

Arborist Report

Client: Quicksilver Developments

Address: 258 High Street,

MAITLAND N.S.W 2320



Bradley Magus

Valuation Solutions PTY LTD

Trading as ***Abacus Tree Services***

ABN: 63 163 718 631

ACN: 108 515 859

P.O Box 333 Newcastle 2300

(Ph 0425 203 049)

Email: abacustrees@gmail.com

www.abacustreeservices.com

Tafe RTO Provider Number: 90002

This document is copyright © 2022

Table of Contents

1.0	Executive Summary	3
2.0	Arborist Details	4
2.1	Introduction	4
2.2	Aims of this report/Procedure	5
3.0	Disclaimer	5
3.2	Site Description	6
4.0	Tree Schedule	8
4.1	Trees & Impact on Development	10
5.0	Discussion & Compliance to Australian Standards 4970 – 2009, 4373 – 2007 & Rural Fire Service (RFS) 10:50 Code.....	11
6.0	Conclusions	15
7.0	Recommendations	17
8.0	References	20
9.0	APPENDIX 1 Site Maps	21
	APPENDIX 2 U.L.E (Useful Life Expectancy) Categories and Subgroups	22
	APPENDIX 3 Notes on Tree Assessment	23

1.0 *Executive Summary*

- It is recommended that Tree 1 (1 in total) be retained and incorporated into the development. It is recommended that bearers and joists, screw pile piers or similar method of construction be used within the TPZ (10.32 metres). It is recommended that all footings associated with the development inside the TPZ be undertaken before commencement of building works to determine the locations. It is recommended that no structural roots greater than 60 - 70mm in diameter be pruned. Upon finding roots greater than 60 - 70mm will require the footing to be dug to an alternative location. All footings are to be dug by hand (shovel) to the required depth within the TPZ. It is recommended that final footing placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate. Conditions and recommendations are outlined in section 7 of the report.

2.0 Arborist Details

Bradley Magus Contact Details: P.O Box 333 Newcastle 2300 Ph: 0425 203 049 Email: abacustrees@gmail.com or bradmagus1@bigpond.com Web: www.abacustreeservices.com	Qualifications <ol style="list-style-type: none">1. Diploma Horticulture (1993)2. Bachelor of Horticulture Science (1996)3. Masters Land Economics (2002)4. Diploma Horticulture (Arboriculture) (AQF 5) 2007 (Dux)5. International Society of Arboriculture Certified Arborist (2007)6. QTRA Assessor – 2011 & 2013
---	--

2.1 Introduction

Abacus Tree Services was commissioned by Quicksilver Developments to assist in the preparation of an arborist report. An assessment was made on one (1) tree (Tree 1) located within the confines of 258 High Street, Maitland. There is in total one (1) tree located at 258 High Street, Maitland that was assessed as per the applicant's instructions.

The purpose of this report is to provide information and guidance to the applicant in relation to one (1) tree only. The information in this report is to be used in correlation with other reports identified by Maitland Council and will provide Maitland Council with a framework for determining the development application (D.A).

This report and its recommendations are based upon a physical site inspection undertaken on the 16 September 2022.

The photographs included in this report were taken at the time of the inspection on the 16 September 2022.

2.2 Aims of this report/Procedure

The aim of this report is to assess the health and condition of one (1) tree (Tree 1). The condition of the trees was assessed from ground level using the VTA (Visual Tree Assessment) method as outlined by Mattheck & Breloer (1999). The following criteria will be assessed within this report –

- An assessment of the dimensions (age, class, height and Diameter at Breast Height (D.B.H))
- An assessment of the health and condition of the trees;
- An assessment of the Useful Life Expectancy (U.L.E)
- Compilation of an appropriate report detailing the results of the above assessments
- Trees earmarked for retention to be assessed as per Australian Standards 4970-2009
- Hazard Rating, Recommendations for each tree

The (U.L.E) method of tree assessment, as outlined by Jeremy Barrell (1999) has been adopted within this report. U.L.E categories give an indication of the useful life expectancy anticipated for the tree that has been adopted for this report. Several factors are considered in determining this rating such as species, location, age, condition and health of the tree. The five U.L.E categories are outlined in detail within Appendix 2.

3.0 Disclaimer

This assessment has been prepared for the exclusive use of the applicant (Quicksilver Developments), for the preparation of a development application submission. Information in this report relates to one (1) tree within the premises of 258 High Street, Maitland only and should not be used in conjunction with any other property.

This assessment was carried out from the ground, and covers what was reasonably able to be assessed and available to the assessor at the time of the inspection. The assessor carried out no aerial inspections. Information contained in this report covers only the trees that were examined and reflects the condition of the trees at the time of the inspection; furthermore the inspection was limited to a visual examination of the subject trees without dissection, excavation, probing or coring. Trees are living things and their condition will change over time. Therefore there is no guarantee that problems or deficiencies of the subject tree may not arise in the future.

3.1 Site Map



Figure 1

Location: All trees are located within 258 High Street, Maitland

Source: www.googlemaps.com.au

3.2 Site Description

Tree 1 is located wholly within 258 High Street, Maitland. The site is located in the municipality of Maitland Council. The species on site has been assessed against the requirements set out in Maitland Council's s Local Environmental Plan (2011) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2011) (Part B.5 – Tree Management) I have assessed the property against Schedule 5 (Environmental Heritage) within Maitland LEP. The property is listed in accordance with Part 1 (Heritage Items) and/or Part 2 (Heritage Conservation Area). This property is listed as a local heritage item in accordance with Maitland LEP (Local item (I155)). This property is listed as coming under the requirements of Central Maitland Heritage Conservation Area as noted on the NSW Planning Portal (20 September 2022).

The subject property has also been assessed against the SEPP Policy (Biodiversity and Conservation) 2021. This property or council area is listed as being within Part 2 (Section 2.3) of the SEPP (Biodiversity and Conservation) 2021. All councils have items of local government and state heritage significance. These items are found in the NSW heritage website. The subject property has been assessed against the Heritage NSW database. In accordance with Heritage NSW listed items there are no listings (Items listed by Local Government & State Agencies) for the subject property. This also includes no trees of heritage significance for the subject property.

The site is set on a flat block with the immediate area being dominated by a mix of commercial premises. The nearest major arterial road is Hunter Street. Tree 1 is located within the subject property identified as 258 High Street, Maitland. Tree 1 is within close proximity to the subject property & proposed alterations and additions.



Figure 2 – Location of subject property identified as 258 High Street, Maitland

4.0 *Tree Schedule*

Species & dimension requirements on Page 9. This page intentionally left blank

Tree No	Scientific Name	Common Name	DBH (MM)	Height (M)	AGE CLASS	Vigour	SPREAD N.E.S.W.	ULE	Comments
1	Araucaria heterophylla	Norfolk Island Pine	860	21	M	G	6,4,4,4	2d	Symmetrical, LCR = 95 – 100%, apical dominant

Key:

Age class: Young = Y, Semi mature = SM, Mature = M, YM = Young Mature, Over mature = OM

DBH = Diameter at Breast Height LCR = Live Crown Ratio

Vigour = E = Excellent, G = Good, F = Fair, P = Poor, D = Dead, Do = Dormant

LDW = large deadwood over 40mm, MDW = Minor deadwood less than 40mm

N = north, E = east, W = west, S = south MS = multiple Stems

ULE = Useful Life Expectancy (See appendix 2 for guidelines)

MS = Multiple Stems S = Shrub

NCC = Maitland Council

SRZ = Structural Root Zone TPZ = Tree Protection Zone

4.1 *Trees & Impact on Development*

Trees are living organisms and their root systems play an integral role in stability and providing nutrient storage as well as water uptake. The majority of tree roots for Dicotyledons occur within the first metre of the soil. Therefore construction works can have a profound effect on their health and longevity as well as their structural stability. Tree distances from excavation works must be taken into consideration at the planning stage to ensure that the tree is not damaged.

There are several main factors that occur at the construction phase that can have a negative impact on the trees health and stability. These practices can include but are not limited to –

- Parking of vehicles and heavy machinery within the drip line of the tree.
- Stockpiling of materials within the drip line of the tree.
- Excavating within the drip line and damaging the structural root system.
- Raising soil levels in and around the base of the tree therefore reducing the trees ability for gaseous exchange.
- Damage to the tree due to heavy machinery and equipment resulting in large bark tears or loss of branches and scaffolds.

To reduce the effects of construction it is imperative to provide an area underneath the tree where no works are undertaken. The area where supervised works are undertaken is referred to as the structural root zone (SRZ). The S.R.Z/T.P.Z is an area where no to minimal activities listed above should occur. All trees require an S.R.Z/T.P.Z and will vary from species to species but for the purposes of this report the Australian Standards 4970 has now been adopted.

In conclusion the Australian Standards like similar methods for protecting trees is only a guide. To ensure the health and longevity of trees within construction sites it is imperative to provide a large protection zone taking into consideration that the tree will also grow over time. The greater area that can be put aside where no works occur will aid in the preservation of the tree. The activities listed above should be kept to a minimum and encroachment within the SRZ/TPZ will require the supervision by a qualified AQF 5 arborist. These impacts will be taken into consideration in the discussion & recommendations section of this report.

5.0 Discussion & Compliance to Australian Standards 4970 – 2009, 4373 – 2007 & Rural Fire Service (RFS) 10:50 Code

Abacus Tree Services has been approached by Quicksilver Developments to undertake an arborist (assessment) report on Tree 1 that comes under the requirements of Maitland Councils Development Control Plan (B5 – Tree Management). There is one (1) tree (Tree 1) that has been assessed within the subject property identified as 258 High Street, Maitland. Tree 1 is located within the front setback of the subject property as outlined in Figure 3. The applicant proposes to construct alterations and additions within the subject property identified as 258 High Street, Maitland (Appendix 1).

Abacus Tree Services has relied upon the sketch drawings provided by RTC Group (Drawing number – NSW 3359 Revision H) to formulate distances and setbacks in accordance with Australian Standards 4970 – 2009. I have relied upon this information to be true and accurate. Any changes to the sketching and drawings will require the calculations to be reassessed in accordance with Australian Standards 4970 – 2009.

The table below represents the S.R.Z (Structural Root Zone) and TPZ (Tree Protection Zone) figures based on Australian Standards 4970 - 2009.

Tree No	SRZ (metres)	TPZ (metres)
1	3.25	10.32

All trees require a S.R.Z and a T.P.Z with Australian Standards 4970- 2009 being used as a guideline. Tree 1 has been given an SRZ and TPZ of 3.25 & 10.32 metres in accordance with Australian Standards 4970 - 2009. Tree 1 is in good health and condition with no major pests or diseases noted. Tree 1 is symmetrical with a live crown ratio of 95 – 100%. Tree 1 has an apical dominant leader with no immediate pruning works required.



Figure 3 – showing the location of Tree 3 that is situated in the front setback next to High Street. This species is located 9.4 metres to the existing building as highlighted in red. This distance is measured from the trunk at 1.4 metres above ground level to the brick wall. The proposed development will be located closer to Tree 1 as outlined in red.

There is the existing footpath and road to one side. This species is located within 3 metres to the footpath and 7 metres to the road. Tree 1 is located 9.4 metres to the existing building on one side and 5.4 metres to the building to the rear. The overall area of TPZ has been calculated at 334.59m² in accordance with AS 4970 - 2009. The proposed development will extend closer to the trunk. The development will be within 5.8 metres to the trunk. AS 4970 – 2009 indicates that the TPZ radius is taken from the centre of the trunk. This leaves a spatial separation of 6.28 metres from the centre of the trunk to the proposed development. The existing buildings to the western side will remain with no proposed building works. The total floor area to be constructed inside the TPZ has been calculated at 58.54m². The overall loss of TPZ has been calculated at 17.49% that doesn't comply with AS 4970 – 2009. All building works will be located outside of the SRZ. In order to reduce the loss down to 10% to comply with AS 4970 – 2009 will be to construct the proposed development on screw pile piers or similar method of construction inside the TPZ. If this can be achieved will allow the retention of Tree 1.



Figure 4 – the building line will encroach into the TPZ as noted in red. The area lost has been calculated at 58.54m². The loss of TPZ can be reduced when constructing the development on bearers and joists.

Allowing for sixteen footings within the TPZ to be no greater than 350mm in diameter. This will be a net loss within the TPZ of 5.6m². This would reduce the loss of TPZ down to 1.67%. Taking into consideration that the remainder of the TPZ remains intact including the soil profile and the organic layer associated with the TPZ. This would require all works inside the remaining section of grassed area within the TPZ to be constructed using non mechanised methods. This includes all grassed areas outside of the proposed development. This will require minimal disruption to the root plate including no other hardstand areas or excavation works inside the TPZ. If this can be achieved will allow the retention of Tree 1. Tree 1 is earmarked for retention and incorporation into the development.

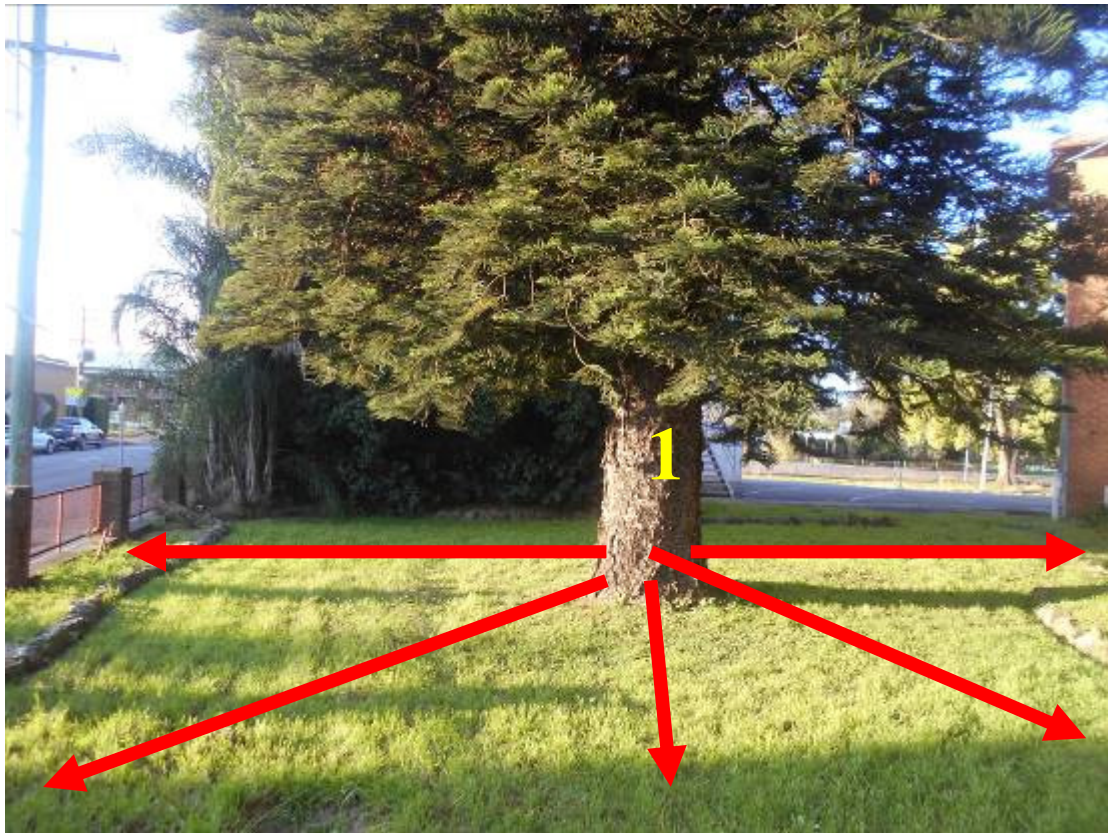


Figure 5 – showing the remainder of the TPZ that is to remain intact. This includes removal of the existing grass if required to be undertaken by non-mechanised methods. This also includes the section of TPZ that is to remain between the trunk and the proposed development.

6.0 Conclusions

- Abacus Tree Services has been approached by Quicksilver Developments to undertake an arborist (assessment) report on Tree 1 that comes under the requirements of Maitland Councils Development Control Plan (B5 – Tree Management). There is one (1) tree (Tree 1) that has been assessed within the subject property identified as 258 High Street, Maitland. Tree 1 is located within the front setback of the subject property as outlined in Figure 3. The applicant proposes to construct alterations and additions within the subject property identified as 258 High Street, Maitland (Appendix 1). Tree 1 has been assessed in accordance with Australian Standards 4970 – 2009.
- Tree 1 is located wholly within 258 High Street, Maitland. The site is located in the municipality of Maitland Council. The species on site has been assessed against the requirements set out in Maitland Council’s Local Environmental Plan (2011) pursuant to Section 5.9 & 5.9AA (repealed) & Development Control Plan (2011) (Part B.5 – Tree Management) I have assessed the property against Schedule 5 (Environmental Heritage) within Maitland LEP. The property is listed in accordance with Part 1 (Heritage Items) and/or Part 2 (Heritage Conservation Area). This property is listed as a local heritage item in accordance with Maitland LEP (Local item (I155)). This property is listed as coming under the requirements of Central Maitland Heritage Conservation Area as noted on the NSW Planning Portal (20 September 2022).
- The subject property identified as 258 High Street, Maitland is not located in a Rural Fire Service (RFS) 10:50 area. Therefore all trees have been assessed in accordance with council requirements with no exemptions under RFS 10:50 legislation. The search was undertaken on the 21 September 2022. Rules and regulations in relation to the RFS 10:50 can change and it is therefore up to the applicant to ensure they comply with the 10:50 code and any updates that may occur.
- Protection fencing for Tree 1 (1 in total) has been considered due to the proximity to the development and to protect the remaining TPZ from construction works and machinery. Tree 1 will require retention in accordance with Australian Standards 4970 – 2009. Conditions and recommendations will be outlined in section 7 of the report.
- Tree 1 has the potential for future growth and therefore the canopy and root plate have the potential for future growth. All measures have been taken to minimise damage to the proposed buildings and hardstand areas however future growth has the potential to cause damage to the proposed buildings and/or hardstand areas.

- The applicant has therefore assessed all trees within 5 metres of the proposed development. This includes all trees on neighbouring properties within 5 metres of the proposed development. The applicant has assessed all trees necessary for the development to meet the requirements of Maitland Council DCP (Part B5 – Tree Management) & Australian Standards 4970 – 2009.
- Tree 1 (1 in total) can be retained and incorporated into the development. Conditions and recommendations in relation to retained trees will be outlined in section 7 of the report.

7.0 Recommendations

- It is recommended that Quicksilver Developments embark on a management program for one (1) tree (Tree 1) before commencement of the proposed building and constructions works as follows:

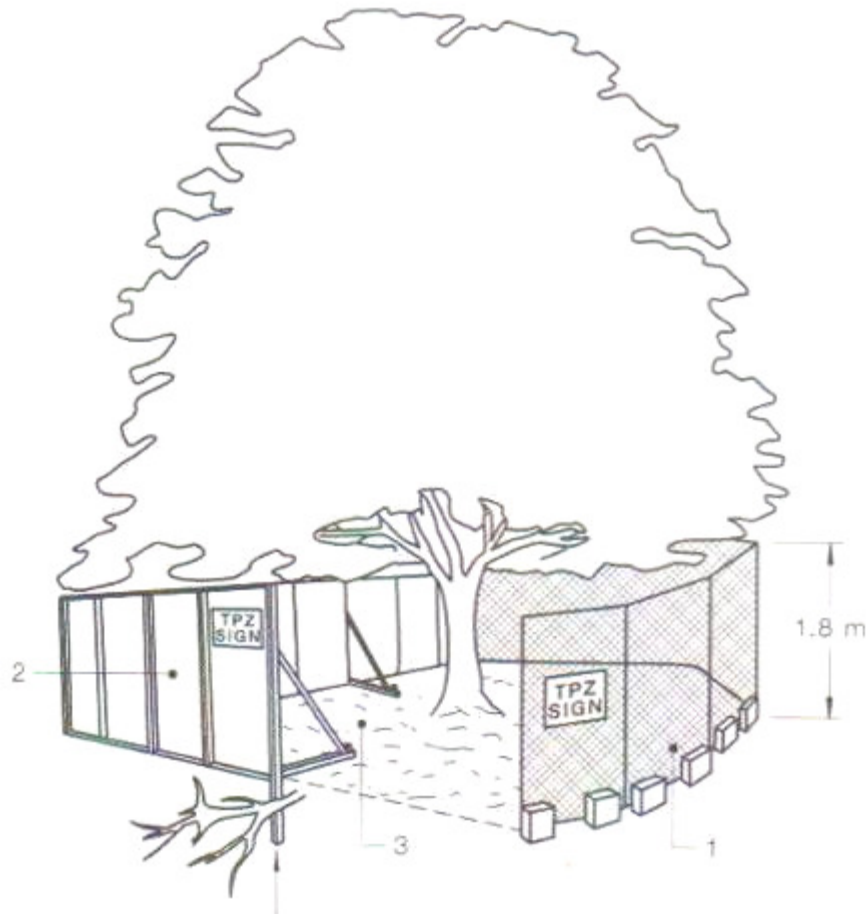
- It is recommended that Tree 1 (1 in total) be retained and incorporated into the development. It is recommended that bearers and joists, screw pile piers or similar method of construction be used within the TPZ (10.32 metres). It is recommended that all footings associated with the development inside the TPZ be undertaken before commencement of building works to determine the locations. It is recommended that no structural roots greater than 60 - 70mm in diameter be pruned. Upon finding roots greater than 60 - 70mm will require the footing to be dug to an alternative location. All footings are to be dug by hand (shovel) to the required depth within the TPZ. It is recommended that final footing placement be a minimum of 100mm to all structural roots to allow for spatial separation and expansion of the root plate.

- It is recommended that all other areas of the TPZ being the grass area be retained at existing soil levels. It is recommended that the existing grass be retained inside the section of TPZ not subject to development. This includes retaining the grass in all four quadrants during construction works up to the proposed development to protect the root plate. The section of grass that is to be retained during construction works is to remain intact until the landscaping phase. This will protect the tree during construction works and avoid the soil from drying out during this phase. The grass can be removed after completion of all building works associated with the development. Removal of the grass if required to be removed before this stage is to be undertaken by non-mechanised methods and the entire section of TPZ (grass) to be replaced with mulch a minimum of 100mm thick. The existing garden beds and concrete edges are to be removed by non-mechanised methods inside the TPZ.

- It is recommended that all underground services be constructed outside of the protected grass areas within the TPZ. No unauthorised excavation works are to be undertaken unless authorised by Maitland Council.

- It is recommended that all debris and waste on site that is located within the grass area of the TPZ be removed by non-mechanised methods being wheel barrow and shovel and/or similar method. All other areas outside of the TPZ could be utilised with machinery.

- The remainder of the grass area that is not being used for development is to remain at existing soil levels. The SRZ (3.25 metres) from the centre of the trunk or 2.77 metres from the trunk is to be set aside as a mulched garden bed devoid of hardstand areas. The remaining sections of TPZ can be utilised as permeable paving or similar method of construction that doesn't require concrete or excavation works. No formwork or excavation works are allowed in this zone outlined as the grass area within the TPZ (Figure 7).
- It is recommended that protection measures be put in place that aid in the preservation of Tree 1 (1 in total). It is recommended that 1.8 metre inter locking chain wire fencing be installed before commencement of all civil and building works on site as indicated in Figure 6. Protection fencing is to be installed to the outer edge of the boundary as indicated in Figure 6. The development side is to have the fencing erected a minimum of 4.6 metres from the trunk. This will allow scaffolding to be erected and placed inside the TPZ. The scaffolding is to be erected at existing soil levels or rumble boards to protect this section of TPZ that is outside of the fenced zone. Protection fencing is to be installed before commencement of all civil & building works and remain in place until the release of the occupation certificate.
- It is recommended that all civil contractors that enter the site are made aware of the importance of preserving Tree 1 and understand the tree protection measures that are put in place to preserve Tree 1. Only authorised personnel are allowed to enter into the fenced area to undertake weed management and mowing or wiper snipping. No chemicals are allowed to be applied in the application of weed management. Upon completion of these tasks the applicant is to enclose the fenced area to ensure it is cordoned off to all personnel.
- All stockpile sites and waste bins, washing off of materials including all cement slurry to be maintained and operated outside of the fenced areas at all times.
- It is recommended that all parking of vehicles and use of machinery be kept outside of the designated fenced area at all times. No placement or use of machinery is allowed within the designated TPZ fenced area (Figure 7).
- This report is not for publication to the internet and submission of this report in the submission phase set out by Council is to be taken down upon completion of the development application.



- Figure 6 – showing the proposed fencing that is to be put in place before the commencement of building works on site (Tree 1 only).
Source: Australian Standards 4970 - 2009

Bradley Magus (Member ISAAC & LGTRA)
Consulting Arborist/Certified Arborist (ISAAC 2007)
Diploma in Horticulture (Arboriculture) (AQF 5) (Dux)
Bachelor of Horticulture Science

8.0 References

AS4373-2007 Pruning of Amenity Trees. Standards Australia

AS 4970 – 2009 Protection of trees on development sites

Clark R.J & Matheny N (1998) Trees & Development – A technical guide to Preservation of trees during land development: International Society of Arboriculture

Mattheck C., Breloer, (1999) The Body Language of Trees – a handbook for failure analysis 5th ed., London: The Stationery Office, U.K

Internet Sites

www.googlemaps.com.au

www.heritagensw.gov.au

www.rfs.nsw.gov.au

www.maitland.nsw.gov.au

www.planningportal.nsw.gov.au



Figure 7 - Close up of the subject property and canopy area of Tree 1. The red dashed area represents the fenced area that is to be cordoned off before all civil and building works on site. Not to scale
Source: RTC Group

APPENDIX 2 U.L.E (Useful Life Expectancy) Categories and Subgroups

Useful Life Expectancy – Classification

1. Long ULE > 40 Years

- a. Structurally sound and can accommodate future growth
- b. Long term potential with minor remedial treatment
- c. Trees of special significance which warrant extra care

2. Medium ULE of 15-40years

- a. Will live between 15 – 40 years
- b. Will live for more than 40 years but would be removed for safety or other reasons
- c. May live for more than 40 years but will interfere with more suitable specimens and need removal eventually
- d. More suitable for retention in the medium term with some remedial care

3. Short ULE of 5-15 years

- a. Trees that may only live between 5 – 15 more years
- b. May live for more than 15 years but would need removal for safety or other reasons
- c. Will live for more than 15 years but will interfere with more suitable specimens or provide space for replacement plantings
- d. Require substantial remedial care but are only suitable for short term retention

4. Remove tree within 5 years

- a. Dead, dying or seriously diseased
- b. Dangerous trees through instability or loss of adjacent trees
- c. Structural defects such as cavities
- d. Damaged that are clearly not safe to retain
- e. May live for more than 5 years but will need replacement to prevent interference or make space for more suitable trees
- f. May or are causing damage to structures
- g. That will become dangerous

5 Trees suitable to transplant

- a. Small trees can be reliably moved or replaced
- b. Young trees between 5 – 15 years
- c. Trees that have been regularly pruned to control growth

Key	Criteria	Comments
Tree no		
Species	Relates to the one on the site plan	
Remnant /planted Self Sown	May be coded – See Key for details	
Special Significance	A – Aboriginal C- Commemorative Ha- Habitat Hi- Historic M- Memorial R- Rare U- Unique form O- Other	May require specialist knowledge
Age Class	Y- Young- Recently Planted S-Semi mature (<20% of life expectancy) M- Mature (20-80% of life expectancy) O- Over mature (>80% of life expectancy)	
Height	In Metres	
Spread	Average diameter of canopy in metres	
Crown Condition	Overall vigour and vitality 0 – Dead 1 – Severe decline (<20% canopy, major deadwood 2 – Declining 20-60% canopy density, twig dieback 3- Average/low vigour (60-90% canopy density, twig dieback) 4- Good (90-100% crown cover, little or no dieback or other problems) 5- Excellent (100% crown cover, no deadwood or other problems	
Failure Potential	Identifies the most likely failure and rates the likelihood that the structural defects will result in failure within the inspection period. 1- Low – Defects are minor (eg dieback of twigs, small wounds with good wound development) 2 – Medium – Defects are present and obvious egg Cavity encompassing 10-25% of the circumference of the trunk) 3 High- Numerous and/or significant defects present (eg cavity encompassing 30-50% of the circumference of the trunk, major bark inclusions) 4- Severe- Defects are very severe (eg fruiting	Requires specialist knowledge

	bodies, cavity encompassing more than 50% of the trunk)	
Size of defective part	Rates the size of the part most likely to fail. The larger the part that fails the greater the potential for damage. 1- Most likely failure less than 150mm in diameter 2- Most likely failure 150-450mm in diameter 3- Most likely failure 450-750mm in diameter 4- Most likely failure more than 750mm in diameter	
Target rating	Rates the use and occupancy that would be struck by the defective part: 1. Occasional use (jogging, cycle track 2. Intermittent use (e.g picnic area, day use parking 3. Frequent use, secondary structure (eg seasonal camping, storage facilities) 4. Constant use structures (year round use for a one of hours each day, residences)	
Hazard rating	Failure potential + size of part + target rating Add each of the above sections for a one out of 12	The final one identifies the degree of risk. The next step is to determine a management strategy. A rating in this column does not condemn a tree but may indicate the need for more investigation and a risk management strategy.
Root Zone	C-Compaction D- Damaged/wounded roots E- Exposed roots Ga- Tree in graded bed Gi- Girdled roots Gr- Grass K-Kerb close to tree L+- Raised soil level L- Lowered soil level M- Mulched Pa- Paving concrete bitumen	

	Pr- Roots pruned O-Other	
Defects	B-Borers C-Cavity D-Decay Dw-Deadwood E-Epicormics I-Inclusions L- Lopped LDCMP- Leaf damage by chewing mouthpiece insects M- Mistletoe/parasites MBA- Multi branch attachments PD- Parrot damage PFS- Previous failure sites S-Splits/Cracks T-Termites TL- Trunk lean TW- Trunk wound O-Other	
Services/adjacent structures	Bs- Bus stop Bu- Building within 3 metres Hvo- High voltage open wire construction Hvb- High voltage bundled (ABC) Lvo- Low voltage open wire construction Lvb- Low voltage bundled (ABC) Na- No services above Nb- No services below ground Si- Signage SL- Street light T- Transmission U- Underground services O- Other	More than one of these may apply