PRELIMINARY TREE ASSESSMENT FOR PROPOSED DEVELOPMENT AT 48 – 54 South Parade Wagga Wagga NSW 2650.

1. INTRODUCTION.

There is planned development by NSW Department of Planning, Industry and Environment, Land and Housing Corporation at properties identified as 48 – 54 South Parade Wagga Wagga NSW 2650.

A preliminary assessment of the tree vegetation is required to determine what trees are on site, condition, significance and recommendations for retention or removal. The findings are intended to assist the development and design process.

2. SCOPE AND PURPOSE.

The report has been commissioned by Mr. Adam Bower, Land and Housing Corporation Development Manager, Delivery South West Sydney and Southern NSW. He can be contacted on (02) 9374 3650.

The site was formally inspected on 22 February 2022.

The report is designed to provide;

- accurate identification of tree vegetation,
- tree condition, including any hazards present
- evaluation of the trees relative to their contribution to the environment, amenity and any other identified values
- evaluation of potential development impacts where known or suspected.
- recommendations for management of the issues identified and interpretation of Wagga Wagga City Council Development Control Plan 2010 – Part B – Natural Resource and Landscape Management Section 5.2 Preservation of Trees (WWCC 2022).

No site plan was available, all relevant trees have been plotted on aerial photograph to aid in location and inclusion in development plans.

Interpretation of impacts and recommendations are based on the author's interpretation of *Australian Standard 4970-2009 Protection of trees on development sites*.

General development impacts or potential issues from development are addressed for guidance.

- <u>Diagram 1</u> provides the location of the assessment site.
- Annexure 1 Tree Data File contains full details of all trees. This Annexure is also available in Microsoft Excel format on request.
 - Full criteria and evaluation methods of assessment is contained at the conclusion of Annexure 1.
- <u>Diagram 2</u> Provides Aerial location of trees across the site including a number of WWCC Street Trees.
- <u>Photographs</u> of each tree are provided at the conclusion of the report to aid in identification and to highlight or demonstrate relevant assessment details.

3. Site Conditions and Background.

The site currently comprises three dwelling buildings and is a total of approximately 1140 square meters. The three properties are surrounded by roads and laneways. There is a scattering of generally small exotic vegetation across the site. There are no large or imposing trees.



Diagram 1– Location of Assessment site 48-54 South Parade Wagga Wagga NSW 2650.

Adapted from WWCC IntraMaps 2022.

A total of 19 trees are identified and reported; including 4 WWCC Street Trees. Diagram 2 below provides an overlay of tree numbers and locations.



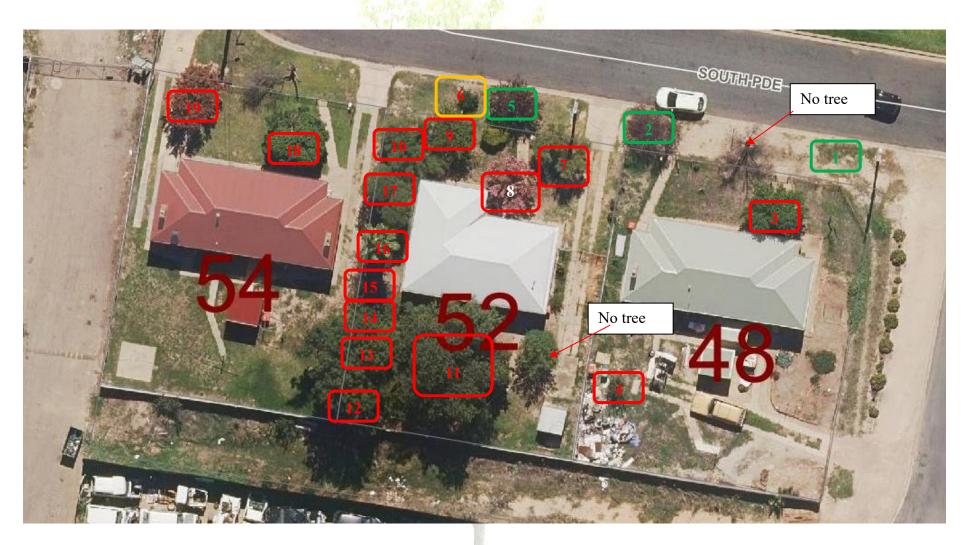


Diagram 2 – Tree Locations across site. Source WWCC- IntraMaps 2022 (Image Date 2020).

4. Summary of Findings and Discussion

The following discussion points are provided in additional to individual tree details in contained in Annexure 1.

- Wagga Wagga City Council Trees. There are four trees identified on Road reserves –
 South Parade which are WWCC Controlled trees.
 - o Tree numbers 1, 2, 5 and 6.
 - All trees are in Fair or poor condition with lower retention values.
 - If the development is likely to have notable impacts on the trees then I would suggest that Council is contacted and there may be some support to allow removal and replacement of the trees.



Photo 1 – Trees 2
A WWCC Street Tree – noted as the largest and most notable Council Street
Tree at the development site.

- All 15 Trees within the Development Site.
 - o There are a total of 15 Trees identified within the Development Site.
 - o All trees are recommended for removal.
 - There are no significant trees.
 - All 15 trees are Exempt Species or Exempt height under Wagga Wagga City Council Development Control Plan 2010 – Part B –Natural Resource and Landscape Management Section 5.2 Preservation of Trees (WWCC 2022).
 - There are no notable trees that might be considered as worth of retention within the new landscape – it is considered that a quality landscape plan will provide better amenity and long term useful life with new trees.
- <u>Canopy Coverage</u>. The site currently has a theoretical calculated canopy coverage of approximately 400 square meters which equates to about 35% canopy coverage.

5. Recommendation Summary.

- All trees and shrubs on site have been logged including all trees that are 8 m in height or more and subject to evaluation within WWCC Development Control Planning.
- ➤ All 19 trees to be included in the site plans noted as retained or removal.
- > Trees 1, 2, 5 and 6 are WWCC Street Trees and should be retained and protected.
 - If any onerous burden is discovered regarding their retention then Council should be approached and removal and replacement offered. None of the 4 Trees are notable trees.
- An arboricultural Impact assessment may not be required as part of the development application given that all trees on the site are evaluated for removal.
- It can be noted that the current canopy coverage is about 400 square meters and the development should aim to at least match that coverage as a quality target for higher density housing.
- A very simple Tree Protection Plan may be required to cover the WWCC Street Trees although it will only need to note the following items;
 - Trees 1, 2 5 and 6 are to be retained and simple fencing needs to be erected at the relevant TPZ zones as noted in Annexure 1.

References.

WWCC (2022). Wagga Wagga City Council Development Control Plan 2010 – Part B – Natural Resource and Landscape Management Section 5.2 Preservation of Trees. Accessed on line 7/03/2022 at;

https://wagga.nsw.gov.au/ data/assets/pdf file/0015/112254/ECM 2509477 v26 Versio n-Control-Project-Wagga-Wagga-DCP-2010-as-amended-Section-5-Natural-Resource-and-Landsca.pdf

Terms, Conditions and Limitations that apply.

Obviously, visual tree assessment from the ground has some limitation as every single portion of the tree cannot be observed or inspected. Most or the large majority of tree conditions, factors or issues can be observed from the ground. Where aerial inspection or other investigative means should be considered the report or email will recommend or provide those as an additional considerations. The integrity of the root zone of trees can often be difficult to determine from visual inspection – particularly on steep slopes and on shallow soil profiles. Unless there are indicators of some instability then most trees are effectively accessed as stable as part of Visual Tree Assessment.

Trees are a valuable asset and necessary part of both the urban and natural environment. They are the cornerstone of our environment and provide numerous benefits to our social wellbeing, biodiversity and ecology of any area. They provide water balance stability, salinity and erosion control, amenity, cultural, public health and aesthetic benefits; efforts should be made to preserve and plant new trees where possible. As an asset they require appropriate management and resource inputs.

It should be noted that trees cannot be guaranteed 'risk free'. All trees represent some degree of risk. Arboriculture is not an exacting science; rather it is an educated interpretation of the interaction of biotic and environmental circumstances, which change over time. It is not possible to determine or predict all limb or tree failures. This report is such an interpretation at the time of inspection.

Unless Quantified Tree Risk Assessment (QTRA) has been specifically applied and reported, then this report or email does not constitute a risk assessment. The Author does not seek to determine what level of risk any individual or organisation is prepared to accept but serves to provide tree managers with tree condition, hazards and other salient issues or factors associated with the tree or trees; and provide or recommend management options.

7 March 2022.

BAppSc(EnvHort) - AdvDip OH&S

Institute of Australian Consulting Arboriculturists (IACA) Accredited Member (ACM 0622018) QTRA – Registered Advanced User (4519).

Member - International Society of Arboriculture
Associate Member – The Arboriculture Association (UK)





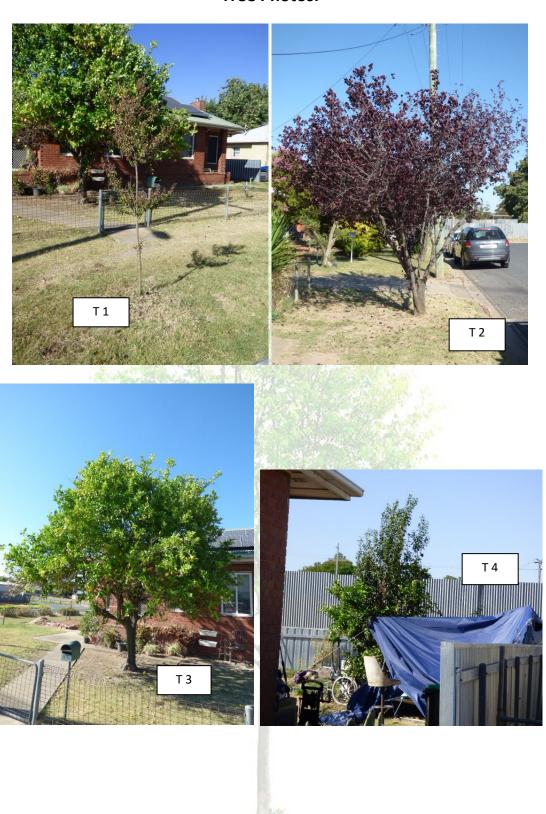
™ ISA Member : 257486



AS8205.



Tree Photos.





Page 8 of 11 Wade Ryan – 4 Lloyd Road Wagga Wagga NSW 2650 waderyan1@bigpond.com Mobile 0408 300 989



Page 9 of 11 Wade Ryan – 4 Lloyd Road Wagga Wagga NSW 2650 waderyan1@bigpond.com Mobile 0408 300 989



Page 10 of 11 Wade Ryan – 4 Lloyd Road Wagga Wagga NSW 2650 waderyan1@bigpond.com Mobile 0408 300 989



T 18
Only portion of tree that can be observed – not covered by Ivy is circled.

Developed Wade Ryan Contracting 0408 300 989 waggatreeconsultancy.com.au waderyan1@bigpond.com											Anne	xure 1 - Tro	ee Date File - Proposed Development a	it 48 - 56 Sout	h Parade St	 						
ree No Species	General Location	Species Origin	General Size	Age Class	DBH (m)	Height M	Canopy Ø		General Condition	Canopy Area (M²)	Radius in m	TPZ Radius in m from stem	Factors, Observed Conditions or Issues Commentary on tree	Environmental Rating/Value	Expected Remaining Life	Significant Tree Status	Retention Value	Replacement Time Frame	Recommended Action for planning of development	Primary Reason for Recommendation	Secondary Reason for Recommendation	Other Comments
Lagerstroemia spp . (Crepe Myrtle)	48 South Prd - WWCC nature strip	Exotic	Very Small	New	0.02	2	0.5	4 - Poor	3 - Fair	0.1964	1.50	0.24	New planting struggling with competition from grass in root space	5 - Very Low	5 to 15	Not Significant	3- Fair	0-5	Retain	Other		Council Tree - retain and protect
Prunus spp. (Ornamental Plumb)	48 South Prd - WWCC nature strip	Exotic	Small	Mature	0.15	3.5	5	3- Fair	3 - Fair	19.643	1.50	1.8		5 - Very Low	5 to 15	Not Significant	2 - Good	0-5	Retain	Other		Council Tree - retain and protect
Citrus spp. (Lemon)	48 South Prd	Exotic	Small	Mature	0.18	5.5	6	2 - Good	3 - Fair	28.286	1.61	2.16		5 - Very Low	5 to 15	Not Significant	4 - Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wit better amenity values
Citrus spp. And Prunus species as one (Lemon/Plum)	48 South Prd - rear yard	Exotic	Small	Semi Mature	0.1	4	6	2 - Good	4 - Poor	28.286	1.50	1.2	Two trees growing as one	5 - Very Low	5 to 15	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wit better amenity values
Prunus spp. Ornamental Plumb	52 South Prd - WWCC street tree	Exotic	Small	Over Mature	0.15	4	5	4 - Poor	3 - Fair	19.643	1.50	1.8		5 - Very Low	5 to 15	Not Significant	4 - Poor	0-5	Retain	Other		Council Tree - retain and protect
Prunus spp. (Ornamental Plumb)	52 South Prd - WWCC street tree	Exotic	Small	Over Mature	0.05	1	1	3- Fair	5 - Very Poor	0.7857	1.50	0.6	Root suckers from removed or failed Tree	5 - Very Low	0 to 5	Not Significant	5 - Very Poor	0-5	Remove	Other		Council Tree - retain and protect or approach council to remove and replace
Callistemon Species (Bottle Brush)	52 South Prd - front yard	Aus Native	Small	Over Mature	0.23	4	2	3- Fair	4 - Poor	3.1429	1.79	2.76	Tree has been heavily lopped	4 - Low	0 to 5	Not Significant	4 - Poor	0-5	Remove	Exempt height	Replaced in short term	Landscape plan should provide tree will better amenity values
Lagerstroemia spp . (Crepe Myrtle)	52 South Prd - front yard	Exotic	Small	Semi Mature	0.14	4	6	2 - Good	3 - Fair	28.286	1.50	1.68	6 stems	5 - Very Low	15 plus	Not Significant	4 - Poor	0-5	Remove	Exempt height	Replaced in short term	
Prunus spp. Ornamental Plumb	52 South Prd - front yard	Exotic	Small	Over Mature	0.15	4	5	3- Fair	4 - Poor	19.643	1.50	1.8	6 stems Root stock from original tree	4 - Low	0 to 5	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree will better amenity values
0 Tamarix aphylla (Athol Pine)	52 South Prd - front yard	Exotic	Small	Over Mature	0.2	4	5	3- Fair	4 - Poor	19.643	1.68	2.4	10 stems	5 - Very Low	0 to 5	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wir
1 Fraxinus oxycarpa (Desert Ash)	52 South Prd - Middle back vard	Exotic	Medium	Mature	0.43	10	11	2 - Good	2 - Good	95.071	2.32	5.16		5 - Very Low	5 to 15	Not Significant	3- Fair	5-10	Remove	Exempt species	Other	Tree values do not warrant retention
2 Prunus spp. Ornamental Plumb	52 South Prd - back fence	Exotic	Small	Over Mature	0.1	5	2	2 - Good	4 - Poor	3.1429	1.50	1.2	6 stems Root stock from original tree	5 - Very Low	5 to 15	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wir
3 Fraxinus oxycarpa (Desert Ash)	52 South Prd - Back yard fence of 54	Exotic	Medium	Mature	0.4	10	8	2 - Good	3 - Fair	50.286	2.25	4.8	2 stems	5 - Very Low	5 to 15	Not Significant	4 - Poor	5-10	Remove	Exempt species		Tree values do not warrant retention
4 Prunus spp. Ornamental Plumb	52 South Prd - Back yard fence of 54	Exotic	Small	Semi Mature	0.1	4	4	3- Fair	3 - Fair	12.571	1.50	1.2		5 - Very Low	0 to 5	Not Significant	4 - Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wit better amenity values
5 Prunus spp. Ornamental Plumb	52 South Prd - Back yard fence of 54	Exotic	Small	Young	0.08	4	3	4 - Poor	4 - Poor	7.0714	1.50	0.96	Tree hard against fence	5 - Very Low	5 to 15	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Landscape plan should provide tree wit better amenity values
Washingtonia filifera (Desert Fan Palm)	52 South Prd - Back yard fence of 54	Exotic	Medium	Mature	0.56	12	4	1 - Excellent	1 - Excellent	12.571	2.59	6.72		5 - Very Low	15 plus	Not Significant	4 - Poor	5-10	Remove	Exempt species		Seeds prolifically as weed species
7 Ligustrum lucidum, (broad-leaf privet)	52 South Prd - Back yard fence of 54	Exotic	Small	Young	0.25	6	5	2 - Good	3 - Fair	19.643	1.85	3		5 - Very Low	5 to 15	Not Significant	5 - Very Poor	0-5	Remove	Exempt species	Exempt height	Seeds prolifically as weed species
8 Cupressus Species (Pine)	54 Front Yard	Exotic	Small	Mature	0.2	5	6	4 - Poor	4 - Poor	28.286	1.68	2.4	Tree 95 over run by ivy vine	5 - Very Low	0 to 5	Not Significant	5 - Very Poor	0-5	Remove	Exempt height	Other	Landscape plan should provide tree with better amenity values
9 Lagerstroemia spp . (Crepe Myrtle)	54 Front Yard	Exotic	Small	Over Mature	0.1	4	4	3- Fair	3 - Fair	12.571	1.50	1.2	6 stems	5 - Very Low	5 to 15	Not Significant	4 - Poor	0-5	Remove	Exempt height		Landscape plan should provide tree with better amenity values
1	1	1		1	1	1	1	1	Total	408.77	1	I	1	1	1	1	1	1	1	1		1

	Annexure 2 - Assessment and Evaluation criteria - Definitions.									
	Origin General Tree Size				Age Class	General Condition - summation of all considerations. Includes Stem/Canopy Structure Defects, Form, Canopy Vigour, Extent of any decay, Pest and Disease influences	ERL - estimated remaining life in years under current Situation	Tree Vigour	1	Retention value
Endemic	Species is native to this location	Very Large	> 25m	New	Recent Planting - last year or two	1 - Excellent	0	1 - Excellent	1 - Excellent	Interpretation Based on
Aus Native	Species native to Australia but not this location	Large	18-25m	Young	Sapling, extended growth remaining	2 - Good	0 to 5	2 - Good	2 - Good	overall tree condition, species performance in local
•		Medium	10-18m	Semi Mature	Some remaining growth to reach maturity for the site and species	3 - Fair	5 to 15	3- Fair	3- Fair	environment, expected
Exotic	Species introduced to Australia	Small	< 10m	Mature	Considered mature size for site and species - typically no sign of decline	4 - Poor	15 plus	4 - Poor	4 - Poor	remaining life and significance
		Very Small	< 3m	Over Mature	Tree has commenced to decline - obvious signs	5 - Very Poor	40 plus	5 - Very Poor	5 - Very Poor	of tree in landscape
				Senescent	Extended signs of decline - recovery not expected					
				Dead	Little or no metabolic function remaining					
Environmental			En	vironmontal Eur	aluation Considerations/criteria					

5 - Very Low	Listed Weed or nuisance species; or very small value or insignificant to local ecology - could	be replaced within 5 years or readily replaced with species of greater value
		<u> </u>
	Significant Tree value considerations/criteria	Recommended Action f
	Defined as Significant Tree by regulatory or other authority or	
Van Cignificant	Environmental rating 1 or	
Very Significant	Heritage Listed or	
	Very High Cultural or heritage Values	
	Environmental rating 2 or	7
Significant	Medium or large tree in good/excellent condition, suited to local environment or	
Significant	imposing within the local landscape with long life expectancy and or	
	strong amenity values or some cultural or heritage links	

Recommended Action for DA/Development	Primary Reasons
Retain Priority	Very Significant tree
Retain	Significant Tree
Retain if possible	Sound tree suited to site
Remove	Positive amenity values
Remove Priority	Poor Condition
	Unsuitable for location
	Species not suited to Environment
	Condition & Safety
	Replaced in short term
	Allow development
	Exempt species
	Exempt height
	Other

	Pi	cks	
Replacement time:	1	Very significant	
0-5	2	Significant	
5-10	3	Not Significant	
10-20	4		
20+	5	Yes	
50+		No	
100+			

Retain - Impacts to Manage Retain - Impacts unlikely Not determined

Other Definitions

Tree Height and canopy spread is estimated unless otherwise specified.

Tree stem diameter is measured at approximately 1.4m above - or at a point indicative of the tree dimension where abnormal growth occurs at 1.4m above ground. Multi stemmed trees are calculated as per AS 4970

Mature or semi mature Endemic Tree with or without hollows, plays an important part in local ecology, or Australian Native that has high substitute values as endemic tree replacement would take 50-100 years

Young or semi mature Endemic tree or Australian native species that has some positive values for local fauna/ecosystems - replacement would take 20 or more years. Large Exotic tree with elevated general values.

TPZ - Tree Protection Zone - specified area above and below ground and at a given distance from the trunk set aside for the protection of the tree's roots and crown to provide for the viability and stability of a tree to be retained where it is potentially subject to damage by development.

SRZ - Structural Root Zone - the area around the base of a tree required for the tree's stability in the ground - calculated in meters radially from stem centre.

Normally Old growth Remnant Tree, multiple hollows important to endangered fauna, replacement would be well in excess of 150 years

Normally exotic species, or small, young endemic or native that could be replaced in the short term 5-10 years

From Australian Standard 4970-2009 Protection of Trees on development sites

TPZ and SRZ are calculated from AS 4970

Rating/Value 1 -Very High

2 - High

3 - Medium

Tree canopy area is a calculated area from the diameter of the of the canopy - some actual variation may exist in the calculation if the canopy is not symmetrical.

variation may exist in the calculation in the carbopy is not symmetrical.					
Detailed explanation of Recommendations for Development					
	The Tree is a high value tree from an amenity, environmental or other				
Retain Priority	perspective - its removal should only occur under some extenuating				
	circumstance				
Retain	The tree has good or excellent retention values - a compelling reason should				
Retain	exist to remove the tree				
	The tree has some positive values for retention - it will not be significant - the				
Retain if Possible	positive values outweigh the negative values				
	It is recognised that removal may be required in many instances.				
Remove	The tree condition, structure, size, species or other consideration dictates that				
Kelliove	a new tree is a better option				
Remove Priority	The tree condition, structure, size species of other consideration dictates that				
Remove Phonty	the tree should be removed and not retained.				