable. However, the area lost should be compensated for



elsewhere and only be restricted to one side of the tree. Other factor such as health, condition, age, species type and tolerance to disturbance, as well as lean and stability must also be considered when establishing if the encroachment is acceptable and won't adversely impact on the tree.

 Major Encroachment of more than 10% of the TPZ area will require detailed investigation to establish if the tree will remain viable. Such investigation should involve either root investigation or consideration of health, condition, age, species type and tolerance to disturbance, lean and stability.

8.0 IMPACT ASSESSMENT

8.1 Site Trees TPZ and SRZ Calculations

TPZ and SRZ calculations have been made for all trees captured within *Appendix C – Tree Assessment Schedule* and can be viewed within *Appendix D – Tree Impact Schedule*. The encroachment into the TPZ of each tree has been nominated as either 'No Incursion', 'Minor', 'Major' or 'Within Footprint' based on the criteria outline within *Section 7.0 Tree Protection Standards*.

8.2 Proposed Development Assessment Findings

General

Version 2.0 of the report has been updated to reflect trees approved for removal under a separate D.A or are listed as an exempt species.

Prescribed tree removals already approved fall into two categories, they have either been approved under the Landscape Referral Response DA2024/0492, dated 16/05/2024 prepared by Northern Beaches Council or the Demolition Notice of Determination DA2024/0081, dated 25/06/2024 prepared by Northern Beaches Council.

Trees Approved for Removal Under DA2024/0492

The Landscape Referral Response DA2024/0492, dated 16/05/2024 prepared by Northern Beaches Council approves the removal of fourteen (14) existing prescribed trees on the subject site as listed below:

Tree's 7, 10, 60, 64, 71, 72, 74, 75, 77, 79, 81, 82, 120 & 121.

Trees Approved for Removal Under DA2024/0081

The Demolition Notice of Determination DA2024/0081, dated 25/06/2024 prepared by Northern Beaches Council approves the removal of eight (8) existing prescribed trees on the subject site as listed below:

Tree's 10, 23, 28, 60, 64, 101, 114 and 137, note a total of three (3) trees have been approved for removal in both DA's they been Trees 10, 60 & 64.

Exempt Trees

A total of 56 trees within the site are listed as exempt due to their size, species or location and as per the *Northern Beaches Council Website 'What you can do without a Council permit'* Council consent is not required for their removal.

Tree's 6, 26, 32, 33, 40, 51, 56, 58, 61, 62, 63, 65, 66, 68, 69, 70, 73, 76, 78, 80, 87, 90, 92, 93, 94, 95, 102, 107, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 138 & 139 are all listed as exempt trees which may be removed without a permit due to the following circumstances.

The tree is:

- Under 5 metres in height
- On the Exempt Tree Species List
- In an area in which the Council has authorised their removal as part of a hazard reduction program, where that removal is necessary in order to manage risk
- Required to be removed under other legislation (including the NSW Rural Fires Act 1997 and the Environmental Planning and Assessment Act 1979)
- Can be removed under the 10/50 Legislation. Some clearing of vegetation is allowed if your
 property is mapped in the 10/50 entitlement area. Development Application Approval
 conditions in some circumstances prevent the use of the RFS 10/50 entitlement area from
 being used.
- Removed by Rural Fire Services because they pose or will pose a significant threat to access along required fire trails or to human life, buildings or other property during a bush fire
- Located within two metres of an existing approved building (not including decks, pergolas, sheds, patios or the like, even if they are attached to a building). The measurement is made from the building to the base of the tree trunk.
- Is considered a high risk/imminent danger certified by a Level 5 qualified arborist. These trees can be removed without Council consent by the owner of the tree subject to the owner obtaining written confirmation from the arborist that clearly states:
- a) The arborist qualifications: AQF Level 5 Arborist or equivalent
- b) That the tree(s) is declared an imminent danger and high risk to life and property
- c) That immediate removal of the tree(s) is recommended
- d) A copy of the report must be sent to Council for record keeping purpose
 - Any tree listed as a priority weed under the Bio Security Act 2015 and identified in the Greater Sydney Regional Weed Management Plan.
 - Dead, and not required as the habitat of native animals photographic evidence recommended
 - Has fallen or partially fallen as a result of a storm and still present a danger (photos required)
 - Part of the pruning or removal of hedges (unless hedge is conditioned to be retained in a development consent). "Hedge" means groups of two or more trees that:
- (a) are planted (whether in the ground or otherwise) so as to form a hedge, and
- (b) rise to a height of at least 2.5 metres (above existing ground level).



Trees within the Footprint

The proposed sub-division will require the removal of 34 trees that have not already been listed as exempt, which are located within the footprint of the proposed sub-division building envelopes, driveways, PPOS areas and new road. They have been identified as Tree's 17, 22, 25, 27, 30, 31, 34, 35, 36, 37, 38, 41 (grouping of 18, only remove trees within the footprint), 42, 43, 44, 45, 46, 52, 53, 54, 57, 59, 67, 83, 85, 86, 88, 89, 91, 100, 101, 104, 105 & 106.

The following bullet points show the proposed subdivision works that will impact an individual tree identification number:

- New Road: 67
- Lot 3: 17, 30, 31, 34, 35, 36, 37, 38, 42, 43, 44, 45 & 46
- Lot 3 PPOS: 22
- Lot 4: 25, 27 & 41
- Lot 5: 52, 53, 54 & 57
- Lot 6: 59, 89 & 91
- Lot 7: 85, 86, 88, 100 & 101
- Lot 8: 83, 104, 105 & 106

Out of the 34 trees 13 have been attributed with a 'Low' retention value, 19 with a 'Medium' retention value and 2 with a 'High' retention value. A breakdown of retention value by identification number is as follows:

Low: 25, 30, 34, 35, 37, 45, 53, 85, 88, 89, 100, 101 & 106

Medium: 17, 22, 27, 31, 36, 38, 41, 43, 44, 46, 52, 54, 57, 59, 67, 86, 91, 104 & 105

High: 42 & 83

Tree's that exhibit 'High' retention values warrant retention and major design consideration where practical. The following comments pertaining to trees of 'High' retention value are listed below;

<u>Tree 42: Eucalyptus botryoides – Remove</u>

Tree 42 is located within the footprint of Lot 3's building envelope with no mitigation options or design modifications that exist to retain the tree. The tree was observed to be in fair health and structural condition with a good form classification.

Canopy and trunk notes include bark delamination on the South side, deadwood and epicormic growth. The tree was judged to have a history of failure and was awarded a high significance predominantly due to its size and canopy contribution. Should the proposed development be approved in its current format, Tree 42 is required to be removed.

Tree 83: *Eucalyptus botryoides* – Remove

Tree 83 is within the footprint of Lot 8's building envelope with no mitigation options for its retention. Should the proposed subdivision be approved in its current format, tree removal is required.

Trees with a Major Encroachment

Tree 14: Eucalyptus haemastoma - Retain

The supplied plans indicate Tree 14 will be subject to a total combined encroachment of 29.9%. Anything greater than 10% is considered major in accordance with AS4970:2009 – Protection of



Trees on Development Sites. Encroachment consists of 26.1% from Lot 3's Principal Private Open Space (PPOS) and a further 3.8% from Lot 3's building envelope.

Design modification to include mirroring of the PPOS to the East which will eliminate its 26.1% encroachment reducing actual encroachment to only 3.8% from Lot 3's building envelope. In doing so Trees 21 & 22 will now be within the footprint of Lot 3's PPOS and will require removal. Tree 1 will also incur and approximate 1.5% TPZ encroachment.

Tree 14 is a better candidate for long term retention than Trees 21 & 22, it is also situated further away from the building envelope allowing adequate space for its retention. The 1.5% encroachment Tree 1 will experience is insignificant and well within the acceptable limits as defined by *AS4970*.

The tree was noted to be in good health, structure and form presenting 'Medium' retention values, the tree is to be retained and protected.

Tree 18: Corymbia maculata - Remove

The supplied plans indicate Tree 18 is within the footprint of Lot 3's PPOS, as a design modification is required to retain Tree 14, Tree 18 will too benefit and be able to be retained however, the tree, comprised of 3 separate trees in a group, will be located within 800mm – 1200mm of Lot 3's building envelope.

The tree was awarded a 'Short' ULE rating, is considered to be of 'Low' Landscape Significance resulting in 'Low' retention values.

Tree 19: Corymbia maculata - Remove

A design modification is required for the retention of Tree 14 thus resulting in Tree 19 being within the footprint of the PPOS for Lot 3. Without the design modification Tree 19 already sustains a 17.4% major encroachment from the PPOS. Tree removal is required.

Tree 20: Corymbia maculata - Remove

Tree 20 will be subjected to a 38.2% total encroachment combined from 22.7% from Lot 3's PPOS and an additional 15.5% from Lot 3's building envelope. Tree removal is required.

Tree 21: Corymbia maculata - Remove

A design modification required for the retention of Tree 14 will result in Tree 21 being within the footprint of the PPOS for Lot 3. Tree removal is required.

Tree 29: Corymbia maculata - Remove

Tree 29 will result in a 28.9% major encroachment from Lot 3's building envelope. Tree removal is required.

<u>Tree 39: Glochidion ferdinandi – Remove</u>

The supplied plans indicate Tree 39 will be subjected to a 29.3% major encroachment with work to occur within the SRZ from Lot 4's building envelope.

Tree 47: Eucalyptus microcorys – Remove

The supplied plans indicate Tree 47 will be subjected to a 20.2% major encroachment with work to occur within the SRZ from Lot 3's building envelope. The tree presents a 'Medium' ULE rating is of



'Medium' Landscape Significance resulting in 'Medium' Retention Values. Encroachment is deemed excessive, tree removal is required.

<u>Tree 48: Eucalyptus botryoides – Retain</u>

The supplied plans indicate Tree 48 will be subjected to a 16.4% major encroachment from Lot 3's turning bay. Design modification is required to reduce the footprint of the turning bay below a 10% encroachment. Modification to the design will result in the successful retention of Trees 48 & 49.

Tree 49: Eucalyptus botryoides - Retain

As with Tree 48, Tree 49 will be subjected to a 27.9% major encroachment from Lot 3's turning bay. Tree 49 will further endure an additional 4.5% from Lot 3's building envelope. Design modification is required to reduce the footprint of the turning bay, in theory if the design achieves below a 10% encroachment for Tree 48, it would result in no impact to Tree 49's TPZ reducing actual encroachment to 4.5%.

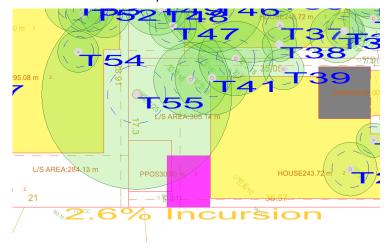
Tree 55: Eucalyptus microcorys - Retain

This 25m tree with an equally wide spreading canopy was noted to be in good health, structural condition and form at the time of assessment. The tree was awarded a 'Long' ULE rating, is of 'High' Landscape Significance resulting in 'High' retention values.

Currently, the tree is subjected to a total combined encroachment of 42.6%, encroachment is deemed unacceptable however the tree is worthy of significant design modification for its retention.

Encroachment is comprised of 2.6% from Lot 3, 4.4% from Lot 4, 28.4% from Lot 5's building envelopes. An additional 7.2% encroachment is calculated from the PPOS of Lot 4.

Design modification to ensure Tree 55's retention may consist of relocation of Lot 4s' PPOS to incur on the minimum TPZ as pictured below:



This modification will reduce the encroachment from 7.2% to 2.6%. Further reduction may be achieved by utilizing pier and beam technology with the remaining PPOS located inside the TPZ, this would result in approximately 0.5% incursion.

Lot 5, currently accountable for 28.4% encroachment is to be constructed on pier and beams within Tree 55's TPZ. The TPZ area is calculated to be 382.9m2, a 300mm wide pier hole equates to approximately 0.07m2 or 0.18% of the calculated TPZ. Using this equation an encroachment of 1.8% would be sustained for up to 10 pier holes.

Using sensitive construction measures Tree 55's TPZ encroachment may be reduced from 42.6% to 11.4% or 9.5% depending on whether pier and beams are used for Lot 4's PPOS. Either encroachment will be supported as the tree is in a condition and vitality to tolerate construction



impact however, the latter encroachment calculation is the more preferable and within the acceptable limits as defined by AS4970.

Strict tree protection measures and supervision by an AQF Level 5 Project Arborist is to be adhered to in accordance with *AS4970:2009 – Protection of Trees on Development Sites*.

Tree 84: Eucalyptus botryoides - Remove

Tree 84 will result in a 65.6% major encroachment from the building envelopes of Lot 7 (39.0%) and Lot 8 (26.6%).

Tree 96: Eucalyptus pilularis - Remove

Tree 96 will result in a 28.4% major encroachment from the building envelopes of Lot 6 (3.3%) and Lot 7 (25.1%).

Tree 99: Livistona australis - Remove

Tree 99 will result in a 30.5% major encroachment from the building envelope of Lot 7.

Tree 103: Syzygium smithii - Remove

Tree 103 will result in a 67.0% major encroachment from the building envelopes of Lot 7 (27.9%) and Lot 8 (39.1%).

Tree 140: Eucalyptus botryoides- Retain

Located on a neighbouring property, the supplied plans indicate that Tree 140 will be subjected to a 27.8% major encroachment from development of the proposed new road. The current design shows works through the SRZ, a design modification is required to ensure the footprint of the new road is outside of the SRZ. Sensitive construction measures apply with site specific conditions to include no excavation within the TPZ, existing subgrades are to be used with minimal fill (<150mm) to be used if needed to construct the road.

Should the above-mentioned sensitive constructions measures not be a viable building methodology. The road is to be bridged, suspended or constructed on piers and beams through the TPZ. All works are to be supervised by the AQF Level 5 Project Arborist.

Tree 141: Cupressus x leylandii x 7- Retain

Located on a neighbouring property, the supplied plans indicate that Tree 141 will be subjected to a 20.3% major encroachment from development of the proposed new road. As with Tree 140 sensitive construction measures apply with site specific conditions to include no excavation within the TPZ, existing subgrades are to be used with minimal fill (<150mm) to be used if needed to construct the road.

Should the above-mentioned sensitive constructions measures not be a viable building methodology. The road is to be bridged, suspended or constructed on piers and beams through the TPZ. All works are to be supervised by the AQF Level 5 Project Arborist.

Tree 142: Melaleuca quinquenervia- Retain

Located on a neighbouring property, the supplied plans indicate that Tree 142 will be subject to a 13.0% major encroachment from the PPOS located within the rear of Lot 7. A design modification is



required relocating the PPOS outside of the TPZ of tree 142 or ensuring the TPZ encroachment falls below the 10% threshold and acceptable limit as defined by *AS4970*.

Tree 146: Cupressus sempervirens x 3- Retain

Located on a neighbouring property, the supplied plans indicate that Tree 143 will be subject to a 13.0% major encroachment from the PPOS located within the rear of Lot 12. A design modification is required relocating the PPOS outside of the TPZ of tree 146 or ensuring the TPZ encroachment falls below the 10% threshold and acceptable limit as defined by *AS4970*.

Trees with a Minor Incursion

All encroachments of the following trees are deemed to be within the acceptable limits as defined by AS4970:2009 – Protection of Trees on Development Sites;

Tree 1, 3, 4, 9, 11, 16, 24, 98, 143, 144 & 148 all have TPZ encroachments less than 10.0%. They are all proposed for retention. Tree protection in accordance with AS4970:2009 – Protection of Trees on Development Sites, Section 8.3 – Site Specific Protection Measures & Appendix B: Tree Protection (Generic) of this report are to be adhered to ensure their long-term retention.

Tree 148 may require minor pruning of small diameter branches back to the fence line. Tree 148 consists of several fruit bearing trees, all pruning work is to be undertaken in accordance with *AS4373:2007 – Pruning of Amenity Trees*.

Trees with No Incursion

Tree's 2, 5, 8, 12, 13, 15, 50, 97, 145, 147 & 149 are not expected to have their TPZ's encroached upon. They are still to be retained and protected in accordance with *AS4970:2009 – Protection of Trees on Development Sites* to avoid accidental damage.

Tree's 15 is recommended for removal due to Arboricultural reasons. It has been awarded a 'Low' Retention Value and should be removed irrespective of the development.

8.3 Site Specific Protection Measures

As the development application is for the subdivision of land only, no works are required onsite. No site specific protection measures are required at this stage. Should minor works proceed on site such as establishment of fencing and signage, an appropriately qualified and experienced AQF Level 5 Arborist is to be engaged and generic tree protection measures as per *AS4970:2009 – Protection of Trees on Development Sites* are to be implemented.

9.0 RECOMMENDATIONS

9.1 Exempt & Approved Removals

Tree's 6, 26, 32, 33, 40, 51, 56, 58, 61, 62, 63, 65, 66, 68, 69, 70, 73, 76, 78, 80, 87, 90, 92, 93, 94, 95, 102, 107, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 138 & 139 are all listed as exempt trees which may be removed without Council consent.

Tree's 7, 10, 60, 64, 71, 72, 74, 75, 77, 79, 81, 82, 120 & 121 have already been approved for removal within The Landscape Referral Response DA2024/0492, dated 16/05/2024 prepared by Northern Beaches Council.



Tree's 10, 23, 28, 60, 64, 101, 114 and 137 have already been approved for removal within The Demolition Notice of Determination DA2024/0081, dated 25/06/2024 prepared by Northern Beaches Council.

9.2 Tree Removal

As a result of inspection and assessment of the subject trees not already listed as exempt or approved for removal under a separate D.A, the following recommendations are made;

Tree's 17, 22, 25, 27, 30, 31, 34, 35, 36, 37, 38, 41 (grouping of 18), 42, 43, 44, 45, 46, 52, 53, 54, 57, 59, 67, 83, 85, 86, 88, 89, 91, 100, 104, 105 and 106 are located within the proposed subdivision footprint and will require removal to facilitate the works.

Tree's 18, 19, 20, 21, 29, 39, 47, 84, 96, 99 and 103 are all subject to major TPZ encroachments that cannot be reduced to an acceptable level as per *AS4970* and therefore are required to be removed.

Tree 15 was noted to be a matured epicormic shoot growing from an old removed stump, it's removal should be approved irrespective of the development.

9.3 Tree Retention

Tree's 1, 2, 3, 4, 5, 8, 9, 11, 12, 13, 14, 16, 24, 48, 49, 50, 55, 97, 98, 140, 141, 142, 143, 144, 145, 146, 147, 148 & 149 are recommended for retention and are to be protected in accordance with the Australian Standards *AS4970:2009 – Protection of Trees on Development Sites, Section 8.3 Site Specific Protection Measures* & *Appendix B: Tree Protection (Generic)* of this report.

9.4 Design Modification

Design modification is required to ensure the retention and ongoing viability of Tree's 14, 48, 49, 55, 140, 142, 146 which are all subject to major TPZ encroachments. Recommendations on how to reduce encroachment have been provided within *Section 8.2 Proposed Development Assessment Findings*.

Should you require any further information in relation to this report, please contact our office on:

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Regards,

Tarek Hussein Consulting Arborist

Diploma Horticulture (Arboriculture) - AQF Level 5

ISA Tree Risk Assessment Qualification (TRAQ)

AQF Certificate III in Arboriculture AQF Certificate II in Arboriculture

On anti-one Management City of C

Operations Manager for City of Sydney Major Tree Services Contract 2018-2021



10.0 LIMITATION OF LIABILITY

The Tree Guardian Arboricultural Consultants are tree specialists who use their qualifications, education, knowledge, training, diagnostic tools and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of this assessment and report.

The Tree Guardian cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways the arboriculture industry does not fully understand. Conditions are often hidden within trees and below ground. Unless otherwise stated, observations have been visually assessed from ground level. The Tree Guardian cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of The Tree Guardian's services, such as property boundaries and ownership, disputes between neighbours, sight lines, landlord-tenant matters, and related incidents. The Tree Guardian cannot take such issues into account unless complete and accurate information is given prior or at the time of the site inspection. Likewise The Tree Guardian cannot accept responsibility for the authorisation or non-authorisation of any recommended treatment or remedial measures undertaken.

In the event that The Tree Guardian recommends retesting or inspection of trees at stated intervals these works must be carried out within the designated time frame. It is the client's responsibility to make arrangements with The Tree Guardian to conduct the reinspection. Trees can be managed, but they cannot be controlled. To live or work near a tree involves a degree of risk. There is no warranty or guarantee, either expressed or implied by The Tree Guardian, that problems or deficiencies of the subject trees may not arise at a future time.

Trees are living entities. As such, their health may alter, they will grow and their environmental circumstances may change from the time of the site inspection upon which this report is based. For this reason, this report has a maximum validity time of 1 year from the date of being written. Should there be any alteration to the site, the tree or the trees immediate environment from those current at the time of the site inspection, upon which this report is based, the report will become invalid immediately.

All written reports must be read in their entirety, at no time shall part of the written assessment be referred to unless taken in full context of the whole written report. This report remains the intellectual property of The Tree Guardian. It has been issued to the identified client for the specified and agreed purpose only. Use of this report for any other purpose or by any other individual or company must have the written consent of The Tree Guardian PRIOR to that use. Failure to obtain such consent is deemed a breach of copyright and will result in legal action being undertaken against all parties involved. If this written report is to be used in a court of law or any legal situation The Tree Guardian must be advised in writing prior to the written assessment being presented in any form to any other party.

Care has been taken to obtain information from reliable sources. All data has been verified wherever possible however, The Tree Guardian can neither guarantee nor be responsible for the accuracy of information provided by others.

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- AS 4970:2009 Protection of Trees on Development Sites
- AS 4373:2007 Pruning of Amenity Trees,
- AS 2303:2018 Tree Stock for Landscape Use

APPENDIX A – DEFINITIONS AND CRITERIA

Tree ID No A unique identification number assigned to a particular tree and used to identify it throughout the report.

Common Name The name in common use and accepted by most persons for that particular species.

Botanical Name The taxonomic name, expressed in binomial nomenclature, derived from visual identification features and visible from ground level or specimen collection.

Height (m) The visually estimated height of the tree in metres.

Width N/S = North to South; E/W = East to West. The visually estimated maximum width of the canopy in that direction in metres.

Ø (m) Diameter at Breast Height (DBH) measured at 1.4m above ground, unless otherwise noted, as outlined in AS 4970 – 2009.

Ø @ Base (m) Diameter at Base measured above the root flares and below the DBH as outlined in AS4970-2009.

Health Good (G) – In good, health with no significant health issues visible. Fair (F) – Some health issues which could be addressed by intervention. Poor (P) – Significant health issues that could be addressed by intervention. Very Poor (VP) – Significant health issues which are unlikely to be addressed by intervention. Senescent (S) – Tree has entered a cycle of decline from where it is unlikely to recover regardless of intervention.

Structure Good (G)—No visible defects within the structure of the tree. Fair (F) — Minor visible defects within the structure of the tree relative to the species. Poor (P) - Major visible defects within the structure of the tree relative to the species. Very Poor (VP) - Significant visible defects within the structure of the tree relative to the species.

Form Good (G) – A specimen that has attained its full genetic potential and with no physical or environmental impediments to growth. Fair (F) – A specimen that has generally attained its genetic potential and with some minor physical or environmental impediments to growth. Poor (P) – A specimen that has attained some of its genetic potential and with significant physical or environmental impediments to growth. Very Poor (VP) - A specimen that has not attained any of its full genetic potential due to major physical or environmental impediments to growth.

Age Y = Young – young tree that is yet to establish. SM = Semi-mature – an established tree but one that has not attained its full genetic potential for size and/or form. M = Mature – a tree that has attained its full genetic potential in size and/or form. OM= Over Mature – a tree that is no longer capable of further growth and/or has entered a cycle of decline.

Canopy Cover A visual estimation, expressed as a percentage, of the canopy present as compared to a specimen which has attained its full genetic potential and with no physical or environmental impediments to growth.

Foliage Density A visual estimation, and expressed as a percentage, of the level of foliage density present as compared to a specimen which has attained its full genetic potential and with no physical or environmental impediments to growth.

Tree Protection Zone (TPZ) A defined, radial area within which certain activities are prohibited or restricted to prevent or minimise potential injury to designated trees. Calculated using the formula outlined in AS4970-2009.

Encroachments into a TPZ may be possible where it is assessed by a suitable qualified Arborist and deemed to be acceptable without being detrimental to the ongoing vigour of a tree.

A Minor Encroachment of 10% or less of the TPZ area and outside of the Structural Root Zone (SRZ) is generally considered acceptable. However the area lost should be compensated for elsewhere and only be restricted to one side of the tree. Other factor such as health, condition, age, species type and tolerance to disturbance, lean and stability must also be considered when establishing if the encroachment is acceptable and won't adversely impact on the tree.

A Major Encroachment of more than 10% of the TPZ area will require detailed investigation to establish if the tree will remain viable. Such investigation should involve root investigation and consideration of health, condition, age, species type and tolerance to disturbance, lean and stability.

Structural Root Zone (SRZ) A radial area of soil around a tree where the majority of the structural roots are located and in which encroachment or activity is prohibited to prevent or minimise the potential for destabalisation of designated trees. Calculated using the formula outlined in AS4970-2009.

<u>Useful Life Expectancy (ULE):</u> A useful life expectancy has been determined for individual trees based on an assessment of current estimated age, species characteristics and potential life span, any known impacts, level of impact that the proposed development will have on the tree, species tolerance to development impacts. The ratings are:

Long – 40 years +
Medium – 15-40 years
Short – 5-15 years
Transient – less than 5 years

Dead or hazardous (defective or unstable)



This rating has been determined based an assessment of the tree at the time of inspection and any information made available during the assessment. Unknown impacts or adverse actions following initial inspection of individual trees do not form part of the final ratings.

<u>Landscape Significance Rating:</u> The Landscape Significance has been determined by an assessment of the cultural, environmental and aesthetic value of individual trees. This location, amenity, visual prominence, habitat value and species type are also considered when determining the landscape significance of individual trees.

The following criteria is used when determining the Landscape Significance Rating. This rating aids with determining the Retention Value.

Landscape	Description					
Significance						
	The subject tree is listed or forms part of the description of an item listed in the NSW Heritage Act					
Very High	The subject tree is listed as or forms part of the description of a Heritage Item under the Council's Local Environmental Plan					
	The subject tree is listed in Council's Register of Significant Trees					
	The subject tree is remnant					
	The subject tree is considered a land mark					
	The subject tree is considered to be of local, cultural or historical importance					
	The subject tree forms part of an Ecological Community associated with the site as defined by the provisions of the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999.					
	The subject tree has been identified as providing habitat value to a threatened or protected species.					
High	The subject tree is visually prominent and provides a positive contribution to the amenity and aesthetics of the area.					
	The subject tree is an excellent representative of the species in terms of health, structure and form					
	The subject tree is of large /dominate dimensions (height and canopy spread) and provides a positive					
	contribution to the canopy cover of the area.					
	The subject tree provides a positive contribution to the amenity and biodiversity of the immediate area					
	The subject tree provides a positive contribution to the visual appearance of the area					
	The subject tree is a screening element, visual and/or noise buffer					
	The subject tree provides present habitat value					
Medium	The subject tree represents the species in a positive manner in term of health, structure and form.					
	The subject tree is not protected by the provisions of Council's Development Control Plan as it is less than					
	the proscribed height or is a species listed as exempt					
Low	The subject tree is a species considered as being an environmental weed					
	The subject tree provides little to no value to the amenity or aesthetics of the area					
	The subject tree is structurally unsound or poor health which cannot be improved.					
Insignificant	The tree is declared a Noxious Weeds under the Noxious Weeds Act 1993					
	The tree is dead					

^{*}The above has been modified from the Tree iQ Criteria for Landscape Significance

<u>Tree Retention Rating:</u> The Retention Value has been allocated to individual trees by combining the Useful Life Expectancy and Landscape Significance Rating into the Matrix below to give a Retention Value of High, Medium or Low.

			LAND	SCAPE SIGNIFICA	NCE	
λου		Very High	High	Medium	Low	Insignificant
Expectancy	Long					1
	Medium					
Useful Life	Short					
Usel	Transient					
	Dead/Hazard					

<u>High</u>: Warrants retention and major design consideration (modification of footings, building alignment etc)

Medium: Warrants retention and minor design consideration (effort should be made to retain these trees wherever possible).

<u>Low:</u> These trees should not be considered to be a constraint to design layout. These trees should be removed irrespective of any proposed development.



APPENDIX B – TREE PROTECTION (GENERIC)

TREE PROTECTION

All trees, other than those indicated on the drawings to be removed, shall be protected at all times during construction in accordance with the Australian Standard 4970 - 2009 *Protection of Trees on Development Sites*.

All works shall be undertaken in accordance with the Tree Protection Plan and the following tree protection specifications, unless otherwise directed by the Principal's representative or the appointed Project Arborist.

PROJECT ARBORIST

A Project Arborist, with minimum AQF Level 5 qualifications, shall be appointed prior to the commencement of any construction activities. The Project Arborist will be responsible for specifying, monitoring and certification of all tree protection measures for any activities proposed around existing trees located within the limit of the construction.

The Contractor shall provide site access to the Project Arborist at all times. The Project Arborist may provide advice on the existing trees, however all communications will be formalised between the Contractor and the Principal's representative.

SITE INDUCTION

The Principal's Representative, Project Arborist, Contractor and any other persons required to work within the Tree Protection Zone (TPZ) of any trees shall attend a site induction meeting before any machinery or materials are brought onto the site and before the commencement of any site works including demolition, earthworks or site clearing.

The Tree Protection Measures, including the location of tree protection fencing, site sheds, stockpile areas, temporary access roads, sediment control devices and any drainage works shall be confirmed during the site induction meeting.

The site induction will highlight the requirements to protect the trees within the site, the type of actions that could lead to potential damage and the penalties imposed by Council for breach of the tree protection measures.

TREE PROTECTION FENCING

Prior to the commencement of any construction activities, install a Tree Protection Fence around individual trees or group of trees at the nominated TPZ distances specified on the Tree Protection Plan. Where TPZ merge together a single fence encompassing a group of trees is suitable. The fencing shall define and restrict entry into the TPZ. The fencing shall conform to the following:

- Fencing shall be a minimum of 1.8m steel galvanised chain wire fencing with lockable gates to AS 1725 and clad with shade cloth to prevent wind-blown debris entering the TPZ;
- The fencing shall be set / fixed into concrete blocks. The fencing must not be secured with posts driven into the ground;
- The area within the TPZ fencing shall be kept free of weeds and grass for the duration of project;
- Mulch shall be installed and maintained to a depth of 75mm for the duration of project

The TPZ fencing shall be erected by the Contractor and approved by the Project Arborist before any machinery or materials are brought onto the site and before the commencement of any works including demolition.



TPZ SIGNAGE

A sign (600mm x 400mm) identifying the name and contact details of the Project Arborist shall be attached to the protective fencing of each TPZ. Below is a sample signage for use:

PROHIBITED ACTIVITIES

The following activities are prohibited within the TPZ;

- Excavation, trenching (unless approved by and under the direct supervision of the Project Arborist)
- Ripping and cultivation
- Mechanical removal of vegetation
- Soil disturbance or movement of natural rock
- Soil changes including placement of fill (unless approved by and under the supervision of the Project Arborist)
- Movement and storage of plant, equipment and vehicles including machinery washing, repairs and refuelling
- Erection of site offices or sheds including portable toilets
- Affixing of signage or hoardings to trees
- Stockpiling, storage and mixing of materials including storage of waste materials, disposal of waste materials and chemicals including paint, solvents, cement slurry, fuel, oil and any other toxic liquids
- Physical damage to canopies, trunk or root systems
- Any activity likely to cause damage to any tree

TREE TRUNK PROTECTION

Trunk protection will be required where works have been approved within the TPZ. As a minimum, the trunk protection shall consist of wrapping of trunks with hessian and two-metre lengths of hardwood timber planks (100 x 50mm) spaced at 100-150mm intervals strapped around the trunk and secured with 2mm galvanised wire. The hessian and timber planks must not be fixed to the tree in any fashion or in any instance.

GROUND PROTECTION

Ground protection must be installed within the TPZ in the event that temporary access for machinery is required and has been approved by the Project Arborist. The ground protection is required to prevent root damage and soil compaction from occurring within the TPZ.

The ground protection shall include a permeable membrane such as geotextile fabric beneath a 100mm layer of mulch below rumble boards of a suitable thickness to prevent soil compaction and root damage from occurring during the movement of any machinery within the TPZ.

EXCAVATIONS WITHIN TPZ

Any excavations undertaken within the TPZ which have been approved by the Project Arborist shall be undertaken using non-destructive methods (such as by hand or with an Airspade) to ensure no tree roots greater than 40mm diameter are damaged, pruned or removed.

In the event that any roots greater than 40mm diameter are located during excavation, further advice shall be obtained by the Project Arborist before further works continues where the root has been identified.

Root pruning must not be undertaken without prior approval from the Project Arborist.

CANOPY AND/OR ROOT PRUNING

Care shall be taken when operating heavy machinery near trees to avoid damage to tree canopies



(foliage and branches). The Project Arborist shall be contacted if there is potential conflict between tree canopies and construction activities (including machinery).

Any canopy or root pruning required shall be undertaken in accordance with AS 4373-2007 *Pruning of Amenity Trees*, under the direct supervision of the Project Arborist.

Where root pruning is required, roots shall be severed at the face of the excavation by hand using clean, sharp pruning implements. All excavations within the TPZ of any tree/s shall be undertaken under the supervision of the Project Arborist.

TREE ROOT PROTECTION

Temporary root protection, including hessian or similar biodegradable material, shall be installed under the supervision of the Project Arborist to prevent roots from drying out, where roots are exposed during demolition or construction works.

SERVICES

Where trenching works are required for any services / hydraulics / drainage etc. this shall not be undertaken within any TPZ. The Project Arborist shall be contacted if any works are required within the TPZ.

Alternative installation methods for services, such as directional boring/drilling, or redirection of services shall be employed where large woody roots greater than 50mm diameter are encountered during the installation of any services adjacent to the specified TPZ.

TREE DAMAGE

In the event that any tree is damaged during construction, the Project Arborist shall be notified as soon as possible to inspect and provide advice for remedial action that may minimise any adverse impact.

EXAMPLE FENCING, PROTECTION AND SIGNAGE:

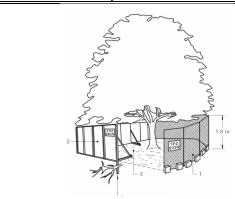


Figure 2 – Protective Fencing



Figure 3 - Tree Protection Zone Signage

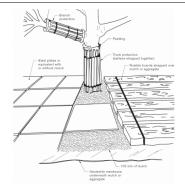


Figure 4 - Trunk, Branch & Ground Protection

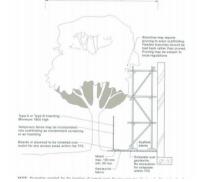


Figure 5 - Indicative Scaffolding within a TPZ

APPENDIX C – TREE ASSESSMENT SCHEDULE

Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
1	Liquidambar styraciflua	15	10	580	700	M	Good	Good	Good	Council street tree, service wire through centre.
2	Eucalyptus resinifera	15	7	390	480	M	Fair	Good	Fair	Moderate deadwood, asymmetrical to North.
3	Liquidambar styraciflua	12	15	650	800	M	Good	Fair	Good	Council street tree. Parallel structural root damage to West.
4	Corymbia maculata	22	8	400	470	M	Good	Good	Good	Can be retained.
5	Corymbia maculata	18	6	340	380	M	Good	Good	Good	Can be retained.
6	Corymbia maculata	4	2	100	130	SM	Good	Fair	Fair	Suppressed, slender. Short ULE, likely a sucker.
7	Corymbia maculata	9	4	220	250	SM	Good	Good	Fair	Suppressed in group.
8	Corymbia maculata	14	5	270	300	SM	Good	Good	Fair	Asymmetrical canopy lean to West. Mildly suppressed by group.
9	Corymbia maculata	17	7	320	360	M	Good	Good	Good	-
10	Corymbia gummifera	18	9	550	650	M	Fair - Poor	Fair	Fair	Should be removed, bark delamination, wound at base, moderate deadwood and epi.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
11	Eucalyptus resinifera	18	6	390	460	M	Good	Good	Good	-
12	Corymbia maculata	17	8	370	450	M	Good	Good	Good	Harp branch formation from main junction, consider for removal.
13	Eucalyptus pilulairs	18	9	530	710	M	Good	?	Good	Suspected basal decay on East and West side. Lvl 3 TRAQ recommended.
14	Eucalyptus haemastoma	17	8	440	480	M	Good	Good	Good	Can be retained.
15	Angophora costata	5	3	150	160	SM	Good	Fair	Good	Epicormic shoot from old removal. Remove.
16	Angophora costata	12	8	350	400	M	Good	Good	Fair	Mildly suppressed, close to existing gate, consider for removal.
17	Corymbia gummifera	18	10	500	580	M	Good	Good	Good	-
18	Corymbia maculata x3	10	3	220	270	SM	Good	Poor	Poor	Slender, suppressed grouping.
19	Corymbia maculata	17	5	360	410	SM	Good	Good	Good	Dominant tree within group.
20	Corymbia maculata	14	5	290	330	SM	Good	Fair	Fair	Asymmetrical to South. Trunk wound at 3m.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
21	Corymbia maculata x 6	5 – 10	1-2	100 – 180	120 – 200	SM	Fair	Poor	Poor	Suppressed and slender grouping.
22	Corymbia maculata	13	5	290	350	SM	Good	Good	Fair	-
23	Corymbia gummifera	5	2	160	200	SM	Good	Fair	Fair	Suppressed, remove for design.
24	Corymbia gummifera	9	5	290	390	М	Good	Fair	Fair	Basal decay + borer on South. Lean to North, Epicormic growth, deadwood.
25	Corymbia gummifera	5	3	150	170	SM	Good	Fair	Fair	-
26	Jacaranda mimosifolia	6	4	300 approx.	300 approx.	SM	Good	Poor	Poor	Exempt species. Sucker, just epicormic growth from damaged tree root. Multitrunked.
27	Banksia spinulosa	6	4	260	360	M	Good	Fair	Fair	J root @ base, asymmetrical to East.
28	Eucalyptus botryoides	16	11	490	570	ОМ	Very Poor	Fair	N/A	70% dead. Only Northern first order branch remains.
29	Corymbia maculata	9	2	180	210	SM	Good	Fair	Poor	Slender, grouped, suppressed.
30	Corymbia maculata	9	2	180	200	SM	Good	Fair	Fair	Slender, grouped, suppressed.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
31	Corymbia maculata	13	5	270	280	SM	Good	Fair	fair	Cross rubbing branch in head West side.
32	Eucalyptus sp. x 3	4 – 5	2	110	130	SM	Good	Poor	Poor	Self-sown.
33	Araucaria bidwillii	13	9	420	500	SM	Fair	Good	Fair	Exempt species.
34	Eucalyptus saligna	6	4	150	160	SM	Good	Fair	Poor	Suppressed, slender, asymmetrical lean to West.
35	Eucalyptus resinifera	9	3	140	150	SM	Good	Fair	Fair	Suppressed, slender.
36	Unidentified species	6	5	150 180	250	SM	Good	Fair	Fair	Codominant.
37	Unidentified species	5	2	140	190	SM	Good	Fair	Fair	-
38	Cyathea australis	5	2	110 140	N/A	M	Good	Fair	Good	Codominant.
39	Glochidion ferdinandi	5	3	110 170	220	SM	Good	Fair	Fair	Epicormic growth.
40	Jacaranda mimosifolia	7	8	430	400	М	Good	Good	Good	Exempt species.

Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
41	Grouping of 18 Trees	5 – 18	2 – 7	100 – 360	120 – 390	SM – M	Good – Fair	Good – Fair	Good – Fair	3 x E. resinifera 15 x C. maculata
42	Eucalyptus botryoides	25	22	990	1060	M	Fair	Fair	Good	Consider for removal, deadwood, epicormic growth, bark delamination of South side, history of failure – high significance due to size.
43	Glochidion ferdinandi	5	3	150 170	230	M	Good	Good	Good	-
44	Eucalyptus botryoides	17	14	480	520	M	Good	Good	Good	-
45	Eucalyptus botryoides	6	2	120	N/A	SM	Good	Poor	Fair	Epicormic shoot from removed tree stump.
46	Eucalyptus botryoides	18	8	490	560	M	Good	Good	Good	Minor deadwood.
47	Eucalyptus microcorys	9	5	230	310	SM	Good	Good	Fair	Suppressed.
48	Eucalyptus botryoides	9	3	200	240	SM	Good	Poor	Poor	Slender, suppressed.
49	Eucalyptus botryoides	16	4	330	410	M	Fair	Poor	Poor	High epicormic growth, slender.
50	Eucalyptus botryoides	7	3	220	240	SM	Good	Poor	Poor	Self-sown sucker.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
51	Dicksonia squarrosa group x 5	1.5 – 3	1 – 2	270	N/A	M	Good	Good	Good	-
52	Corymbia maculata grouping x 7	2 – 12	1-4	60 – 240	80 – 320	SM	Good	Fair	Fair	Slender.
53	Eucalyptus saligna	10	5	290	370	M	Fair	Fair – Poor	Fair – Poor	Asymmetrical to South, basal decay and borer.
54	Banksia integrifolia	5	3	200	230	M	Good	Good	Good	-
55	Eucalyptus microcorys	25	25	920	1050	M	Good	Good	Good	Codominant leaders from main junction @ 10m.
56	Jacaranda mimosifolia	10	8	300 250	570	M	Good	Fair	Fair	Exempt species.
57	Auracaria heterophylla	5	3	200	250	SM	Good	Good	Good	-
58	Cyathea sp.	3	2	130	N/A	M	Good	Good	Good	-
59	Eucalyptus botryoides	15	14	550	600	M	Good	Good	Good	Moderate epicormic growth.
60	Magnolia x soulangeana	5	7	190 320	400	М	Good	Good	Good	Ornamental.

Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
61	Archontophoenix cunninghamiana	3	3	130 140 170	N/A	SM	Good	Good	Good	Exempt species. Multitrunked from base.
62	Buxus sempervirens	3	3	Min	Min	M	Good	Good	Good	-
63	Olea europaea subsp. cuspidata	3	2	Min	Min	M	Good	Good	Good	Exempt species.
64	Callistemon viminalis	5	3	170	190	M	Good	Fair	Fair	Codominant leaders, asymmetrical canopy lean to West.
65	Archontophoenix cunninghamiana	6	4	260	N/A	M	Good	Good	Good	Exempt species.
66	Archontophoenix cunninghamiana	4	2	210	N/A	SM	Good	Good	Good	Exempt species.
67	Corymbia maculata	14	7	400	480	M	Fair	Good	Fair	Mildly suppressed by Tree 71. Asymmetrical canopy lean to West.
68	Citrus x limon	3	2	130	130	M	Good	Good	Good	Exempt species – fruit bearing.
69	Persea americana	3	2	70	80	SM	Good	Good	Good	Exempt species – fruit bearing.
70	Callistemon viminalis x 2	2 – 3	2	70 – 80	90 – 100	М	Good	Fair	Poo	Suppressed, shrub like form.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
71	Corymbia maculata	18	9	540	610	М	Good	Good	Good	Good example of species.
72	Corymbia maculata	7	2	170	190	SM	Fair	Fair	Poor	Suppressed, codominant leaders.
73	Ailanthus altissima	5	5	150 approx.	160 approx.	М	Fair	Poor	Poor	Exempt species.
74	Corymbia maculata	11	4	190 210	300	SM	Good	Fair	Poor	Suppressed, codominant leaders.
75	Livistona australis	11	4	570	N/A	M	Good	Good	Fair	Suppressed.
76	Syagrus romanzoffiana	11	4	300 approx.	N/A	M	Good	Good	Good	Exempt species.
77	Banksia integrifolia	7	3	130	150	M	Good	Good	Fair	Mildly suppressed, slender.
78	Olea europaea subsp. cuspidata	9	8	350 approx.	350 approx.	М	Good	Fair	Fair	Exempt species.
79	Backhousia citriodora	5	2	110	140	SM	Good	Fair	Fair	Codominant leaders, slender, suppressed.
80	Archontophoenix cunninghamiana	7	5	210	N/A	SM	Good	Good	Good	Exempt species.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
81	Callistemon viminalis	5	3	140	160	SM	Good	Good	Fair	Mildly suppressed.
82	Yucca sp.	5	3	170	N/A	M	Good	Good	Fair	Hard up against fence.
83	Eucalyptus botryoides	25	25	940	1070	M	Good	Fair	Fair	Lions tailed branches, high epicormic growth.
84	Eucalyptus botryoides	15	12	400	440	M	Fair	Fair	Fair	Asymmetrical canopy lean to SE.
85	Callicoma serratifolia	7	4	200 approx.	220 approx.	SM	Fair	Fair	Fair	-
86	Eucalyptus botryoides	12	10	650 approx.	680 approx.	M	Good	Poor	Poor	Lopped, predominantly epicormic growth.
87	Syagrus romanzoffiana	5	3	200 approx.	N/A	SM	Good	Good	Good	Exempt species.
88	Callicoma serratifolia	6	6	200 approx.	220 approx.	М	Good	Fair	Fair	-
89	Callistemon viminalis	5	4	200 approx.	220 approx.	М	Good	Fair	Fair	Multitrunked from base.
90	Cyathea australis x 2	2	2	100	N/A	М	Good	Good	Good	-



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
91	Callistemon viminalis	5	4	180 190	220	M	Good	Fair	Good	Codominant from base.
92	Washingtonia robusta	10	3	510	N/A	M	Good	Good	Good	Exempt species.
93	Washingtonia robusta	6	3	650 approx.	N/A	M	Good	Good	Good	Exempt species.
94	Callistemon viminalis x 2	3	2	80	100	SM	Good	Fair	Good	-
95	Yucca sp.	3	1	110	N/A	M	Good	Good	Good	-
96	Eucalyptus pilularis	18	11	740	800	M	Good	Fair	Fair	Previous NE 1 st order branch failure at main junction.
97	Acacia sp.	5	3	200	220	M	Fair	Fair	Poor	Suppressed.
98	Callicoma serratifolia	6	3	140	150	SM	Good	Fair	Fair	Codominant leaders.
99	Livistona australis	5	3	550	N/A	SM	Good	Good	Good	-
100	Eucalyptus botryoides	16	7	850	830	ОМ	Fair	Poor	Poor	In decline, tri leaders all lions tailed, high epicormic growth.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
101	Callicoma serratifolia	5	3	130	180	M	Fair	Fair	Fair	Mildly suppressed.
102	Backhousia myrtifolia	4	3	120	150	SM	Good	Fair	Poor	Suppressed.
103	Syzygium smithii	10	5	380	380	M	Good	Good	Fair	True to type inclusions, multitrunked.
104	Syzygium smithii	9	4	160	180	M	Good	Good	Fair	True to type inclusions, multitrunked.
105	Syzygium smithii	10	5	450 @ base	450	M	Good	Good	Fair	True to type inclusions, multitrunked.
106	Syzygium smithii	8	4	1860 190	200	SM	Good	Good	Fair	True to type inclusions, multitrunked.
107	Eucalyptus sp.	7	4	190	220	SM	Good	Good	Good	Exempt due to location - 1.3m away from existing building.
108	Eucalyptus pilularis	15	18	720	790	M	Fair – Poor	Fair	Fair	In decline, 1 x 1 st or + 1 x 2 nd order branches dead. High deadwood. Exempt: 1.5m to bld.
109	Leptospermum petersonii	4	3	90	100	SM	Fair	Fair	Fair	Multitrunked. Exempt due to height.
110	Eucalyptus pilularis	12	10	400	530	SM	Good	Good	Fair	Minor deadwood. Exempt due to location - 1.3m away from existing building



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
111	Jacaranda mimosifolia	5	5	330	410	M	Good	Good	Good	Exempt species.
112	Persea americana	5	2	150	160	M	Good	Good	Good	Exempt – fruit bearing.
113	Jacaranda mimosifolia	5	6	420	490	M	Good	Good	Good	Exempt species.
114	Syzygium australe	5	3	120	140	M	Fair	Fair	Fair	Screening hedge.
115	Jacaranda mimosifolia	5	4	410	470	M	Good	Fair	Fair	Exempt species. Lopped, epicormic growth.
116	Syzygium australe	3	2	120 130	250	M	Fair	Fair	Fair	Exempt due to height. Codominant from base.
117	Jacaranda mimosifolia	4	5	400	440	M	Fair	Fair	Poor	Exempt species. Previous failure, suppressed, deadwood.
118	Strelitzia nicolai	4	5	350	N/A	M	Good	Fair	Good	-
119	Eucalyptus sp.	15	15	940	1000	М	Good	Good	Good	Exempt due to location - 1.5m away from existing building. High significance, minor deadwood.
120	Callistemon viminalis group x 8	3 – 5	2 – 4	90 – 180	100 – 260	М	Fair	Fair	Fair - Poor	Screening group.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
121	Acacia decurrens	5	3	290	340	M	Fair	Poor	Poor	In decline, against fence.
122	Olea europaea subsp. cuspidata	5	8	550 @ base	550	M	Good	Fair	Fair	Exempt species.
123	Syzygium hedge	4	7	200 x 3	220 x 3	M	Fair	Fair	Fair	Exempt due to location - 1m away from existing building. Hedge.
124	Jacaranda mimosifolia	5	7	190 240 310	600	М	Good	Fair	Fair	Exempt species.
125	Jacaranda mimosifolia	5	6	200 400	510	M	Good	Fair	Fair	Exempt species.
126	Jacaranda mimosifolia	7	5	310	350	M	Good	Good	Fair	Exempt species.
127	Jacaranda mimosifolia	7	6	330	390	M	Good	Good	Fair	Exempt species.
128	Jacaranda mimosifolia	5	7	220 approx.	250	M	Good	Fair	Fair	Exempt species. Multitrunked, raised garden bed.
129	Jacaranda mimosifolia	5	5	340	390	M	Good	Fair	Fair	Exempt species.
130	Jacaranda mimosifolia	5	5	X 5	-	SM	Good	Poor	Poor	Exempt species. Multitrunked from base.



Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
131	Jacaranda mimosifolia	8	7	360	410	М	Good	Good	Fair	Exempt species.
132	Jacaranda mimosifolia	8	8	410	490	М	Fair	Poor	Fair	Exempt species. Decline, structural defects.
133	Jacaranda mimosifolia	7	7	360	380	M	Good	Fair	Fair	Exempt species. Snapped out in head, high epi.
134	Jacaranda mimosifolia	4	3	Min	Min	SM	Good	Poor	Poor	Exempt species. Self-sown multitrunked.
135	Jacaranda mimosifolia	5	6	250	260	М	Good	Good	Fair	Exempt species.
136	Jacaranda mimosifolia	4	3	170	180	SM	Fair	Fair	Poor	Exempt species. Poor example.
137	Strelitzia nicolai	6	5	TPZ	N/A	М	Fair	Fair	Fair	-
138	Jacaranda mimosifolia	7	9	210 260	570	М	Good	Poor	Fair	Exempt species. Included leaders @ base.
139	Jacaranda mimosifolia	6	4	N/A	N/A	SM	Good	Poor	Poor	Exempt species. Epicormic shoot from previous removal.
140	Eucalyptus botryoides	16	15	750 approx.	800 approx.	М	Fair	Fair	Fair	Limited VTA neighbouring property. In decline west side, lean to north

Tree No.	Species Name	Height (m)	Spread (m)	DBH (mm)	DARB (mm)	Age	Health	Structure	Form	Comments
141	Cupressus x leylandii x 7	8	10	400 approx.	400 approx.	М	Good	Good	Fair	Located on neighbouring property. Limited VTA.
142	Melaleuca quinquenervia	8	7	650 approx.	650 approx.	M	Fair	Fair	Fair	Located on neighbouring property. Limited VTA. 1m setback.
143	Leptospermum petersonii	7	4	250 approx.	250 approx.	ОМ	Fair	Poor	Poor	Located on neighbouring property. Limited VTA. Overhanging into site, previous failure.
144	Grevillea robusta	11	7	500 approx.	500 approx.	ОМ	Poor	Fair	Good	Located on neighbouring property. Limited VTA. 1m setback. In decline, included bark.
145	Jacaranda mimosifolia	6	6	250 approx.	300 approx.	SM	Good	Fair	Fair	Located on neighbouring property. Limited VTA. 0.5m setback. Pruning required.
146	Cupressus sempervirens x 3	4	1	100	120	SM	Good	Good	Good	Located on neighbouring property. Limited VTA. 0.4m setback.
147	Livistona australis	8	3	250 approx.	N/A	М	Good	Good	Good	Located on neighbouring property. Limited VTA. 1m setback.
148	Citrus sp. row (Hedge)	3 – 4	5 x 2	150 approx.	150 approx.	M	Good	Good	Good	Located on neighbouring property. Limited VTA. All fruit bearing trees, pruning back to fence line required.
149	Syzygium sp. (Hedge)	3 – 5	7 x 2	150 approx.	150 approx.	SM	Good	Fair	Fair	Located on neighbouring property. Limited VTA. 1m setback.

APPENDIX D – TREE IMPACT SCHEDULE

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
1	Liquidambar styraciflua	6.96	2.85	Medium	Medium	Medium	Retain	0.6% Minor encroachment from removal of driveway.
2	Eucalyptus resinifera	4.68	2.43	Medium	Medium	Medium	Retain	No incursion.
3	Liquidambar styraciflua	7.8	3.01	Medium	Medium	Medium	Retain	5.4% Minor encroachment from Lot 2 PPOS.
4	Corymbia maculata	4.8	2.41	Long	High	High	Retain	3.9% Minor encroachment from Lot 2 PPOS.
5	Corymbia maculata	4.08	2.2	Long	Medium	Medium	Retain	No incursion.
6	Corymbia maculata	2.0	1.5	Short	Low	Low	Remove	Exempt due to height.
7	Corymbia maculata	Approved _	for removal	in Landscape	Referral Respons	se: DA2024/049	2 dated 16/05/.	2024 prepared by Northern Beaches Council.
8	Corymbia maculata	3.24	2.0	Medium	Medium	Medium	Retain	No incursion.
9	Corymbia maculata	3.84	2.15	Medium	Medium	Medium	Retain	0.3% Minor encroachment from Lot 2 building envelope.
10	Corymbia gummifera	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council. Approved for removal in Demolition Notice of Determination: DA2024/0081 dated 16/05/2024 prepared by Northern Beaches Council.						



Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
11	Eucalyptus resinifera	4.08	2.39	Medium	Medium	Medium	Retain	6.0% Minor encroachment from Lot 3 PPOS.
12	Corymbia maculata	4.44	2.37	Medium	Medium	Medium	Retain	No incursion.
13	Eucalyptus pilulairs	6.36	2.87	Medium	Low	Low	Retain	No incursion.
14	Eucalyptus haemastoma	5.28	2.43	Medium	Medium	Medium	Retain	26.1% Major encroachment from Lot 3's PPOS. Additional 3.8% encroachment from Lot 3's building envelope. Tree to be retained. Design modification required, mirror PPOS.
15	Angophora costata	2.0	1.53	Short	Low	Low	Remove	No impact from subdivision. Remove for Arboricultural reasons.
16	Angophora costata	4.2	2.25	Medium	Medium	Medium	Retain	5.6% Minor encroachment from Lot 3 PPOS.
17	Corymbia gummifera	6.0	2.63	Long	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
18	Corymbia maculata x 3	2.64	1.91	Short	Low	Low	Remove	Within footprint of Lot 3 PPOS. Design modification already required for retention of Tree 14, mirror PPOS.
19	Corymbia maculata	4.32	2.28	Long	Medium	Medium	Remove	17.4% incursion from PPOS additional 6.1% from Lot 3 building envelope. Mirroring of PPOS will result in T19 within footprint of PPOS
20	Corymbia maculata	3.48	2.08	Medium	Medium	Medium	Remove	22.7% incursion from PPOS additional 15.5% from Lot 3 building envelope.



Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
21	Corymbia maculata	2.16	1.68	Medium	Low	Low	Remove	Mirroring of Lot 3 PPOS will result in T21 within footprint of PPOS.
22	Corymbia maculata	3.48	2.13	Medium	Medium	Medium	Remove	Mirroring of Lot 3 PPOS for retention of Tree 14 will result in T22 within footprint of PPOS.
23	Corymbia gummifera	Approved j Council.	for removal	in Demolition	Notice of Determ	ination: DA202	4/0081 dated 10	5/05/2024 prepared by Northern Beaches
24	Corymbia gummifera	3.48	2.23	Medium	Low	Low	Retain	7.0% Minor encroachment from Lot 4 proposed driveway.
25	Corymbia gummifera	2.0	1.57	Medium	Low	Low	Remove	Within footprint of Lot 4 building envelope.
26	Jacaranda mimosifolia	3.6	2.0	Medium	Low	Low	Remove	Exempt species.
27	Banksia spinulosa	3.12	2.15	Medium	Medium	Medium	Remove	Within footprint of Lot 4 building envelope.
28	Eucalyptus botryoides	Approved for removal in Demolition Notice of Determination: DA2024/0081 dated 16/05/2024 prepared by Northern Beaches Council.						
29	Corymbia maculata	2.16	1.72	Medium	Low	Low	Remove	28.9% major encroachment for Lot 3 building envelope.
30	Corymbia maculata	2.16	1.68	Medium	Low	Low	Remove	Within footprint of Lot 3 building envelope.

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
31	Corymbia maculata	3.24	1.94	Medium	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
32	Eucalyptus sp. x 3	2.0	1.5	Short	Low	Low	Remove	Exempt due to height.
33	Araucaria bidwillii	5.04	2.47	Long	Medium	Medium	Remove	Exempt species.
34	Eucalyptus saligna	2.0	1.53	Medium	Low	Low	Remove	Within footprint of Lot 3 building envelope.
35	Eucalyptus resinifera	2.0	1.5	Medium	Low	Low	Remove	Within footprint of Lot 3 building envelope.
36	Unidentified species	2.76	1.85	Medium	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
37	Unidentified species	2.0	1.65	Medium	Low	Low	Remove	Within footprint of Lot 3 building envelope.
38	Cyathea australis	2.16	N/A	Medium	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
39	Glochidion ferdinandi	2.4	1.75	Medium	Medium	Medium	Remove	29.3% Major encroachment from Lot 4's building envelope. Works within the SRZ.
40	Jacaranda mimosifolia	5.16	2.25	Medium	Medium	Medium	Remove	Exempt species.

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
41	Grouping of 18 Trees	4.32	2.23	Long	Medium	Medium	Remove	Within footprint or subject to major encroachment from Lot 4
42	Eucalyptus botryoides	11.88	3.39	Medium	High	High	Remove	Within footprint of Lot 3 building envelope.
43	Glochidion ferdinandi	2.76	1.79	Medium	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
44	Eucalyptus botryoides	5.76	2.51	Long	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
45	Eucalyptus botryoides	2.0	N/A	Medium	Low	Low	Remove	Within footprint of Lot 3 building envelope.
46	Eucalyptus botryoides	5.88	2.59	Medium	Medium	Medium	Remove	Within footprint of Lot 3 building envelope.
47	Eucalyptus microcorys	2.76	2.02	Medium	Medium	Medium	Remove	20.2% Major encroachment from Lot 3 building envelope. Works within SRZ.
48	Eucalyptus botryoides	2.4	1.82	Medium	Low	Low	Retain	16.4% Major encroachment from driveway turning bay, reduce turning bay to facilitate tree removal of T48 & T49.
49	Eucalyptus botryoides	3.96	2.88	Medium	Medium	Medium	Retain	4.5% Minor encroachment from Lot 3 building envelope. Additional 27.9% major encroachment from driveway turning bay, reduce turning bay to facilitate tree retention.
50	Eucalyptus botryoides	2.64	1.82	Medium	Low	Low	Retain	No incursion.



Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts	
51	Dicksonia squarrosa group x 5	3.24	N/A	Medium	Medium	Medium	Remove	Exempt due to height.	
52	Corymbia maculata grouping x 7	2.88	2.05	Long	Medium	Medium	Remove	Within footprint of Lot 5 building envelope.	
53	Eucalyptus saligna	3.48	2.18	Medium	Low	Low	Remove	Within footprint of Lot 5 building envelope.	
54	Banksia integrifolia	2.4	1.79	Medium	Medium	Medium	Remove	Within footprint of Lot 5 building envelope.	
55	Eucalyptus microcorys	11.04	3.38	Long	High	High	Retain	2.6% Lot 3, 4.4% Lot 4, 28.4% Lot 5 Building envelope, additional 7.2% Lot 4 PPOS. Tree of High Significance, ensure its protection, sensitive construction required.	
56	Jacaranda mimosifolia	4.68	2.61	Medium	Medium	Medium	Remove	Exempt species.	
57	Auracaria heterophylla	2.4	1.85	Long	Medium	Medium	Remove	Within footprint of Lot 5 building envelope.	
58	Cyathea sp.	2.0	N/A	Medium	Medium	Medium	Remove	Within footprint of Lot 5 building envelope.	
59	Eucalyptus botryoides	6.6	2.67	Long	Medium	Medium	Remove	Within footprint of Lot 6 building envelope.	
60	Magnolia x soulangeana	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council. Approved for removal in Demolition Notice of Determination: DA2024/0081 dated 16/05/2024 prepared by Northern Beaches Council.							



Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
61	Archontophoenix cunninghamiana	3.12	N/A	Medium	Low	Low	Remove	Exempt species.
62	Buxus sempervirens	2.0	1.5	Medium	Low	Low	Remove	Exempt due to height.
63	Olea europaea subsp. cuspidata	2.0	1.5	Long	Low	Low	Remove	Exempt species.
64	Callistemon viminalis			•	•	•		2024 prepared by Northern Beaches Council. 6/05/2024 prepared by Northern Beaches
65	Archontophoenix cunninghamiana	3.12	N/A	Medium	Medium	Medium	Remove	Exempt species.
66	Archontophoenix cunninghamiana	2.52	N/A	Medium	Low	Low	Remove	Exempt species.
67	Corymbia maculata	4.8	2.43	Long	Medium	Medium	Remove	Within footprint of proposed road.
68	Citrus x limon	2.0	1.5	Medium	Low	Low	Remove	Exempt species.
69	Persea americana	2.0	1.5	Medium	Low	Low	Remove	Exempt species.
70	Callistemon viminalis x 2	2.0	1.5	Medium	Low	Low	Remove	Exempt due to height.

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts		
71	Corymbia maculata	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.								
72	Corymbia maculata	Approved	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.							
73	Ailanthus altissima	2.0	1.53	Long	Low	Low	Remove	Exempt species.		
74	Corymbia maculata	Approved	for removal	in Landscape	Referral Respons	e: DA2024/049	2 dated 16/05/2	2024 prepared by Northern Beaches Council.		
75	Livistona australis	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.								
76	Syagrus romanzoffiana	3.6	N/A	Long	Low	Low	Remove	Exempt species.		
77	Banksia integrifolia	Approved	for removal	in Landscape	Referral Respons	e: DA2024/049	2 dated 16/05/2	2024 prepared by Northern Beaches Council.		
78	Olea europaea subsp. cuspidata	4.2	2.13	Long	Low	Low	Remove	Exempt species.		
79	Backhousia citriodora	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.								
80	Archontophoenix cunninghamiana	2.52	N/A	Medium	Low	Low	Remove	Exempt species.		

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts			
81	Callistemon viminalis	Approved	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.								
82	Yucca sp.	Approved	for removal	in Landscape	Referral Respons	se: DA2024/049	2 dated 16/05/.	2024 prepared by Northern Beaches Council.			
83	Eucalyptus botryoides	11.28	3.4	Long	High	High	Remove	Within footprint of Lot 8 building envelope.			
84	Eucalyptus botryoides	4.8	2.34	Medium	Medium	Medium	Remove	39.0% encroachment Lot 7 & 26.6% Lot 8.			
85	Callicoma serratifolia	2.4	1.75	Medium	Low	Low	Remove	Within footprint of Lot 7 building envelope.			
86	Eucalyptus botryoides	7.8	2.81	Medium	Medium	Medium	Remove	Within footprint of Lot 7 building envelope.			
87	Syagrus romanzoffiana	3.6	N/A	Medium	Low	Low	Remove	Exempt species.			
88	Callicoma serratifolia	2.4	1.75	Medium	Low	Low	Remove	Within footprint of Lot 7 building envelope.			
89	Callistemon viminalis	2.4	1.75	Medium	Low	Low	Remove	Within footprint of Lot 6 building envelope.			
90	Cyathea australis x 2	2.0	N/A	Medium	Medium	Medium	Remove	Exempt due to height.			

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
91	Callistemon viminalis	3.12	1.75	Medium	Medium	Medium	Remove	Within footprint of Lot 6 building envelope.
92	Washingtonia robusta	6.12	N/A	Long	Medium	Medium	Remove	Exempt species.
93	Washingtonia robusta	7.8	N/A	Long	Medium	Medium	Remove	Exempt species.
94	Callistemon viminalis x 2	2.0	1.5	Medium	Low	Low	Remove	Exempt due to height.
95	Yucca sp.	2.0	N/A	Medium	Low	Low	Remove	Exempt due to height.
96	Eucalyptus pilularis	8.88	3.01	Long	Medium	Medium	Remove	3.3% Lot 6 & 25.1% Lot 7 including both PPOS.
97	Acacia sp.	2.4	1.75	Short	Low	Low	Retain	No incursion from subdivision.
98	Callicoma serratifolia	2.0	1.5	Medium	Medium	Medium	Retain	3.5% minor encroachment from Lot 7 building envelope.
99	Livistona australis	6.6	N/A	Long	Medium	Medium	Remove	30.5% major encroachment from Lot 7 building envelope.
100	Eucalyptus botryoides	10.2	3.06	Medium	Low	Low	Remove	Within footprint of Lot 7 building envelope.



Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts			
101	Callicoma serratifolia	Approved for removal in Demolition Notice of Determination: DA2024/0081 dated 16/05/2024 prepared by Northern Beaches Council.									
102	Backhousia myrtifolia	2.0	1.5	Medium	Low	Low	Remove	Exempt due to height.			
103	Syzygium smithii	4.56	2.2	Long	Medium	Medium	Remove	27.9% encroachment Lot 7 & 39.1% Lot 8.			
104	Syzygium smithii	2.0	1.61	Long	Medium	Medium	Remove	Within footprint of Lot 8 building envelope.			
105	Syzygium smithii	5.4	2.37	Long	Medium	Medium	Remove	Within footprint of Lot 8 building envelope.			
106	Syzygium smithii	3.12	1.68	Long	Low	Low	Remove	Within footprint of Lot 8 building envelope.			
107	Eucalyptus sp.	2.28	1.75	Long	Medium	Medium	Remove	Exempt: 1.3m to existing building.			
108	Eucalyptus pilularis	8.64	3.0	Short	Medium	Low	Remove	Exempt: 1.5m to existing building.			
109	Leptospermum petersonii	2.0	1.5	Short	Low	Low	Remove	Exempt due to height.			
110	Eucalyptus pilularis	4.8	2.53	Long	Medium	Medium	Remove	Exempt: 1.3m to existing building.			

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
111	Jacaranda mimosifolia	3.96	2.28	Medium	Medium	Medium	Remove	Exempt species.
112	Persea americana	2.0	1.53	Medium	Low	Low	Remove	Exempt species.
113	Jacaranda mimosifolia	5.04	2.45	Medium	Medium	Medium	Remove	Exempt species.
114	Syzygium australe	Approved j Council.	for removal	in Demolition	Notice of Detern	nination: DA202	24/0081 dated 1	1.6/05/2024 prepared by Northern Beaches
115	Jacaranda mimosifolia	4.92	2.41	Medium	Low	Low	Remove	Exempt species.
116	Syzygium australe	2.16	1.85	Short	Low	Low	Remove	Exempt due to height.
117	Jacaranda mimosifolia	4.8	2.34	Short	Low	Low	Remove	Exempt species.
118	Strelitzia nicolai	4.2	N/A	Medium	Low	Low	Remove	Exempt due to height.
119	Eucalyptus sp.	11.28	3.31	Long	High	High	Remove	Exempt due to location: within 1.5m of existing building.
120	Callistemon viminalis group x 8	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.						

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
121	Acacia decurrens	Approved for removal in Landscape Referral Response: DA2024/0492 dated 16/05/2024 prepared by Northern Beaches Council.						
122	Olea europaea subsp. cuspidata	6.6	2.57	Long	Low	Low	Remove	Exempt species.
123	Syzygium hedge	2.4	1.75	Short	Low	Low	Remove	Exempt due to height.
124	Jacaranda mimosifolia	5.28	2.67	Medium	Low	Low	Remove	Exempt species.
125	Jacaranda mimosifolia	5.4	2.49	Medium	Low	Low	Remove	Exempt species.
126	Jacaranda mimosifolia	3.72	2.13	Medium	Medium	Medium	Remove	Exempt species.
127	Jacaranda mimosifolia	3.96	2.23	Medium	Medium	Medium	Remove	Exempt species.
128	Jacaranda mimosifolia	2.64	1.85	Medium	Medium	Medium	Remove	Exempt species.
129	Jacaranda mimosifolia	4.08	2.23	Medium	Low	Low	Remove	Exempt species.
130	Jacaranda mimosifolia	3.6	2.0	Medium	Low	Low	Remove	Exempt species.

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts	
131	Jacaranda mimosifolia	4.32	2.28	Medium	Medium	Medium	Remove	Exempt species.	
132	Jacaranda mimosifolia	4.92	2.45	Medium	Low	Low	Remove	Exempt species.	
133	Jacaranda mimosifolia	4.32	2.2	Medium	Low	Low	Remove	Exempt species.	
134	Jacaranda mimosifolia	2.0	1.5	Short	Low	Low	Remove	Exempt species.	
135	Jacaranda mimosifolia	3.0	1.88	Medium	Low	Low	Remove	Exempt species.	
136	Jacaranda mimosifolia	2.04	1.61	Short	Low	Low	Remove	Exempt species.	
137	Strelitzia nicolai	Approved for removal in Demolition Notice of Determination: DA2024/0081 dated 16/05/2024 prepared by Northern Beaches Council.							
138	Jacaranda mimosifolia	3.96	2.61	Medium	Low	Low	Remove	Exempt species.	
139	Jacaranda mimosifolia	N/A	N/A	Short	Low	Low	Remove	Exempt species.	
140	Eucalyptus botryoides	9.0	3.01	Medium	Medium	Medium	Retain	27.8% major encroachment from construction of proposed road, sensitive construction measures required.	

Tree No.	Species Name	TPZ (m)	SRZ (m)	ULE	Landscape Significance	Retention Value	Proposed Action	Development Impacts
141	Cupressus x leylandii x 7	4.8	2.25	Long	Medium	Medium	Retain	20.3% major encroachment from construction of proposed road, sensitive construction measures required.
142	Melaleuca quinquenervia	7.8	2.76	Medium	Medium	Medium	Retain	13.0% Major encroachment from Lot 7 proposed PPOS, sensitive construction measures required.
143	Leptospermum petersonii	3.0	1.85	Short	Low	Low	Retain	8.8% Minor encroachment from Lot 7 proposed PPOS, sensitive construction measures required.
144	Grevillea robusta	6.0	2.47	Short	Low	Low	Retain	6.8% Minor encroachment from Lot 7 proposed PPOS, sensitive construction measures required.
145	Jacaranda mimosifolia	3.0	2.0	Medium	Medium	Medium	Retain	No incursion from proposed subdivision.
146	Cupressus sempervirens x 3	2.0	1.5	Long	Low	Low	Retain	13.3% Major encroachment from Lot 12 proposed PPOS, sensitive construction measures required.
147	Livistona australis	3.0	N/A	Medium	Medium	Medium	Retain	No incursion from proposed subdivision.
148	Citrus sp. row (Hedge)	2.0	1.5	Short	Low	Low	Retain	1.8% minor encroachment from construction of road.
149	Syzygium sp. (Hedge)	2.0	1.5	Medium	Low	Low	Retain	No incursion.

APPENDIX E – PHOTOS

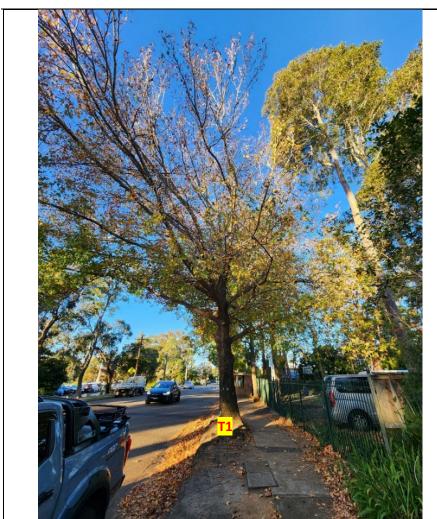


Photo 1: Tree 1 – Council street tree, taken facing East to be retained

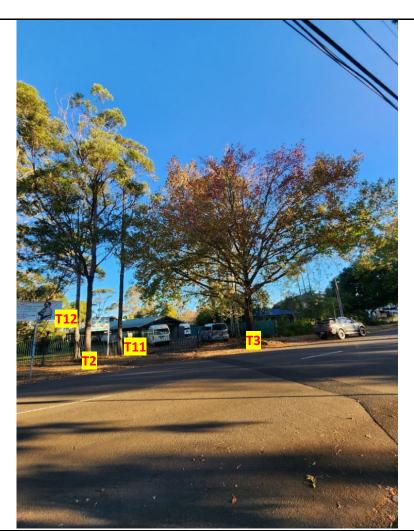


Photo 2: Trees 2, 3, 11 & 12 taken facing South.



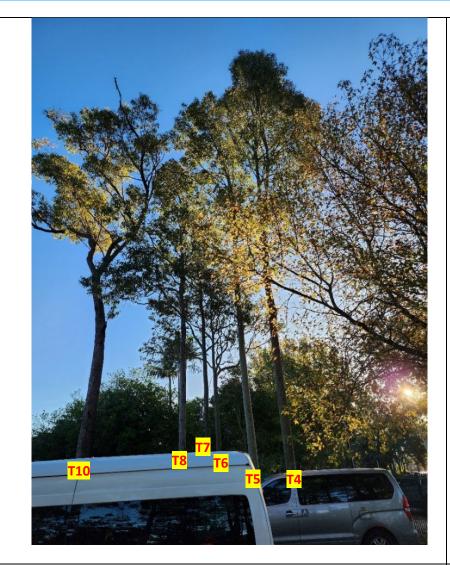




Photo 3: Showing Trees 4 – 10 facing West

Photo 4: Trees 40 & 56 listed as exempt species. Taken facing South.



Photo 5: Tree 28 in poor health proposed for removal. Tree subject to major encroachment. Taken facing North.



Photo 6: Trees 17 & 33 taken facing Northeast. Tree 33 Exempt species.

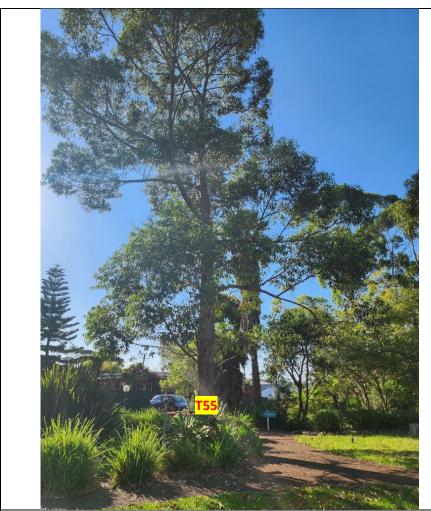


Photo 7: Tree 55 High retention value, priority for retention. Taken facing Southeast. Design modification required to retain the tree.

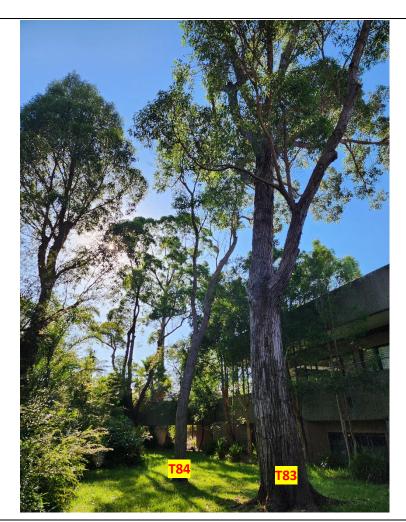


Photo 8: Trees 83 & 84 taken facing East. Tree 83 High retention value unable to retain due to fill in excess of 2.5m



Photo 9: Trunk of 83 showing perspective of fill requirement when compared to red arrow.



Photo 10: Stonewall to be removed.



Photo 11: Trees 107 – 110 within 2m of existing building and are exempt under the DCP.



Photo 12: T119 within 2m of existing building (1.5m) and therefore exempt under the DCP.



Photo 11 Minor pruning back to fence line of Citrus sp. Tree 140 maybe required.



Photo 12: T145 located on neighbouring property subject to major encroachment. Tree sensitive construction measures apply.

APPENDIX F - PLANS

- Plan 1 Post RFI Approved Tree Removal: Sheet 1 of 2, Revision B, dated 11/07/2024
- Plan 2 Post RFI Approved Tree Removal: Sheet 2 of 2, Revision B, dated 11/07/2024
- Plan 3 Trees Remaining Post Demolition: Sheet 1 of 2, Revision A, dated 15/08/2024
- Plan 4 Trees Remaining Post Demolition: Sheet 2 of 2, Revision A, dated 15/08/2024
- Plan 5 Tree Location & Protection: Sheet 1 of 2, Revision A, dated 15/08/2024
- Plan 6 Tree Location & Protection: Sheet 2 of 2, Revision A, dated 15/08/2024

