PEAKE ARBORICULTURE

ARBORICULTURAL IMPACT ASSESSMENT

Lot 22/-/DP28663

61 Dolphin Crescent

Avalon Beach, NSW 2107

Prepared on: 26/03/2025

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EXECUTIVE SUMMARY

This Arboricultural Impact Assessment (AIA) was requested by Matthew Dent on the 18th of March 2025. This AIA is to address the potential impacts upon surrounding trees from the proposed development of Lot 22/-/DP28663, 61 Dolphin Crescent, Avalon Beach NSW 2107 (the subject site)

Two (2) trees within the subject site have been assessed during the preparation of this report.

Following a detailed assessment of construction impacts (available in section 6 of this report) it is recommended that;

All trees included in this assessment are to be retained and protected. The appointment of a project arborist (AQF Level 5) for the duration of the project, should be made prior to the commencement of any site works including demolition, to implement tree protection measures recommended below and in the Tree Protection Specification.

It is recommended that the TPZ's of T1 and T2 are protected with Tree protection Fencing for the duration of the development. The specific location of tree protection fencing is to be determined by the project arborist following a review of all construction drawings. Specifications for signage and fencing are provided in sections 9.5 & 9.6 of this report. If tree protection fencing is required to be removed for access etc. alternative tree protection measures such as stem protection must be used.

Any tree roots exposed during excavation within the TPZ of a retained tree with a diameter greater than 40mm must be assessed by the project arborist. Recommendations for root pruning or design must then be made (any remediation required to offset damage from root pruning must also be made.)

CONTENTS

1 INTRODUCTION & AIMS

1.1 This Arboricultural Impact Assessment (AIA) was requested by Matthew Dent on the 18th of March 2025. This AIA is to address the potential impacts upon surrounding trees from the proposed development of Lot 22/-/DP28663, 61 Dolphin Crescent, Avalon Beach NSW 2107 (the subject site). The subject site can be seen in figure 1 below.

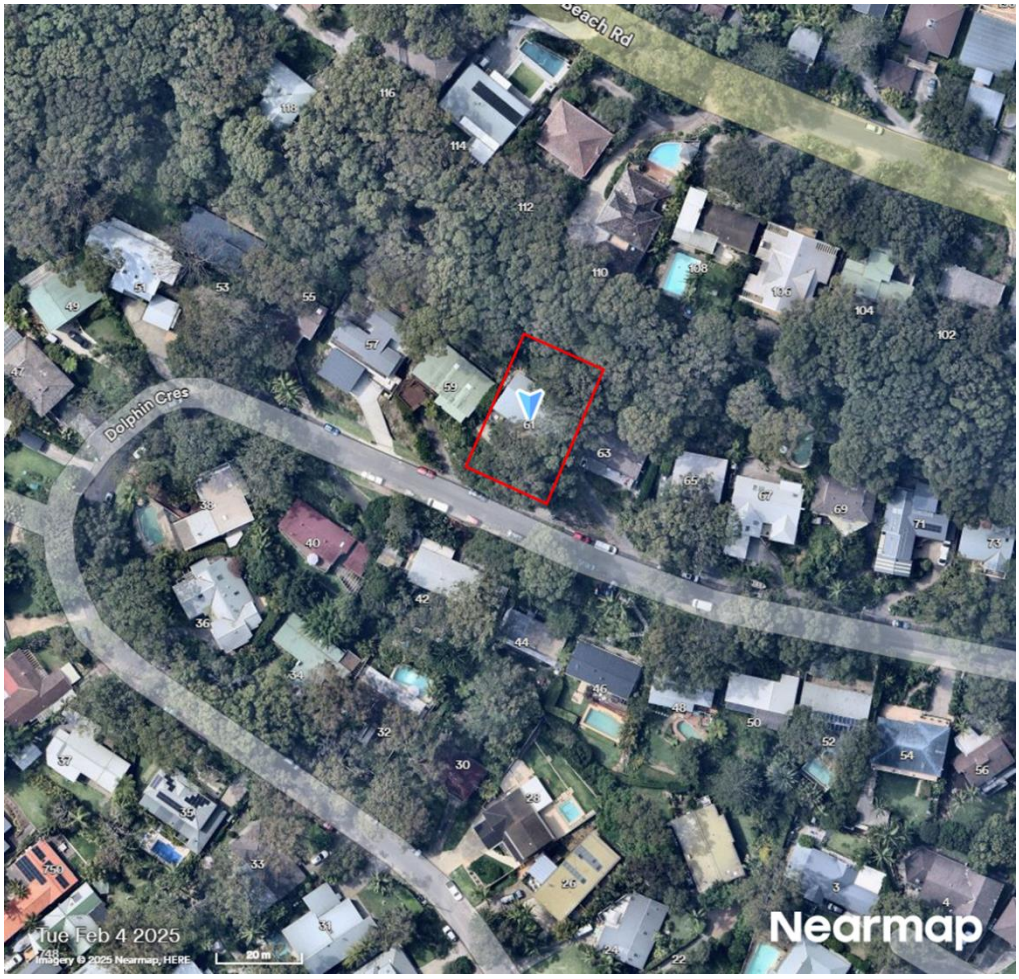

Figure 1: The subject site, site boundary shown in red. (Nearmap, 2025)

1.2 The aim of this report is to:

- Examine Councils policies in regard to application requirements needed for the preparation of an Arboricultural Impact Assessment.
- Visually assess and identify the subject trees & the environment in which they grow.
- Assess construction impacts for each subject tree through the revision of plans for the proposed development.

2 LEGISLATION REQUIREMENTS

2.1 Lot 22/-/DP28663, 61 Dolphin Crescent, Avalon Beach NSW 2107 is zoned C4 – Environmental Living and is located within the Local Government Area of Northern Beaches Council (NSW Government, n.d.)

2.2 Chapter 2 – Vegetation in non-rural areas of the State Environmental Planning Policy (Biodiversity & Conservation) 2021 (NSW Government, 2021) has been considered in the preparation of this report. The aims of the chapter are to;

- *"(a) to protect the biodiversity values of trees and other vegetation in non-rural areas of the State, and*
- *(b) to preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation."*

2.3 Section A1.9 of the Pittwater 21 Development Control Plan - 2014 (DCP) (Pittwater Council, 2004), defines a tree as;

"tree means a palm or woody perennial plant with a single or multi stem greater than five (5) metres in height."

2.4 Section B4.22 of the Pittwater 21 Development Control Plan - 2014 (DCP) (Pittwater Council, 2004), Preservation of Trees or Bushland Vegetation has also been considered, in particular;

"10. Where trees proposed to be retained may be affected by the construction of new buildings and works of Classes 1 and 10, a Tree Protection Plan as per Appendix 18 (P21DCP) is to be submitted."

2.5 Section 7.6 – Biodiversity, of the Pittwater Local Envrionmental Plan 2014 (Pittwater Council, 2014)

3 METHOD

3.1 The trees and site were visually assessed from ground level, using methods developed by the Visual Tree Assessment (VTA) process (Claus Mattheck, 2006). No detailed inspections as described in the VTA process have been undertaken. The genus and species of the trees were recorded as well as the dimensions for diameter at breast height (DBH), diameter above buttress (DAB) and canopy width. Height and age of the trees were estimated as well as the percentage of deadwood, the tree was given a Health / Vigour rating and signs and symptoms of pests and diseases were looked for. Structural defects and comments were recorded.

3.2 Calculations have been made using guidelines supplied in AS4970-2009 Protection of Trees on Development Sites (Standards Australia, 2009) for the;

- Tree Protection Zone (TPZ),
- Structural Root Zone (SRZ),
- Live Crown Ratio (LCR),
- Live Crown Size (LCS),
- Height/Diameter ratio (H/D).

3.3 The trees have been allocated a landscape significance rating of Low, Medium or High using the *IACA Significance of a Tree, Assessment Rating System* (STARS)© (IACA, 2010). Stars assessment criteria includes:

- Condition and Vigour
- Form, species specific
- Provenance, age and botanical significance
- Heritage and Ecological significance
- Size, shape, and local amenity value
- Restrictions to tree growth

Appendix A contains the assessment criteria in full.

3.4 The trees have been given a Useful Life Expectancy (ULE) rating, categorised as either;

- Long – 40+ years
- Medium – 15-40 years
- Short – 5-15 years
- Consider for removal - <5 years

4 OBSERVATIONS

4.1 Listed in Table 1 below are observations from the subject trees relating to;

- Health and vigour. (Dead, Senescent, Poor, Fair, Good, Excellent)
- Structure / Form. (Poor, Fair, Good, Excellent)
- Structural defects and comments.
- Any signs/symptoms of pest and disease attack.
- Previous pruning or wounds.

Tree No.	Genus/Species & Common Names	Health / Vigour	Structure / Form	Structural Defects/ Comments	Pests/ Disease	Pruning/ Wounds
1	*Allocasuarina torulosa* Forest She-Oak	Fair	Poor	Tip dieback in crown.	None visible	Cambium wound on main stem.
2	*Corymbia maculata* Spotted Gum	Fair	Fair	Supressed	None visible	None visible

Table 1: Tree Observations

4.2 Listed in Table 2 below are measurements from the subject trees relating to;

- Diameter at breast height (DBH).
- Diameter above buttress (DAB).
- Canopy spread – measured to the North, East, South and West (N, E, S, W).
- Tree height.
- Lowest scaffold branch.

**Measurements for Group A are an indicative size only.*

Tree Number	Species	Maturity	Height (m)	Lowest Scaffold (m)	Spread (m)				DBH / Multi (cm)	DAB (cm)
					N	E	S	W		
1	*Allocasuarina torulosa*	Mature	5.5	1.5	0	4	1	3	25	30
2	*Corymbia Maculata*	Mature	20	10	1	5	2	5	45	49

Table 2: Tree Measurements

4.3 Listed in Table 3 Below are calculations from the subject trees relating to:

- Tree Protection Zone (TPZ)
- Structural Root Zone (SRZ)
- Live Crown Ratio (LCR)
- Live Crown Size (LCS)

Tree Number	Species	TPZ (m)	SRZ (m)	Live Crown Size (m2)	Live Crown Ratio (%)
1	*Allocasuarina torulosa*	3	2	16	73%
2	*Corymbia Maculata*	5.4	2.45	65	50%

Table 3: Calculations from the subject trees

5 TREE RETENTION VALUES

5.1 Trees have been allocated a retention value using the priority Matrix in the *IACA Significance of a Tree, Assessment Rating System* (STARS)© (IACA, 2010). The Matrix uses the Landscape Significance rating combined with the Useful Life Expectancy (ULE) to determine a retention value of either;

- Priority for Retention (High) – All measures must be taken to retain and protect these trees. If the guidelines set out in AS4970-2009 Protection of trees on development sites cannot be used to protect the trees, design modification or re-location of the proposed development should be considered.
- Consider for Retention (Medium) – Retention of these trees should remain a priority. If the trees are adversely affecting the proposed development and all protection measures have been considered but are not viable, removal can be considered.
- Consider for Removal (Low) – Retention of these trees is not important. No modification to design should be considered for their retention.
- Priority for Removal – Trees in an irreversible decline, weed species or hazardous trees. These trees should be removed.

Tree Number	Species	Landscape Significance Rating	Useful Life Expectancy	Retention Value
1	*Allocasuarina torulosa*	Low	Medium (15-40)	Low-Medium
2	*Corymbia Maculata*	High	Medium (15-40)	High

Table 4: Tree Retention Values

6 CONSTRUCTION IMPACTS

The locations trees discussed below and their TPZ's/SRZ's are overlayed on the attached site plan.

6.1 T1 and T2 will be subject to minor TPZ encroachments of less than 5% (see figure 2 below). No long-term detrimental impacts are expected from this encroachment.

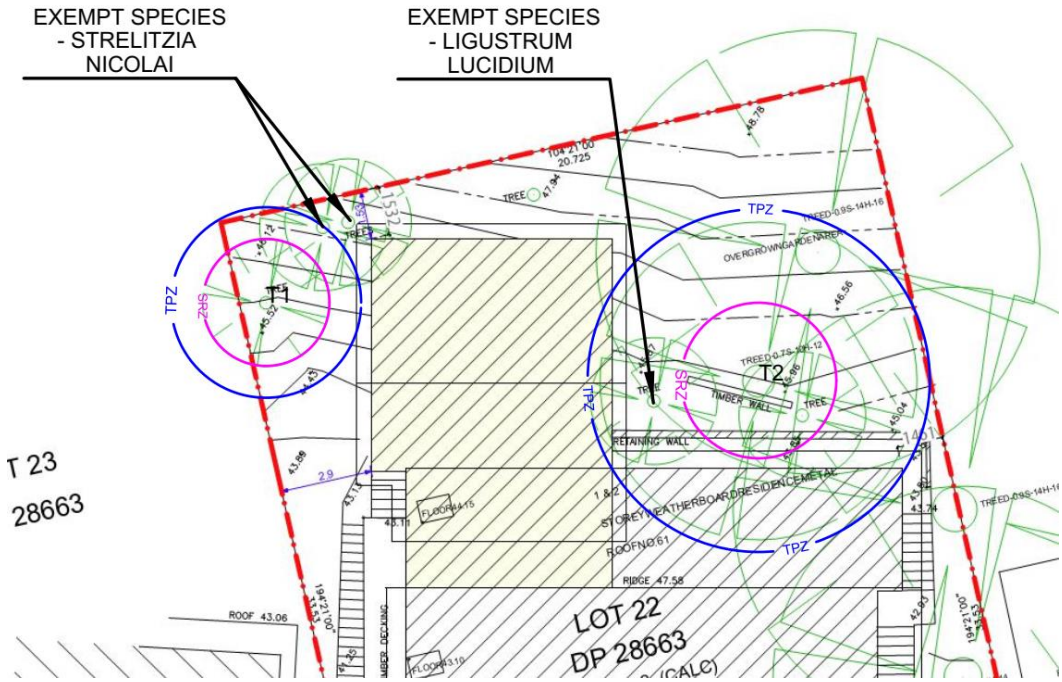

Figure 2: Excerpt of the Site Plan (Drafting Help, 27/09/22) with Tree details overlayed)

7 DOCUMENTS USED IN THE PREPARATION OF THIS REPORT

7.1 Listed in table 6 below are documents used in the preparation of this report.

Document type	Source/ Author	Title	Date	Summary
Survey	Altitude Surveys	Survey Plan	21/05/2024	Levels and details over 61 Dolphin Crescent, Avalon Beach NSW 2107.
Plan Set	Drafting Help	Site Plan Lower Floor Plan - Existing Lower Floor Plan - Proposed Elevations – Existing Elevations – Proposed Landuse Diagram – Existing – Landuse Diagram - Proposed	27/09/2022	Plan Set showing existing structures and proposed development at 61 Dolphin Crescent, Avalon Beach NSW 2107.
Plan Overlay	Peake Arboriculture	Tree Location, TPZ & SRZ Plan.	20/03/2025	Plan showing tree locations, tree protection zones and structural root zones at 61 Dolphin Crescent, Avalon Beach NSW 2107

Table 5: Documents used in the preparation of this report.

8 RECOMMENDATIONS

8.1 All trees included in this assessment are to be retained and protected. The appointment of a project arborist (AQF Level 5) for the duration of the project, should be made prior to the commencement of any site works including demolition, to implement tree protection measures recommended below and in the Tree Protection Specification.

8.2 It is recommended that the TPZ's of T1 and T2 are protected with tree protection Fencing for the duration of the development. The specific location of tree protection fencing is to be determined by the project arborist following a review of all construction drawings and. Specifications for signage and fencing are provided in sections 9.5 & 9.6 of this report. If tree protection fencing is required to be removed for access etc. alternative tree protection measures such as stem protection must be used.

8.3 Any tree roots exposed during excavation within the TPZ of a retained tree with a diameter greater than 40mm must be assessed by the project arborist. Recommendations for root pruning or design must then be made (any remediation required to offset damage from root pruning must also be made.)

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9 TREE PROTECTION SPECIFICATION – AS PER AS4970 – 2009

Tree Protection will be undertaken in the three stages listed below. Certification from the project arborist is required at/during each stage.

9.1 PRE – DEVELOPMENT STAGE

- Prior to any tree removal an AQF level 5 arborist must be engaged as site arborist to oversee all arboricultural aspects of the project, including tagging all trees and identifying trees for removal.
- Tree protection should be installed by a minimum AQF level 3 arborist and be supervised by an AQF level 5 arborist in accordance with the guidelines from AS4970-2009 Protection of trees on development sites (Standards Australia, 2009), and the information provided in this report.
- All trees to be retained must be visually assessed and their current health and condition recorded. The minimum assessment categories are provided below.
  <u>Visual assessment benchmark</u>
  - Health and Vitality (Good/Fair/Poor/Dead)
  - Leaf Damage
  - Pests and Diseases
  - Deadwood percentage
  - Dieback Percentage.
  - Mechanical Damage
  - Recent Pruning
- Certifying of Pre-Construction Tree Protection by the site arborist will conclude the pre-construction phase of development. Construction must not commence until Pre-Construction tree protection has been certified by the site arborist.
- The project manager is to be made aware of Tree Protection requirements for the duration of the project.

Pre-development Arboricultural Certification

	Pre-Development requirement met. (Y/N)	Project Arborist Signature	Date
All trees tagged. Trees for removal identified by project arborist.			
All tree protection measures have been correctly installed.			
A pre-development visual inspection of all trees to be retained has been undertaken by the project arborist			
The project manager has been made aware of all tree protection measures required for the duration of the project.			

9.2 DEVELOPMENT STAGE

- Tree protection measures must remain in place during this stage. They cannot be removed intermittently for access and any modifications to Tree Protection Fencing Locations as shown in the tree protection plan, must be authorised, recorded and carried out by the site arborist.
- The project arborist is to be present for all arboricultural supervision within TPZ's of retained trees, as recommended by the arboricultural impact assessment(AIA) and tree protection plan.
- The site arborist will conduct regular visits (every two months) in accordance with AS4970-2009 to visually assess and record the health and condition of the trees being retained.
- Tree protection measures will also be assessed regularly to ensure they are functioning correctly. Any maintenance required for Tree Protection measures will be performed.
- A stop work notice will be issued to the project manager if any Tree Protection Measures are not found to be complying with the Tree Protection Plan.
- Any incidents relating to retained trees must be reported immediately to the site arborist to be documented and a plan for remediation put in place.

Development Stage Arboricultural Certification.

	Development requirement met. (Y/N)	Project Arborist Signature	Date
Tree protection measures have remained in place for the duration of the development.			
Tree Health and vitality has not deteriorated during the development.			
Arboricultural supervision has been undertaken as required by the AIA and Tree Protection Plan			
Incidents relating to retained trees have been reported to the project arborist.			
Remediation has been implemented as necessary for the successful retention of retained trees.			

9.3 CONCLUSION OF DEVELOPMENT

- Final visit from the site arborist to report on the health and condition of the trees that have been retained and the removal of tree protection. Incidents documented during the development stage will be included in this report.
- Any remedial work necessary upon the completion of development will be recommended in the final report.
- Replacement trees are to be planted before the project arborists final inspection.

Conclusion of Development Arboricultural Certification.

	Development requirement met. (Y/N)	Project Arborist Signature	Date
Tree protection measures have remained in place for the duration of the development.			
Tree Health and vitality has not deteriorated during the development.			
All documentation from site inspections/supervision has been compiled.			
Remediation has been implemented as necessary for the successful retention of retained trees. Any remediation to be continued has been recommended in the final report.			
Replacement tree planting has been undertaken and all replacement trees have been planted correctly.			

9.4 TREE PROTECTION ZONE REQUIREMENTS

Tree Protection Zones (TPZs), will be set out before the commencement of construction works.

According to AS 4970-2009, activities excluded from the TPZ include but are not limited to-:

(a) machine excavation including trenching
(b) excavation for silt fencing
(c) cultivation
(d) storage
(e) preparation of chemicals, including preparation of cement products
(f) parking of vehicles and plant
(g) refuelling
(h) dumping of waste
(i) wash down and cleaning of equipment
(j) placement of fill
(k) lighting of fires
(l) soil level changes
(m) temporary or permanent installation of utilities and signs
(n) physical damage to the tree.

Source Australian Standard *AS 4970-2009 Protection of trees on development sites*.

9.5 Tree Protection Zone Signage

A tree protection zone sign must be affixed to all Fenced Tree Protection Zones. (Example Below)

9.6 Tree Protection Fencing Requirements

Tree protection Fencing must be a minimum of 1.8 metres in height and be held in place with locking clamps and concrete feet between each panel, see Figure 2 below.

An Example of Temporary Fencing

10 REFERENCES

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Standards Australia, 2009. *AS 4970-2009 Protection of trees on development sites.* Sydney: Standards Australia.

11 GLOSSARY OF TERMS

Age class:

Young – planted recently.
Semi Mature – Reached less than 20% of expected life span.
Mature – Between 20-80% of expected life span.
Over Mature – Past 80% of expected life span.

Health and Vigour:

Dead – Dead tree.
Senescent – Advanced state of decline. Significant deadwood visible. <20% live foliage cover.
Poor – Declining. Dieback and deadwood visible. 20-60% live foliage cover.
Fair – Low to average vigour. Dieback or visible. 60-90% live foliage cover.
Good – Good vigour. Small amount of dieback visible. 90-100% live foliage cover.
Excellent – Excellent vigour. No dieback or deadwood visible. 100% live foliage cover.

Structure / Form

Excellent (E), Good (G), Fair (F), Poor (P), this refers to the tree's form & growth habit, as modified by its environment (aspect suppression by other tree/s, soils,) & the state of the scaffold (i.e. trunk & major branches), including structural defects such as cavities, crooked trunks or weak trunk/branch junctions. These are not directly connected with health & it is possible for a tree to have poor structure but have fair condition/vigour.

Crown:

Measured from the top of the tree to the lowest branch, comprising of leaves and branches.

Deadwood:

Dead branches found in a trees crown. An entirely dead branch or stem.

Dieback:

The death of portions of the crown. The death of branches or shoots from the tips inward.

Defect:

A feature of a tree that affects the health or structure in an adverse manner.

Decay:

The process of micro-organisms breaking down woody tissue.

Cavity:

A void in a woody stem, usually created by decay. This can be open or closed.

Soil Texture:

The amounts of sand, silt and clay in a soil.

Soil pH:

A figure expressing the acidity or alkalinity of a soil.

DBH:

Diameter at Breast Height refers to the tree trunk diameter measured at breast height or 1.4 metres above ground level.

DAB:

Diameter Above the Buttress refers to the tree trunk diameter measured above the root buttress and is used to calculate the radius of the SRZ.

TPZ:

Tree Protection Zone The radius of the TPZ is calculated for each tree by multiplying the DBH x 12. To establish the TPZ this radius is measured from the centre of the stem at ground level and it is an area that is to be isolated from construction disturbance. Any encroachment into the TPZ of more than 10% is considered to be a major encroachment.

SRZ:

Structural Root Zone The radius of the SRZ is calculated using the following formula:

r (SRZ) = $(Dx50)^{0.42}$ x 0.64 where D is the DAB measured in metres. It is the area around a tree that is required for tree stability and is usually applied on constructions sites after there has been a major encroachment of the TPZ.

LCR:

Live Crown Ratio. The height of a trees crown, relative to the total height of the tree. Often used as an indicator of overall stability.

LCS:

Live Crown Size. The area of the crown as viewed from one aspect.

H/D:

Height over Diameter ratio. An indicator of failure due to slenderness. 30 is the optimum ratio. Greater than 50 is considered hazardous

12 RELEVANT APPENDICES

12.1 APPENDIX 1 – S.T.A.R.S.© (IACA 2010)

Significance of a Tree, Assessment Rating System* (IACA 2010) – S.T.A.R.S. ©

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. An example of its use in an Arboricultural report is shown as Appendix A.

Tree Significance - Assessment Criteria

High Significance in landscape

- The tree is in *Good condition* and *Good vigor*;
- 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.

Medium Significance in landscape

- The tree is in *Fair-Good condition* and *Good* or *Low vigor;*
- 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*.

Low Significance in landscape

- The tree is in fair-poor condition and good or low vigor;
- 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

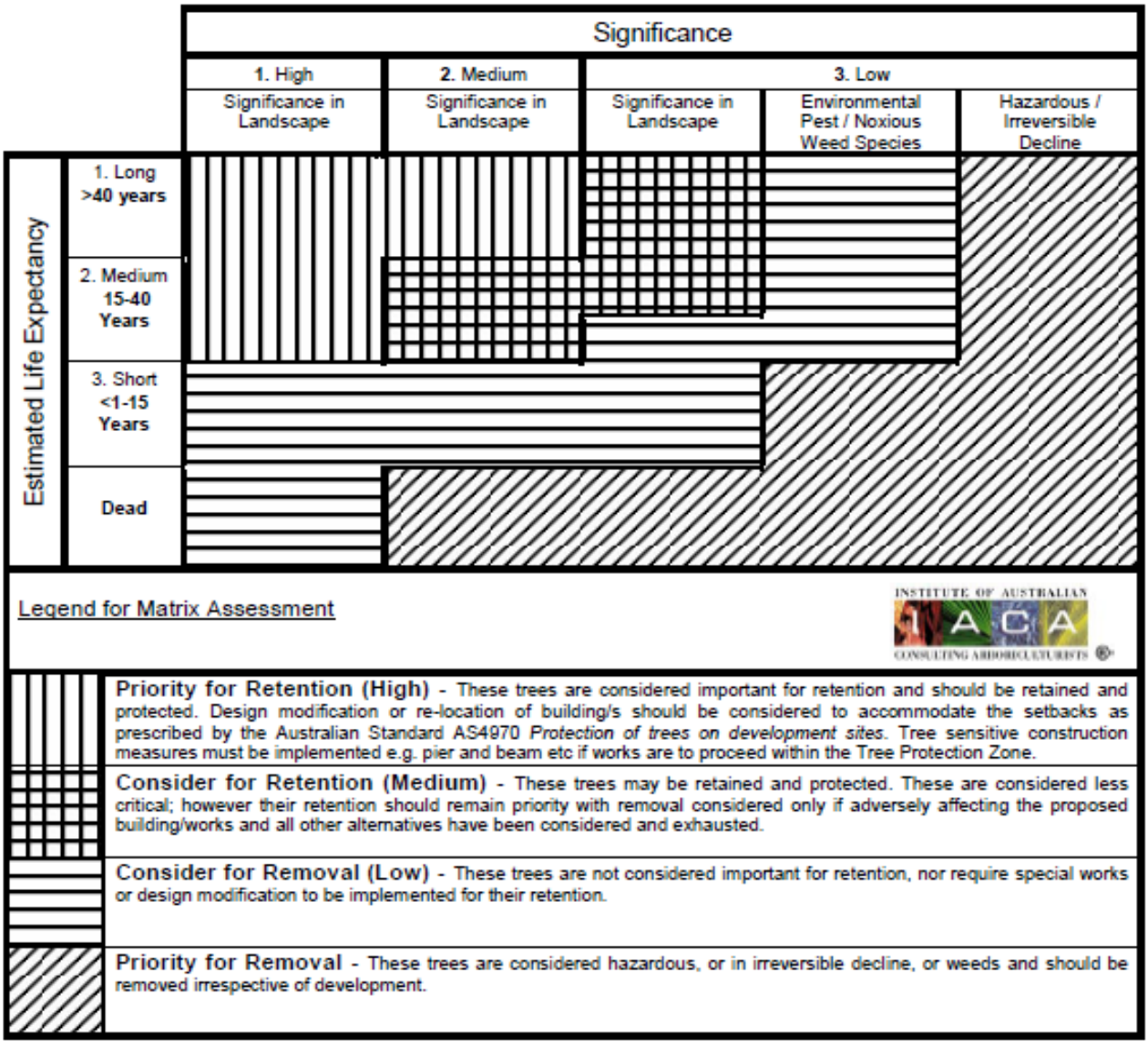
- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

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.

Institute of Australian Consulting Arboriculturists (IACA 2010), *IACA Significance of a Tree, Assessment Rating System (STARS)*, www.iaca.org.au

Table 1.0 Tree Retention Value - Priority Matrix.



USE OF THIS DOCUMENTAND REFERENCING The IACA Significance of a Tree, Assessment Rating System (STARS) is free to use, but only in its entirety and must be cited as follows:

IACA, 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*,Institute of Australian Consulting Arboriculturists, Australia, www.iaca.org.au

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 Ltd2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, www.footprintgreen.com.au

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DEVELOPMENT PROPOSAL

DP: **28663**
LOT No. **22**
SITE AREA: **694.90MSQ.**
EXIST. GFA: **205.00MSQ.**
PROPOSED GFA: **67.00MSQ**
MAX. BUILDING HEIGHT: **8.5M**

NEW WORKS:
NEW 3RD STOREY ADDITION AT REAR OF DWELLING

NOTE:

NEW ROOF. COLOUR - SHALE GREY, COLORBOND® CORRUGATED STEEL. IN FITTING WITH EXISTING HOUSE ROOF.

NEW WALLS: NEW WALLS - JAMES HARDIE™ TEX BASE SHEET, COLOUR IS APPROXIMATELY AN RGB VALUE OF (187, 161, 145). THIS CORRESPONDS TO A SOFT, EARTHY TONE WITH A WARM BEIGE OR LIGHT TAUPE APPEARANCE

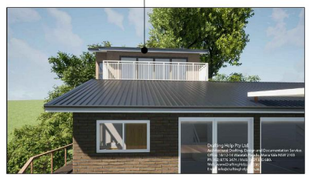
FLOOR: TIMBER FRAME.

NEW TIMBER BALUSTRADE: NATURAL. IN FITTING WITH EXISTING HOUSE BALUSTRADES .

NEW REAR EXTENSION WITH BALCONY

NEW REAR EXTENSION WITH BALCONY

NEW REAR EXTENSION WITH BALCONY

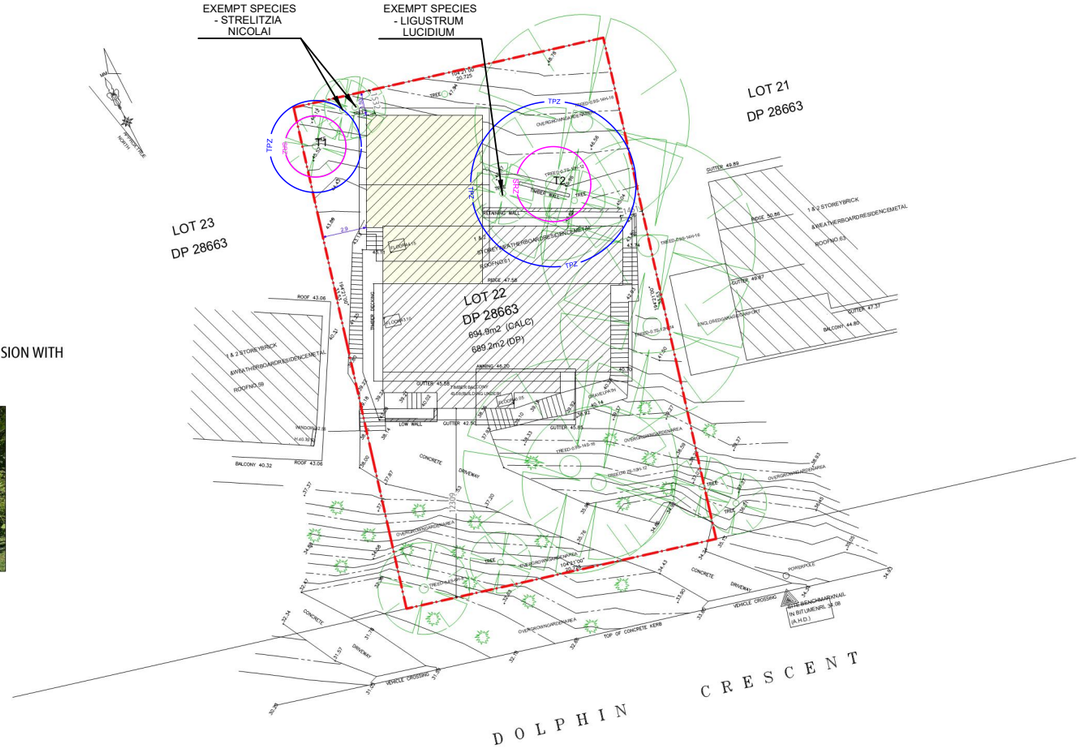


NEW REAR EXTENSION

NEW REAR EXTENSION

LEGEND:
EXISTING BUILDING OUTINE

SMOKE ALARMS TO COMPLY WITH AS 3786



SITE PLAN
SCALE 1:200

TREE LOCATION, TPZ AND SRZ PLAN

SITE PLAN (DRAFTING HELP– 27/09/2022) WITH TREE PROTECTION ZONE AND STRUCTURAL ROOT ZONE OVERLAY (PEAKE ARBORICULTURE 20/03/25).

THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARBORICULTURAL IMPACT ASSESSMENT PREPARED FOR 61 DOLPHIN CRES, AVALON BEACH NSW 2107, BY PEAKE ARBORICULTURE (20/03/2025).

LEGEND
TREE PROTECTION ZONE
TPZ
STRUCTURAL ROOT ZONE
SRZ

PEAKE ARBORICULTURE

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GENERAL NOTES
- BUILDER TO CONFIRM ALL LEVELS AND DIMENSIONS ON SITE BEFORE WORK BEGINS
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL AUTHORITIES REQUIREMENTS AND B.C.A. REQUIREMENTS.
- CONNECT DPS TO EXISTING STORMWATER SYSTEM. ALL STRUCTURAL DETAILS TO ENGINEERS SPECIFICATIONS

1:100
2m 0 2m 4m 6m 8m 10m

BASIX® Certificate
Building Sustainability Index www.basix.nsw.gov.au

Alterations and Additions

Certificate number: A1784622

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability. If it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary
Date of issue: Monday, 16 September 2024
To be valid, this certificate must be lodged within 3 months of the date of issue.

Project address	
Project name	54424_61 Dolphin Crescent
Street address	61 DOLPHIN Crescent AVALON BEACH 2107
Local Government Area	Northern Beaches Council
Plan type and number	Deposited Plan DP28663
Lot number	22
Section number	-
Project type	
Dwelling type	Dwelling house (detached)
Type of alteration and addition	The estimated development cost for my renovation work is $96,000 or more, and does not include a pool (and/or spa).
N/A	N/A
Certificate Prepared by (please complete before submitting to Council or PCA)	
Name / Company Name: Max Brightwell	
ABN (if applicable): 95897024364	

Fixtures and systems	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Lighting			
The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✔	✔
Fixtures			
The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.		✔	✔
The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.		✔	✔
The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.		✔	

Construction	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Insulation requirements			
The applicant must construct the new or altered construction (floors), walls, and ceiling/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists.	✔	✔	✔

Construction	Additional insulation required (R-value)	Other specifications
concrete slab on ground floor.	nil	N/A
suspended floor with open subfloor: framed (R0.7).	R0.8 (down) (or R1.50 including construction)	N/A
floor above existing dwelling or building.	nil	N/A
external wall: framed (weatherboard, fibro, metal clad)	R1.30 (or R1.70 including construction)	
raked ceiling, pitched/skillion roof: framed	ceiling: R3.00 (up), roof: foil/sarking	medium (solar absorptance 0.475 - 0.70)

Glazing requirements	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors			
The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✔	✔	✔
The following requirements must also be satisfied in relation to each window and glazed door:		✔	✔
Each window or glazed door with standard aluminium or timber frames and single clear or toned glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with comparing U-value and SHGC may be substituted.		✔	✔
Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with comparing U-value and SHGC may be substituted.		✔	✔
For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sit.	✔	✔	✔
Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.		✔	✔
Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.		✔	✔

Glazing requirements	Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Windows and glazed doors glazing requirements			

Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type
W1	S	1.35	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
D1	S	10.08	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)
W2	W	2.25	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)
W3	W	4.5	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)
W5	W	1.8	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)

Glazing requirements							Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Window/door number	Orientation	Area of glass including frame (m2)	Overshadowing height (m)	Overshadowing distance (m)	Shading device	Frame and glass type			
W6	N	0.76	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
W7	E	5.26	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W8	E	1.8	0	0	eave/ verandah/ pergola/balcony >=450 mm	timber or uPVC, single pyrolytic low-e, (U-value: 3.99, SHGC: 0.4)			
W9	E	0.72	0	0	eave/ verandah/ pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			
D2	E	1.7	0	0	eave/ verandah/ pergola/balcony >=900 mm	timber or uPVC, single clear, (or U-value: 5.71, SHGC: 0.66)			

NATIONAL CONSTRUCTION CODE, AUSTRALIAN STANDARDS, COUNCIL REQUIREMENTS & OTHERCODES:
ALL BUILDING WORK TO BE IN ACCORDANCE WITHNCC, COUNCIL CODES AND ALL RELEVANT AUSTRALIAN STANDARDS INCLUDING,BUT NOT LIMITED TO :
- **AS 1684 - RESIDENTIAL TIMBER FRAMEDCONSTRUCTION**
- **AS 2047:2014 - WINDOWS AND EXTERNAL GLAZEDDOORS IN BUILDINGS**
- **AS 2870:2011 - RESIDENTIAL SLABS ANDFOOTINGS**
- **AS/NZS 3000:2007 - WIRING RULES**
- **AS/NZS 3500.5:2000 - NATIONAL PLUMBING ANDDRAINAGE**
- **AS 3660.1:2014 - TERMITE MANAGEMENT**
- **AS 3700-2011 - MASONRY STRUCTURES**
- **AS 3740-2010 - WATERPROOFING OF DOMESTICWET AREAS**
- **AS/NZS 2918-2018 DOMESTIC SOLID FUELBURNING APPLIANCES**
- **AS 4100-1998 - STEEL STRUCTURES**
- **NORTHERN BEACHES COUNCIL DRIVEWAYSPECIFICATIONS**
- **SYDNEY WATER TECHNICAL GUIDELINES: BUILDING OVER AND ADJACENT TO PIPE ASSETS**

61 DOLPHON CRES. AVALON BEACH 2107

ARCHITECTURAL DRAFTING
3D VISUALISATION
DEVELOPMENT APPLICATION ASSISTANCE
COUNCIL COMPLIANT PLANS

LEGEND:
EXISTING BUILDING OUTLINE
PROPOSED WORK
General Notes

proudly supporting bear cottage

Project ADDITIONS AND ALTERATIONS	Sheet 1
Date 27-Sep-22	
Scale AS SHOWN	
DP No. 28663	
LOT No. 22	

No.	Revision/Issue	Date
A	ISSUED FOR DA	Sep. 27, 22

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02 87763474

Project Name and Address
MATTHEW DENT
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AVALON BEACH
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