

ARBORICULTURAL IMPACT ASSESSMENT (AIA) REPORT

Prepared For: Mr John Burr ridge & Ms Karen Calcagno
Site Address: 12 Pacific Parade Manly
Inspection Date: 1 October 2024
Report Date: 8 October 2024



Image 1: The property (white picket fence) and Street Tree located in front of neighbouring property 10 Pacific Pde Manly.

Prepared by Margot Blues
Diploma (Arboriculture) AQF 5
0414991122



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1 Introduction

1.1 Background

- 1.1.1 The Owners have commissioned this report for Development Application submission.
- 1.1.2 The report's aim was to:
- Conduct a visual assessment of trees protected in accordance with Northern Beaches Council's published directives.
 - Determine the construction impact to the tree as per the Australian Standard AS4970:2009 *Protection of trees on development sites*.
 - Categorise the tree into retention priority (High/Medium/Low Retention value).
- 1.1.3 Alterations and additions are proposed inclusive of offstreet parking and vehicular crossover.
- 1.1.4 Information supplied and relied upon for the preparation of this report included:
- Architectural suite of plans by Costello & Graham Design Issue P3 dated 24/09/2024.
 - Site survey by Altitude Surveys undertaken 27/3/2024.
- 1.1.5 The use of these documents is acknowledged.



2 Methodology

- 2.1.1 Site attendance occurred on the 1 October 2024.
- 2.1.2 The trees were visually assessed using the Visual Tree Assessment (VTA) methodology derived by Mattheck and Breloer (1994) encompassing the biological and mechanical characteristics as presented.
- Biological assessment included leaves (volume and colour); the presence of pests and diseases, canopy dieback, deadwood and epicormic growth.
 - Tree mechanics included assessment of structural stability, previous pruning and any damage/disturbance which may have occurred.
- 2.1.3 No destructive or aerial investigations occurred.
- 2.1.4 Tree height and canopy width were estimated.
- 2.1.5 Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) have been calculated as per AS4970-2009 *Protection of trees on development sites*. Measurements were achieved with the aid of a builder's tape measure, and scaled drawings.
- 2.1.6 Appendix 1: Tree Data.
- 2.1.7 Appendix 2: Tree location and construction impact.
- 2.1.8 No other service diagrams or reports have been provided in the preparation of this report.

2.2 Assumption Made:

- 2.2.1 Recent upgrade to the kerb and gutter possibly would have removed roots encountered during construction. The proposed driveway layback falls within the western edge of the renovated gutter.

It is assumed the vehicular hardstand within the front garden will be concrete.



3 Results

3.1.1 NSW Planning Portal Spatial Viewer (accessed 8/10/2024) property details include:

- Zoning R1 – General Residential
- Heritage – not applicable.

3.1.2 Northern Beaches Council (accessed 8/10/2024):

- A protected (prescribed) tree has:
 - A height five (5) metres or greater and
 - Not listed on the exempt species list.

3.1.3 Manly Local Environmental Plan 2013:

- Street Trees within Pacific Parade are heritage listed (Schedule 5 MLEP 2013 Item referenced I191 – Heritage Map Sheet HER_003 - the landscaped street is heritage listed).

3.2 The Trees

3.2.1 Street Tree T1 is a mature (Camphor laurel) located in the road reserve. The tree appeared in excellent health and condition. Recent road re-asphalting and partial gutter renewal/replacement was evident (Photo 1). The western section of the repaired gutter falls within the footprint of the proposed layback and will require modification upon development approval.

3.2.2 No evidence of any vertical displacement, typical of root impact, seen within the gutter/gutter area, nature strip existing footpath or within the private property. At 3 metres out from the gutter (roadside) the asphalt is vertically displaced (root). This is pre-existing, currently impacted by parked cars and due to distance out from the kerb should not be impacted by driveway construction.



Photo 1: Recent gutter repair. T1 Camphor laurel within the road reserve. Proposed driveway beyond the tree. Photo looking west.

3.2.3 The remaining trees all located within the rear garden were exempt (exempt listed or had not reached the prescribed height of 5 metres as per published directives Northern Beaches Council). These trees appeared unaffected by the proposal.



Photo 2: Trees within the rear garden. Trees unaffected by the development.



3.3 Construction impact to the trees

3.3.1 The development impact based on the proposal:

Tree ID	Species	Comment	Recommendation
T1	<i>Cinnamomum camphor</i> Camphor Laurel	<p>Construction impact Low – less than 10% as per AS4970 (Total Incursion 3.5%). Development within the TPZ and outside SRZ</p> <p>See appendix 2.</p> <p>Recent gutter repairs fall within the footprint of the driveway.</p> <p>The vehicular hardstand within the property is shown to have an approximate Finished height of FL4.450. Assuming a concrete driveway to be installed will necessitate minimum excavation of 30cm.</p>	<p><u>Retention Value:</u> High –</p> <p>Retain</p> <p>Project arborist to review at time of layback excavation.</p> <p>Trunk protection required during construction.</p>
T2 – T5		<p>All within the rear garden are unaffected by the development. All were exempt under Northern Beaches Council’s directives.</p> <p>All trees appear retainable based on the proposal.</p>	<p><u>Retention Value:</u></p> <p><u>Low.</u></p> <p><u>No protection required.</u></p>

Table 1: Construction impact to the trees based on the proposed.



4 Conclusion & Recommendation

4.1.1 The proposed driveway and hardstand construction is anticipated to have minimal impact on the street tree. Excavation will be required. Construction incursion has partially been undertaken close to T1 with the kerb/gutter renewal.

The driveway and vehicular crossover constitute a 3.5% incursion into T1's TPZ which is considered "minor" in accordance with AS4970-2009. Required excavation required to meet Council driveway/crossover specifications is seen as minimal. The main excavation (minimum 30cm)will be within the property required for the hardstand.

4.2 Tree protection recommended.

1.1.1 Trunk armouring is the temporary affixing of battens around a tree's trunk (including root flare) and or branches. Trunk armouring requires three main components:

- Porous, **readily draining materials** such as hessian or Geo-Textile fabric shall be used for padding limbs to be armoured. Duct tape or gaffer's tape can be used to temporarily affix padding during installation.
- Timber battens with a minimum size of 40x80mm are to be positioned around the trunk & lower branches to be protected (within 2 metres of ground level). Battens shall be spaced no further than 75mm apart.
- Battens and padding can be secured using either galvanised builders strapping (preferred) or nylon tie-down straps (both ratchetting, and cam-buckle styles are acceptable).

1.1.2 Nylon straps may be beneficial in temporarily supporting timber battens during installation.

1.1.3 The use of 25mm (or thicker) plywood board may be used in conjunction with cushioning and battens around the root flare of trees to be protected.

1.1.4 Under no circumstance is the tree be physically damaged during the installation of trunk armouring. This means the tree shall not be drilled, nailed, or otherwise used to support powerlines, stays, guys etc.

1.1.5 It is recommended the tree is deadwooded.

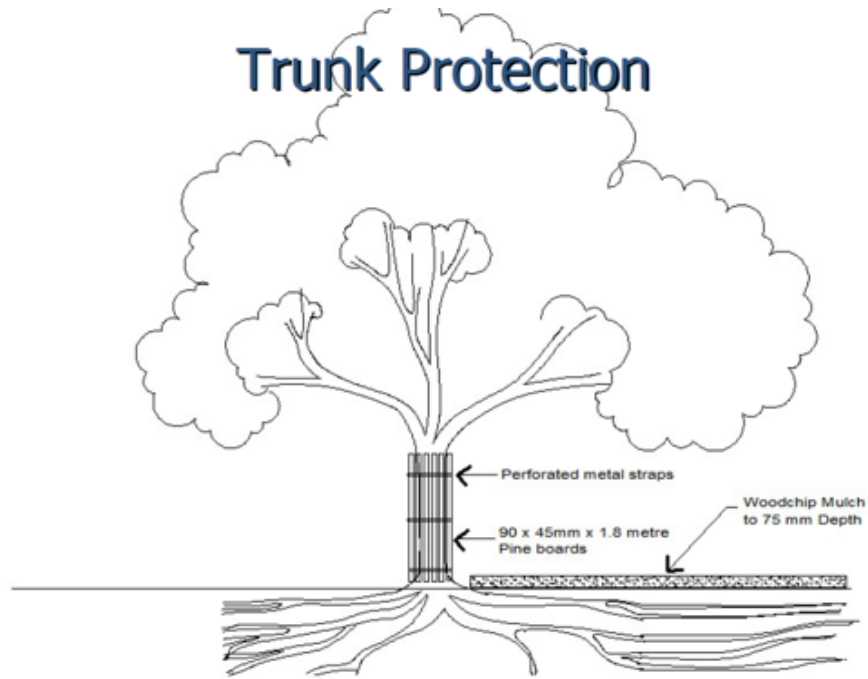


Figure 1: Trunk protection only required

Tree Data Summary - 12 Pacific Parade Manly - Assessed 1/10/2024

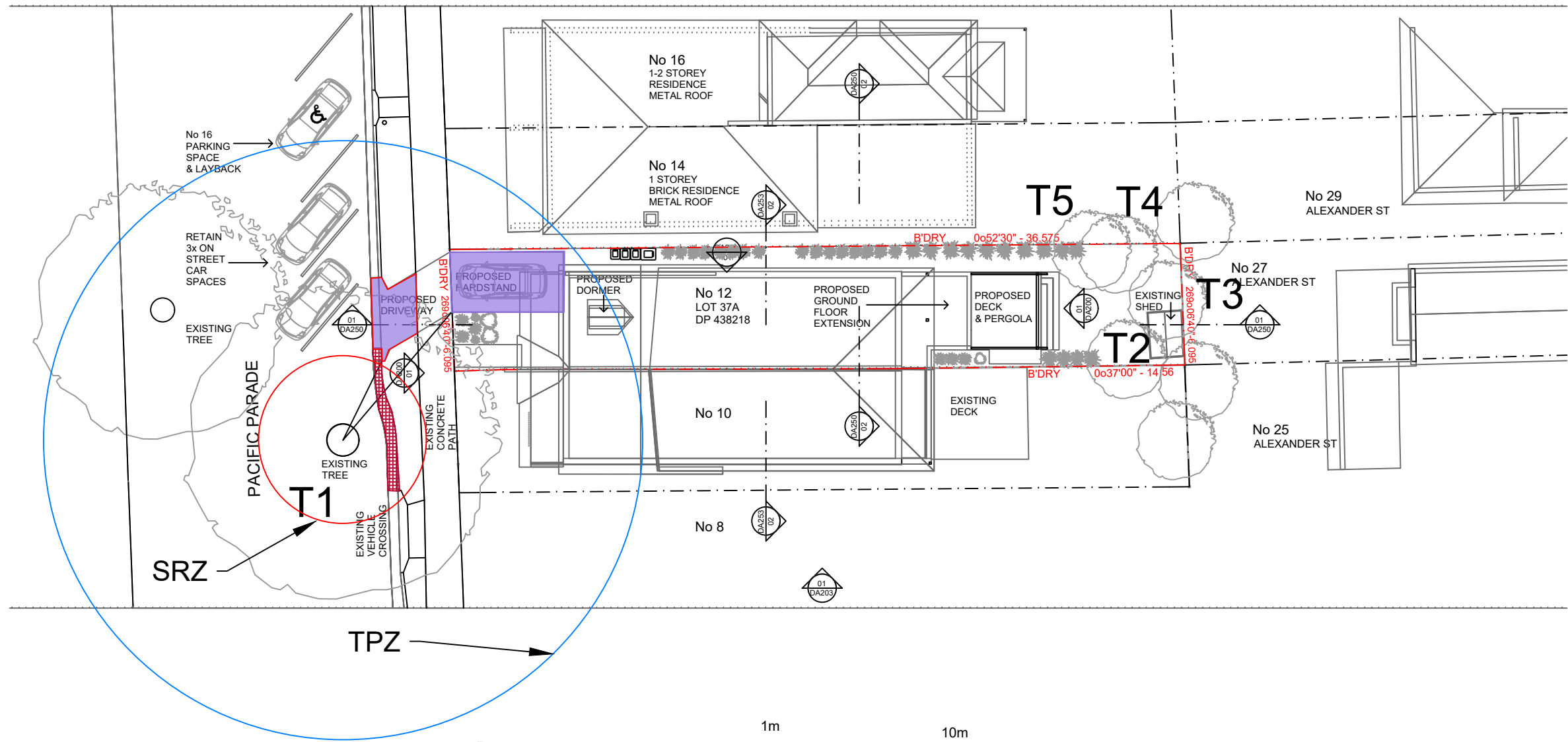
Tree ID	Species <i>Botanical name</i> Common name	Height (m)	Canopy dims n/s in metres	DBH (cm)	DGL (cm)	Foliage condition	Maturity	Trunk type	Stability	Vigour	Notes <i>As recorded during inspection.</i>	TPZ (M) Radius	SRZ (M) Radius
T1	<i>Cinnamomum camphora</i> Camphor laurel	18	12	165	180	Good	Mature	Single upright	Appears Stable	Good	Street tree planted in the road reserve. Tree large and mature in good health and condition. Deadwood present particularly above parked cars. Recent gutter upgrade.	19.8	4.2
T2	<i>Syagrus romanzoffiana</i> Cocos Palm	4	4	20		Good	Mature	Single	Appears Stable	Good	Exempt listed species (Northern Beaches Council).	2.4	0.0
T3	<i>Fraxinus griffithii</i> Evergreen Ash	5	4	15	20	Good	Mature		Appears Stable	Good	Exempt listed species (Northern Beaches Council).	1.8	1.7
T4	<i>Persea americana</i> Avocado	4.5	4	18	20	Fair	Mature		Appears Stable	Good	Exempt as tree has not reached prescribed height of 5 metres.	2.2	1.7
T5	<i>Murraya paniculata</i> Murraya	3.5	3	20	25	Good	Mature	x 2	Appears Stable	Good	Exempt as tree has not reached prescribed height of 5 metres.	2.4	1.8
	<i>Protected tree 5 metres or greater in height and not listed on the exempt species list.</i>												

TPZ - Tree Protection Zone
SRZ - Structural Root Zone

EXISTING WALL
 NEW WALL
 REMOVE EXISTING

DESIGN DEVELOPMENT ISSUE FOR REVIEW

ADDITIONAL BUILDING AREA



01 SITE PLAN
1:200



DEVELOPMENT APPLICATION
PRELIMINARY

Title: SITE PLAN
 Scale @ A3: 1:200
 Project Ref No: PPMBC 23110
 Drawing No: DA002
 Revision: P4



Margot Blues Consulting Arborist
 Title: Tree Identification and construction incursion
 Project: App 2 12 Pacific Pde Manly
 Date Plotted: 08/10/2024

Key:
 Tree Protection Zone (TPZ)
 TPZ Encroachment
 Structural Root Zone (SRZ)