Tree Assessment Report

Prepared for

IMG Group Canberra Airport
Level 4 / 21 Terminal Ave, Plaza Office
West Canberra Airport ACT 2609

CONTACT: *Planning & Environment Manager*: Mr Andrew Connor
M:0428 171 487 *T*:02 6275 2207
EMAIL: A.Connor@canberraairport.com.au

Site Address: 34-36 Inglis St Mudgee NSW 2850.

(Lot 10, DP 1275386; LOTS 16, 17, 18 & 20. SEC43 DP758721)

Date of Inspection: 2nd August 2023

Report date: 5th October 2023 (Version 1)

PREPARED BY

McArdle and Sons Arboricultural Services Pty Ltd (since 1956)

ACN 094 297 408

PO Box 4060 Tamworth NSW Phone: 02 6769 0372

Tree Contractors Association Australia Inc
A National Tree Amenity Industry Body

CONSULTING ARBORIST

Dan McArdle

Level 5 Arborist, *Dip Arboriculture, Dip Agriculture*

Licence No: TCAA: 99/1003/14

Office: 02 6767 0372

Mobile 0418 165 650

E: danmcardle@mcardleandsons.com.au

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SUMMARY

IMG Group Canberra Airport Planning & Environment Manager Mr Andrew Connor has commissioned McArdle and Sons Arboriculture Services Pty Ltd to conduct a Tree Assessment and Report for the Federal Hotel proposed development at 34- 36 Inglis Street Mudgee NSW.

Mr Dan McArdle holds the qualification of AQF level 5 Consulting Arborist, attended the site and conducted the inspection on the 2nd of August 2023.

Document History

Date	Version	Company	Arborist AQF5
14th August 2023	Draft 0.1	McArdle and Sons	Dan McArdle
5th October 2023	Version 1	McArdle and Sons	Dan McArdle

All trees have been tagged and assigned a number and referenced on the Tree Location Map (Fig 2) of its approximate location on the site and referenced in the Tree Survey Table.
Where noted in the Tree Survey Table, trees that have been identified with significant faults and or may require remediation for retention or removal. This assessment report is not including a risk assessment and only attention is noted where a fault or structural damage / dead wood is present and observed.

AIMS

The aim of this report is to inspect and document all trees for Health, Structure, Tree Useful Life Expectancy, Retention value and Tree protection Zones and make recommendations relating to the proposed development.

IN BRIEF

- Trees impacted by the proposed construction identified for removal: TREES # 1,2 & 3; and minor pruning 10% maximum of branch overhang of TREES: 4, 5, 6, 7, 8, 9, 10, 11, 12 &13.
- Tree Protection fencing is required for TREES: 4, 5, 6, 7, 8, 9, 10, 11, 12,13 &14*. (TPZ /SRZ) measurements located in the Tree Survey Table*. Installation of tree protection fencing must be prior to any construction or demolition works All Tree Protecting Fencing must comply with AS 4970 2009 Protection of Tree on Development Sites & AS 4687.1 2003 Temporary Fencing & hoardings.

HERITAGE: Research of Mid-Western Regional Council's LEP 2012 was undertaken to establish Heritage Conservation area and Heritage items. (See fig 3 Map HER 006 LEP 2012). *Lot 10, DP 1275386; LOTS 16, 17, 18 & 20. SEC 43 DP758721* shown to be in the Heritage conservation area and a Heritage item (I81) is listed for the site "Lot *20 SEC 43 DP758721* Federal Hotel *(Attached plans Fig 4 do not include* Lot *20 SEC 43 DP758721)*.

Habitat: Several hollows were observed in (Tree #1) which is listed for removal.

Special Notes:

- Trees # 4, 5, 6, 7, 8, 9, 10, 11, 12,13 &14 are in the adjacent properties and tree protection is required, minor pruning may be required over the proposed construction.
- This report does not include a risk assessment, only comments have made been made as a point of reference to the trees condition and TULE rating applied.

Further information regarding this report please contact our office on 02 6769 0372.

Dan McArdle *Dip Arb, Dip Ag*
McArdle and Sons Arboricultural Services Pty Ltd

INTRODUCTION

IMG Group Canberra Airport Planning & Environment Manager Mr Andrew Connor has commissioned McArdle and Sons Arboriculture Services Pty Ltd to conduct a Tree Assessment and Report of the site know as Federal Hotel at 34 Inglis Street Mudgee NSW. *Lot 10, DP 1275386; LOTS 16, 17, 18 & 20. SEC43 DP758721*

Mr Dan McArdle AQF level 5 holds the qualification of AQF level 5 Consulting Arborist has over 35 years of Arboricultural Industry experience conducted the site inspection and evaluation using Visual Tree Assessment (VTA) method and best industry practices. The systems are in accordance with industry best practice and impact assessments are based upon the Australian Standards, AS 4970 2009 Protection of Tree on Development Sites and guidelines set down by TCAA of Australia.

AIMS

The aim of this report is to inspect and document all trees that may be impacted by the proposed construction. The VTA includes Health, Structure, Tree Useful Life Expectancy, Retention value and Tree protection Zones and make recommendations relating to the proposed development impact.

METHODOLOGY

The collection of data is performed in the field by an AQF Level 5 arborist. The assessment summaries the species, height and diameter, the trees health and structural condition for each tree, hazards, Tree useful life expectancy and retention categories were assigned to each tree. Determine tree protection zones and structural root zones of trees that can be affected by construction.

Testing on site may include:
Mallet impact sounding, non-invasive testing for hollows or decay by probing of cavities, white ant infestation and or other. Invasive tests will determine depth of decay around cavities.

All inspections and testing are ground based. It should be noted that this Tree Assessment Report cannot be considered final until all aerial inspections if noted in the tree survey have been completed, as these may reveal further defects.

This data was recorded in a Tree Survey Table and various assessment methods were used including:

1. Tree Useful Life Expectancy (TULE) (Burrell Approved TCAA use 2014). The rating is of the expected life span of the tree and takes into account age, life span of the species, local environmental conditions, location, and tree safety.
2. Health & Structural Condition of Tree Assessment. This describes the vigour and vitality of the tree**.**
3. Tree Hazard & Site Assessment. This assessment identifies structural defects that predispose a tree to failure located near a target. It is a useful WH&S requirement. *(Only comments have been included in this report)*
4. Some trees have special restrictions including cultural, historical or threatened category and may be reviewed as part of this report or further reporting.

THE SITE

The collection of data was comprehensive on 14 x trees and shrubs. The inspection was conducted on the 2nd of August 2023.

- All trees within the specific site have been surveyed and referenced in this report, Trees # 4, 5, 6, 7, 8, 9, 10, 11, 12,13 &14, located in the adjacent properties.

All trees have been tagged and assigned a number and referenced on the Tree Location Map (Fig 2) of its approximate location on the site.

- TREE #1 is the largest tree located in the centre of the site; all ascending tag numbers are in a clockwise direction.

PLANS

Building plans have not been confirmed as final for the proposed construction on the site *(Fig 3-4).*

HERITAGE

Research of Mid-Western Regional Council's LEP 2012 was undertaken to establish Heritage Conservation area and Heritage items. Map HER 006 LEP 2012. (See fig 5). Heritage item I81listed for Lot *20 SEC 43 DP758721* Federal Hotel *(Attached plans Fig 4 do not include* Lot *20 SEC 43 DP758721)* and the site is included in the Heritage Conservation Area.

HABITAT

All trees referred in this report have been inspected for habitat and where habitats are located, specific tree's identification number has been listed in the tree survey with reference to habitat if applicable.

MATURE TREES: The trees and shrubs inspected are planted trees and not endemic to the Mudgee area.

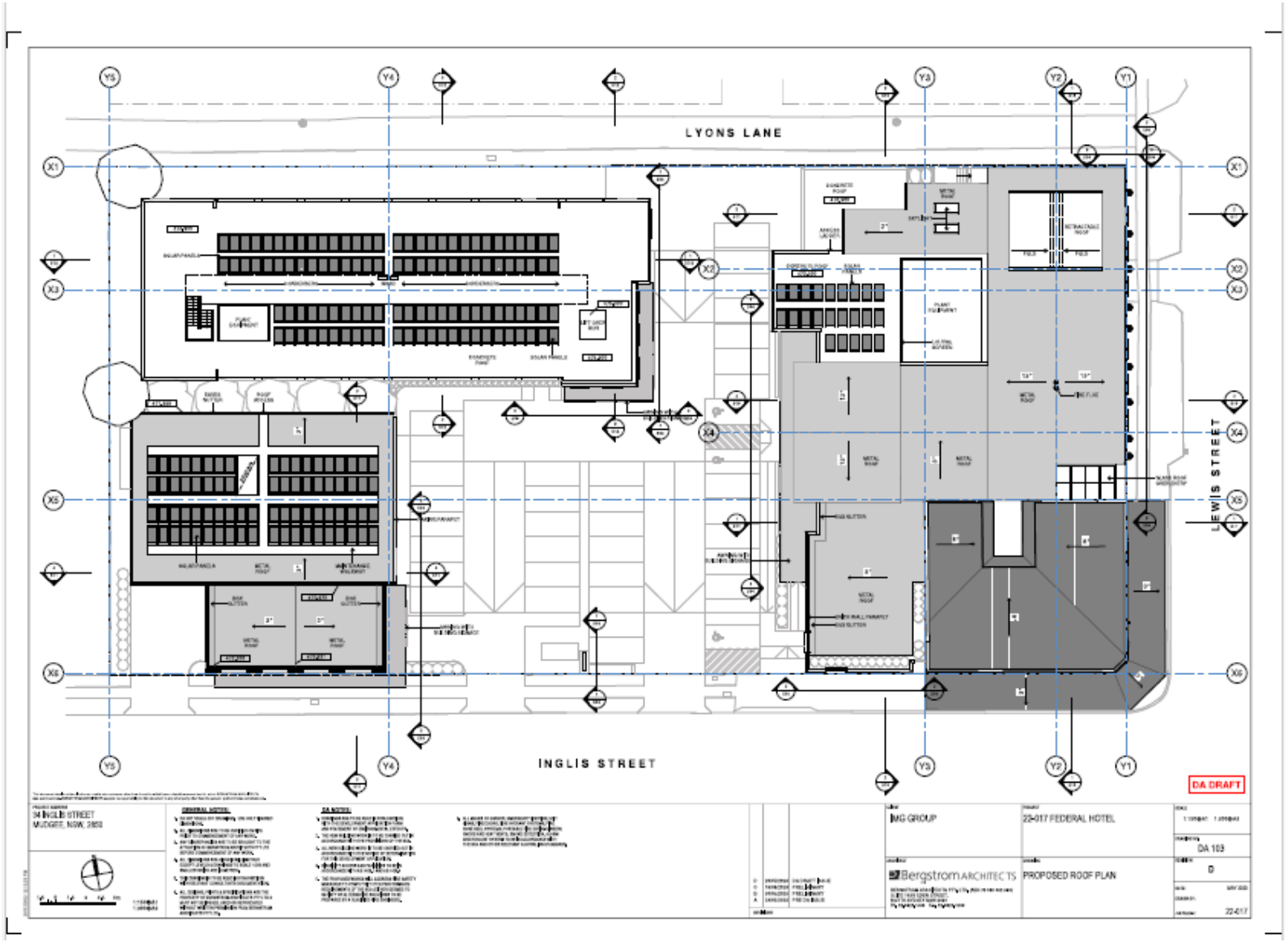
EXISTING TREE AND REMEDIATION'S

Where noted in the Tree Survey several trees have significant faults and or require remediation of the canopy for retention or removal, this tree survey is not including a risk assessment and only attention is noted where a fault or structural damage / dead wood is present.

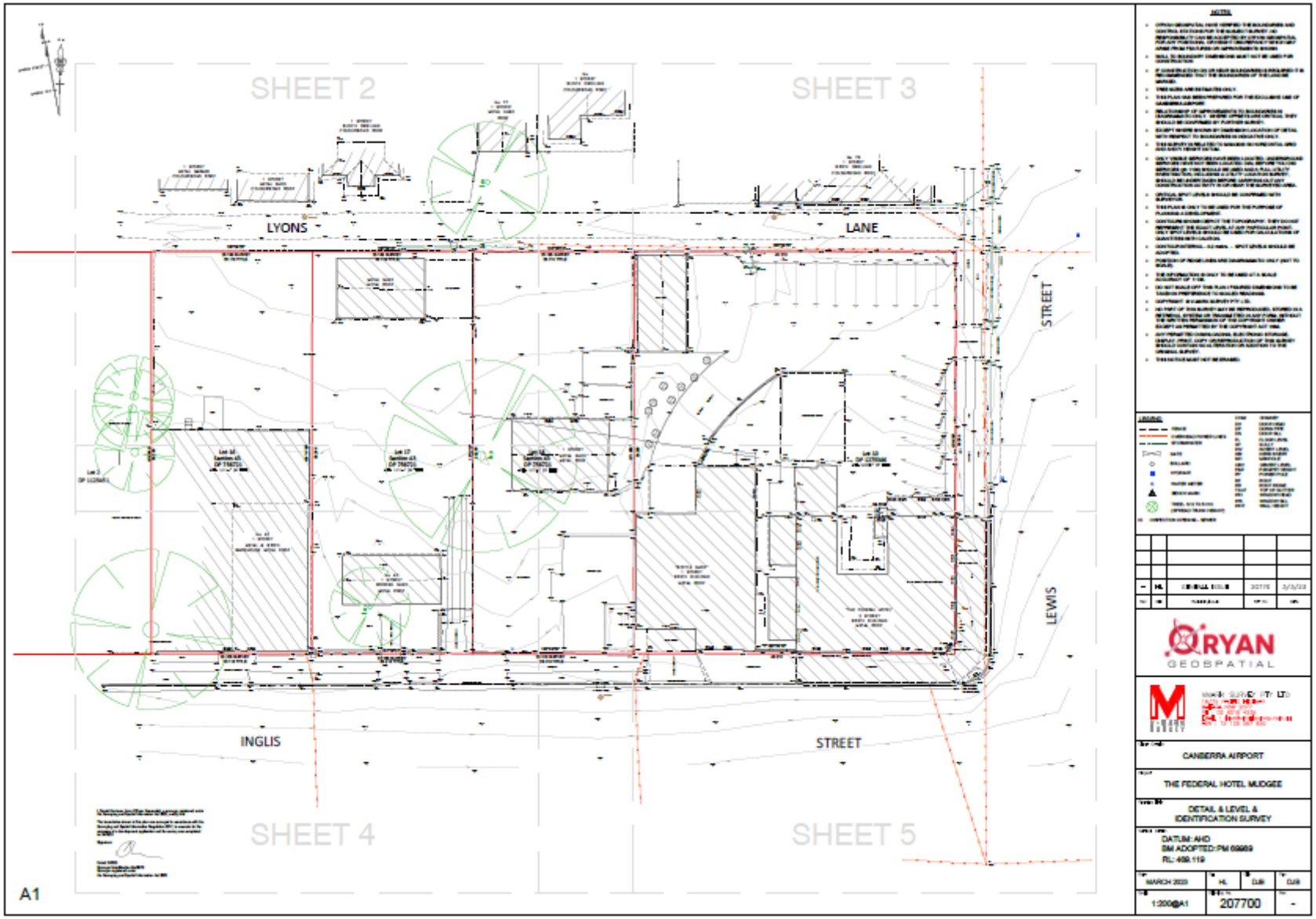
SITE MAPS

Site Location Map: Federal Hotel boundary overlay map(Fig 1).

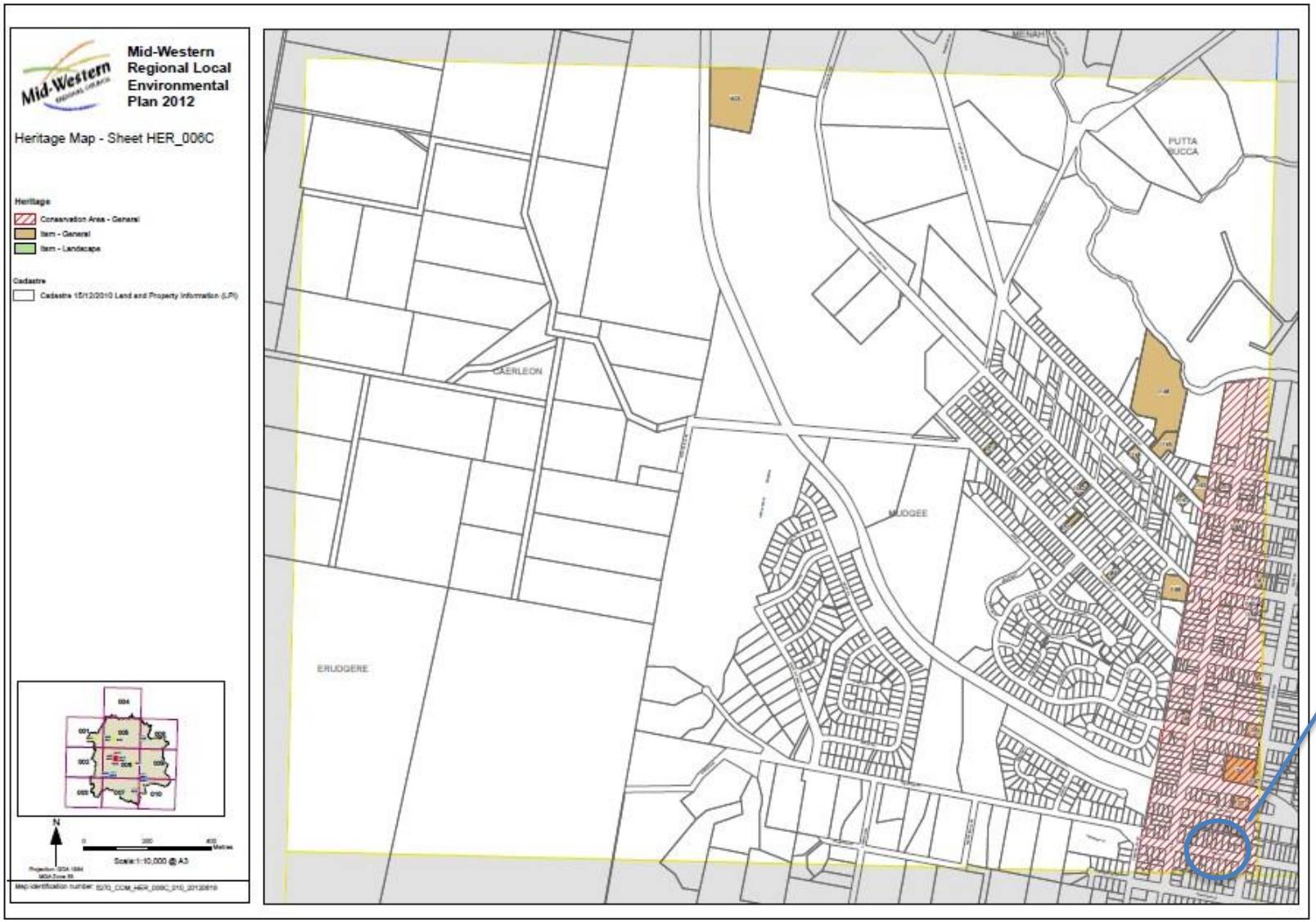
Tree Location Map: Federal Hotel trees inspected (Fig 2).



PROPOSED PRELIMINARY PLAN (Fig 3)



EXISTING PLAN (Fig 4)



(Fig 5) Heritage Map: *Mid Western Regional Council (LEP 2012 HER_ 006c*)

TREE SURVEY

Tree No.	Location GPS	Scientific & Common Name	Height (m)	DBH (cm)	Crown spread (m)	Condition of Tree *(Health &Structure) (Defect & Measurements)*	Basal Flare (cm)	SRZ (m) Radius	TPZ (M) Radius	TULE& Retention Value	OBSERVATIONS RECOMMENDATIONS
1	S32. 600 37° E149. 588 64°	Eucalyptus *scoparia* Wallangarra white gum	22	100	13	Mature moderate condition, 15% dead wood in canopy, hollows, apical stem decayed, white ant active in base, cavity in base and @8m. Structural integrity concerns from active white ant nest & damage to root ball.	1.4	-	-	D3-C4 High	Tree impacted in build zone. REMOVAL
2	S32. 600 54° E149. 588 46°	Ligustrum *lucidum* Broad leaf privet	8	40	8	Mature good condition Declared Weed	60	-	-	F5 LOW	Tree impacted in build zone. REMOVAL
3	S32. 600 57° E149. 588 29 °	Ceratonia siliqua Carob	6	multi	6	Semi mature good condition	40	-	-	A2 LOW	Tree impacted in build zone. REMOVAL
4	S32. 600 54° E149. 588 06°	Quercus *robur* English Oak	14	60	16	Mature good condition in adjacent property, within 1m of boundary alignment.	90	3.2	7.2	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
5	S32. 600 40° E149. 588 07°	Gleditsia *triacanthos* Honey Locust	14	60	14	Mature good condition in adjacent property, within 1m of boundary alignment.	80	3.0	7.2	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
6	S32. 600 22° E149. 588 18 °	Melaleuca quinquenervia Paperbark	8	40/40	10	Mature good condition in adjacent property, within 1.5m of boundary alignment.	55	2.6	6.8	A2 HIGH	RETAIN minor pruning overhang. Tree protection required

7	S32. 600 22° E149. 588 18 °	Melaleuca quinquenervia Paperbark	10	30	4	Mature good condition in adjacent property, within 1.5m of boundary alignment.	60	2.7	3.6	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
8	S32. 600 23° E149. 588 18 °	Melaleuca quinquenervia Paperbark	10	30	4	Mature good condition in adjacent property, within 3m of boundary alignment.	50	2.5	3.6	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
9	S32. 600 25° E149. 588 17°	Callistemon *saligna*	7	15	2	Mature good condition in adjacent property, within 1m of boundary alignment.	25	1.8	1.8	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
10	S32. 600 23° E149. 588 20°	Callistemon *saligna*	8	35	**3**	Mature good condition in adjacent property, within 1m of boundary alignment.	40	2.3	4.2	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
11	S32. 600 22° E149. 588 29°	Jacaranda *mimosaefolia*	8	40	4	Mature good condition in adjacent property, within 3m of boundary alignment.	50	2.5	4.8	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
12 x4	S32. 600 22° E149. 588 20 °	Callistemon *saligna*	10	40	4	Mature good condition in adjacent property	55	2.6	4.8	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
13	S32. 600 16° E149. 588 20°	Callistemon *saligna*	8	30	4	Mature good condition in adjacent property	50	2.5	3.6	A2 HIGH	RETAIN minor pruning overhang. Tree protection required
14	S32. 600 05 ° E149. 588 67°	Liquid amber	10	40	12	Mature good condition in adjacent property opposite side of the lane.	70	2.8	4.8	A2 HIGH	RETAIN Tree protection required

TREE ANALYSIS PHOTOS

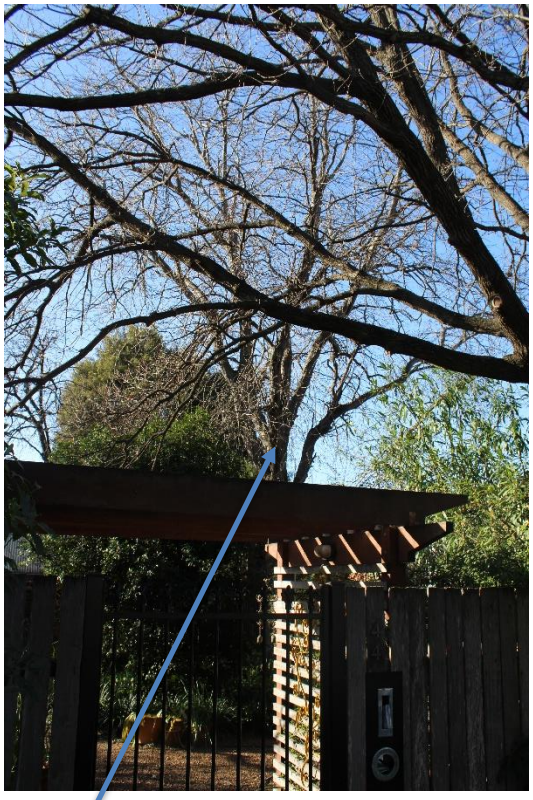
Tree 1

Tree 1 cavity at base

Tree 2

Tree 3

Tree 4



Tree 5

Tree: 6, 7 ,8 & 9

Tree 10, 11, 12 & 13

Tree 14

DISCUSSION

Research of the Mid-Western Regional Council (MWRC) LEP 2012, I have concluded that the Federal Hotel 24-36 Inglis St Mudgee is listed as a heritage item (I 86) (*Attached plans **Fig 4** do not include Lot 20 Sec 43 DP 758721)*.

The *Lots 10, DP 1275386; LOTS 16, 17 & 18. SEC43 DP758721; Lot 20 Sec 43 DP 758721 are* in the Heritage Conservation Area (Heritage Conservation area Map HER 006c LEP 2012 ***Council approval is required for Tree Trimming and Removals.***

All the trees on site have been planted and not endemic to the Mudgee area.

- Eucalyptus *scoparia* is listed as Endangered and endemic to the New England districts, significant planting are common in Mudgee.

All trees inspected have been GPS located and assigned a number and referenced on the TREE LOCATION MAP (Fig 2) of its approximate location on the site.

- **Tree Useful Life expectancy** has been applied and rated in TULE column of the Tree Survey.
- **Tree Retention Value** (also in the same column above) applied at High, Medium and Low.
- **Tree Protection Zones/Structural Root Zones** are listed for trees to be protected where they may be impacted by construction, all measurements noted in the Tree Survey Table TPZ or SRZ are from the centre of the tree.

Where noted in the Tree Survey several trees have significant faults and or require remediation of the canopy or removal, this tree survey is not including a risk assessment and only attention is noted where a fault or structural damage / dead wood is present, general tree maintenance is not part of the aims of this report.

DEVELOPMENT IMPACTS

From the site inspection and attached Proposed Plan (Fig 3) there are 3 x trees (1, 2 & 3) that will be impacted by the proposed building.

- Tree 1 is a large mature eucalyptus with significant infestation of termite and decay damage in the lower trunk and would more likely extend into the root plate below soil level, probing of the cavity indicated depth and activity of termite. The tree is not suitable for retention in development.
- Tree 2 is a proclaimed weed species.
- Tree 3 is healthy and not compatible with the proposed development.
- Trees: 4, 5, 6, 7, 8, 9, 10, 11,12, 13 & 14 are in adjacent properties all trees are documented in the Tree Survey Table, minor pruning up to maximum 10% of branch overhang for building and working clearance is required.

CONCLUSIONS

The site has been identified with a Heritage item and the site is in the Heritage Conservation Area. There is an approval requirement to remove the trees by MWRC.

No trees on sites are indigenous to the area of Mudgee and not listed as a threatened species.

There are several trees within the site impacted by the proposed plan (fig 3) for the development construction and will require removal all other trees in the adjacent properties will require tree protection.

- Trees impacted by the proposed plan construction and identified for removal are numbered: TREES # 1, 2 & 3.
- Tree to be protected from development impacts are TREES # 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 & 14.

The amenity of the site is consistence with the surrounding area, there is a large tree on the site identified for removal assessed as High Retention, the landscape plan must take this into consideration in the replanting.
All trees have been allocated a retention value, the trees for removal are (18) in total and their retention value is as follows:

- HIGH: 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 & 14.
- Medium: NIL
- Low: 2 & 3

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TREE PROTECTION ZONES AND STRUCTURAL ROOT ZONES (TPZ/ SRZ)

Tree protection is important in preventing physical damage to trees and their root systems, implementing Tree Protection Zones by installing fencing at the specified radius distance (*see Tree Survey Table for details)* *(*Ref AS 4970 2009 Protection of Trees on Development Sites & AS 4687.1 2003 Temporary Fencing & hoardings).

- Trees #: 4, 5, 6, 8, 9, 10, 11, 12, 13 &14 will require approved protection fencing 1.8m in height placed at the defined TPZ measurement and must be installed prior to any demolition or earthworks. (*TPZ are noted in the Tree Survey as radius measurements from the centre of the tree trunk*)

AMENITY REDUCED BY THE FOLLOWING

In terms of the trees numbered for removal they have little or no scientific historical, cultural or social value. Several species have a contribution to the landscape which will be removed. Replenishment of desirable tree species is required in order to ensure biodiversity is kept within the local environment.

VALUATION

The value for each tree is based on size, useful life expectancy, importance of position in landscape, presence of other trees, relation of the species to the garden setting, the form of the tree and in rare cases historical associations or botanical interest.

If these trees are reported as having historical, cultural, social or scientific value, in addition to any contribution for the landscape and scenic value of the land, then special consideration and further investigation is essential. The intrinsic value to public amenity and any contribution to the local ecosystem or to biodiversity must be noted.

RECOMMENDATIONS

1 Appoint a Project Arborist for the site and duration of the development. Supervise all installation of tree protection fencing and all excavations where encroachment into the TPZ and Pruning of adjacent trees that overhang the site from adjoining properties is required up to 10% maximum of branch overhang maintaining tree shape.

2 Install tree protection fencing prior to **any construction work**, all fencing must comply with AS 4970 2009 Protection of Tree on Development Sites & AS 4687.1 2003 Temporary Fencing & hoardings.

- Trees requiring protection fencing are number as follows: Trees # 4, 5, 6, 8, 9, 10, 11, 12, 13 & 14. Signs must be erected on the fences “NO ENTRY” with the Project Arborist phone number.

3 Apply to MWRC for approval to and remove only the trees specified: TREES # 1, 2 & 3, and pruning of Trees # 4, 5, 6, 8, 9, 10, 11, 12 & 13 by 10% maximum of overhang to prevent damage by construction equipment.

4 A suitable qualified licenced AQF 3 Arborist contractor must be engaged to complete the works and all pruning work to the Australia Standards AS 4373 2007 Pruning of Amenity Trees. Also (see *Safe work NSW engaging a contractor*)

5 All tree waste can be mulched and stockpiled on site as per Environment Protection Authority (EPA) Raw mulch Order 2016. The generated mulch is to be used on site.

6 Excavations or entry within the tree protection zones must be undertaken with the AQF 5 Consulting Arborist on site and or consult with the AQF 5 Arborist prior to any attempt to enter the enclosed TPZ’s.

7 The development approval must include a tree planting programme to replace 1 x High Retention Value tree with recommended and suitable species.

GLOSSARY

Crown: The width of the foliage in the upper canopy of the assessed tree to the four cardinal points.

Crown lifting: means the removal of the lower branches of the tree.

Crown thinning means the portion of the tree consisting of branches and leaves and any part of the stem from which branches arise.

Drip line: Where the canopy releases water shed from the foliage during precipitation.

DBH/Diameter: Diameter of trunk at 1.4meters in height of assessed tree.

Dead wooding means the removal dead branches from a tree.

Dieback: Tree deterioration where the branches and leaves die.

Flush cut: A cut which damages or removes the branch collar or removes the branch and stem tissue and is inconsistent with the branch attachment as indicated by the bark branch ridge.

Genus/ Species: The Genus and species of each tree has been identified using its scientific name. Where the species name is not known the letters, species is used. The common name for trees may vary considerably in each area of geographical differences and so will not be used in the field survey.

Height: Height has been estimated to + / - 2 metres.

ISA: International Society of Arboriculture.

Maturity: Tree maturity has been assessed as over mature (last one third of life expectancy), mature (one third to two thirds life expectancy) and semi mature (less than one third life expectancy).

Remedial (restorative) pruning: includes: Removing damaged, Dead wood; trimming diseased or infested branches. Trimming branches back to undamaged tissue in order to induce the production of shoots from latent or adventitious buds, from which a new crown will be established.

Retention Value: Rating as High Moderate or Low. Determining factors and not limited to; health vigour, age habitat environmental, landscape heritage etc.

SRZ- Structural Root Zone: An area within the tree's root zone in which roots stabilize the tree. Roots cut in this zone can cause instability and lead to anchorage loss.

Structural Integrity: Describes the internal supporting timber. (Substantial to frail)

TULE- Tree Useful Life Expectancy: An estimation of the trees useful life expectancy using appropriate industry methods.

TPZ- Tree Protective Zone: This zone should be considered as optimal for tree growth and sustainability however the size of the zone is subjective and should be reassessed when individual design and construction methods are being discussed.

Tree Age: Trees have either been assessed as mature, immature or semi-mature.

Tree Numbering: All trees listed in the tree survey have been numbered and plotted

Vigour: This is an indication of the tree health. Trees have either been assessed as Good Vigour, Moderate Vigour or Poor Vigour.

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www.environment.gov.au
www.legislation.gov.au
www.treetech.net.au
www.midwestern.nsw.gov.au

SECTION II APPENDIX A TULE – TREE USEFUL LIFE EXPECTANCY

McArdle and sons Categories	**1 Long TULE**	**2 Medium TULE**	**3 Short TULE**	**4 Remove**	**5 No Potential for Retention REMOVE IMMEDIATELY**	**6 Small, Young or regularly clipped:**
	Trees that appeared to be retainable at the time of assessment for more than 40 years with low level of risk	**Trees that appeared to be retainable at the time of assessment for 15 to 40 years with and with low to medium level risk**	**Trees that appeared to be retainable at the time of assessment for 5 to 15 years with medium to high level of risk**	**Trees that should be removed within the next 5 years High to Very high level of risk**	**Trees that must be removed immediately. Very high to Extreme level of risk**	**Trees that can be easily transplanted or replaced.**
A	Structurally sound trees located in positions tha tcan accommodate future growth	Trees that may only live for between 15 and 40more years	Trees that may only live for between 5 and 15more years	Dead, dying, suppressed or declining trees through disease or inhospitable conditions.	Dead, dying or declining trees diseased or inhospitable conditions.	Small trees less than 5meters in height
B	Trees that could be made suitable for retention in the long term by Intervention Works.	Trees that may live for more than 40 years, but would need to be removed for safety or Nuisance reasons	Trees that may live for more than 15 years, but would need to be re moved for safety or nuisance reasons	Dangerous trees through instability or recent loss of adjacent trees	Dangerous trees through instability or recent loss of adjacent trees	Young trees less than 15years old but over 5meters in height
C	Trees of special significance for historical ,commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention	Trees that may live for more than 40 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting	Trees that may live for more than 15 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting	Dangerous trees through structural defects including cavities, decay, included bark, wounds or poor form	Dangerous trees through structural defects including cavities ,decay, included bark, wounds or poor form	Trees that have been regularly pruned to artificially control growth
D		Trees that could be made suitable for retention in the medium term by Intervention Works.	Trees that require substantial Intervention Works, and are only suitable for retention in the short term	Damaged trees that are clearly not safe to retain	Damaged trees that are clearly not safe to retain and must be removed immediately	
E				Trees that may live for more than 5 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting	High Toxicity Allegan trees, asthmatic and poisonous trees and must be removed immediately.	
F				Trees that may cause damage to existing structures within 5 years	OTHER with legitimate explanation to be removed immediately	
G				Trees that will become dangerous after removal of other trees for reasons given in 1A-1F		
INSPECTION FREQUENCY	Inspection frequency 1-5 Years by competent inspector unless event monitored.	Inspection frequency 1-5 Years by competent inspector unless event monitored.	Inspection frequency 1-3 years by competent inspector unless event monitored.	Inspection frequency to 1 year by competent inspector unless event monitored.	1-7 days by competent inspector and event monitored	Inspection frequency Biannually by competent inspector

TULE Adapted with permission Jeremy Burrel 2014 for TCAA licensed Climbing Arborist.

Health & Structural Condition of Tree	
1. *J- Juvenile; Im- Immature; SM-Semi- Mature; M-Mature*	
2. Excellent Condition	
3. Good Condition but Poor Development / Habit	
4. Dieback is more than 20%.	4b Epicormics
5. Sparse Foliage Crown	5b Unbalanced Canopy
6. Physical Damage	
7. Cavity	
8. Lean	
9. Heavily Pruned	
10. Inclusions	
11. Damage to roots	
12. Insect Damage	12b Borers
13. Termite Damage	
14. Fungal Attack	
15. Parasitic Vine Present	
16. Damage by Climbing Plant	
17. Habitat Tree	

Developed by Claus Mattheck in: *The Body Language of Trees (*1994) which have adapted versions from Hornsby Shire Council.

Appendix C RETENTION VALUE TABLE

Useful life expectancy (ULE) – ULE is measured as:

- long term (greater than 40 years),
- medium term (15 to 40 years),
- short term (5 to 15 years), and
- plan for removal (less than 5 years).

ULE is the period for which the tree can practically be retained. It is affected by the tree's health and vigour, its structural condition, risk it may present, conflict with infrastructure, suitability in its location and conflict with changing land use.

Landscape significance – A tree's significance in the landscape relates to the amenity it provides, it environmental value and its contribution to heritage. These are affected by the tree's species, its ecological importance, its size and form, its location and its visual prominence. Landscape significance is categorised on a seven-point scale of significant, very high, high, moderate, low, very low and insignificant. Heritage listed trees have the highest rating and weed species have the lowest rating.

Tree retention value – Tree Retention Value is based on a tree's ULE and the landscape significance of the tree. The matrix at table 1 below is used to determine the retention value, which is rated as high, moderate, low or very low.

Table 1 Methodology used to assess Tree Retention Values[1]

	Landscape Significance Rating						
Tree sustainability period	1 significant	2 very high	3 high	4 moderate	5 low	6 very low	7 insignificant
greater than 40 years	**high**						
15 to 40 years			**moderate**				
5 to 15 years					**low**		
less than 5 years						**very low**	

APPENDIX D DISCLAIMER

McArdle & Sons Arboricultural Services Pty Ltd

McArdle & Sons Arboricultural Services Pty Ltd does not assume responsibility for liability associated with the tree on or adjacent to this project site, their future demise and/or any damage, which may result therefrom.

Any legal description provided to McArdle & Sons Arboricultural Services Pty Ltd is assumed to be correct. Any titles and ownerships to any property are assumed to be good and sound. McArdle & Sons Arboricultural Services Pty Ltd takes care to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

McArdle & Sons Arboricultural Services Pty Ltd reports and recommendations shall not be viewed by others or for any other reason outside its intended target, either partially or whole, without the prior written consent of the consultant. Unauthorised alteration or separate use of any section of the report invalidates the whole report. McArdle & Sons Arboricultural Services Pty Ltd cannot be held responsible for any consequences as a result of work carried out outside specifications, not in compliance with Australian Standards or by inappropriately qualified staff.

Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale. All recommendations contained within this report represent the current industry best practice methods of inspection. McArdle & Sons Arboricultural Services Pty Ltd shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.

LIMITS OF OBSERVATION
McArdle & Sons Arboricultural Services Pty Ltd makes every effort to accurately identify current tree health and safety issues. Results may or may not correlate to actual tree structural integrity. There are many factors that may contribute to limb or total tree failure. Not all these symptoms are visible. There can be hidden defects that may result in a failure even though it would seem that other, more obvious defects would be the likely cause of failure.

All standing trees have an element of unpredictable risk. McArdle & Sons Arboricultural Services Pty Ltd endeavours to identify the risk that the tree represents; however, a level of risk associated with every tree will remain. McArdle & Sons Arboricultural Services Pty Ltd does not provide any warranty or guarantee that problems, deficiencies or failures with regard to the plant/s, property or building/s will not arise in the future.

Ongoing monitoring may foresee deterioration of a tree and allow remedial action to be taken to prevent injury or damage. The timing for re-inspection on individual trees is subjective and will vary however an annual inspection is advisable for trees in subsequent years.

FURTHER RESEARCH The report does not cover threatened, heritage or existing trees in relation to remnant forest. Further reporting may be considered as part of the relevant RISK ASSESSMENT.

LIMIT OF OBSERVATIONS BY RODNEY M. PAGE
“There are many factors that may contribute to limb or total tree failure. Factors include, decay (in the trunk, crown or branch junctions), external damage to branches leading to decay, poor branch taper, included bark, root rot/ decay. Not all these symptoms are visible i.e. internal decay; of these some external symptoms may indicate the presence of Dead wood but not the extent of decay. The most solid looking piece of timber may be riddled with breaks in continuity of growth caused by insect damage or poor pruning practices or other physical damage caused many years previous. Trees don’t heal; they simply box in the damaged area ((CODIT) Compartmentalization of Decay In Trees.) and continue to expand in girth, completely disguising the fact that the branch or trunk has a hollow or decayed section. Having said this, not all areas, of decay past or present suggest a point of failure.”
In addition to this information, other variables that can contribute to limb or total tree failure are tree species, wood densities, weight, age, location, exposure to the elements, soil types, disease and pests, birds using trees as habitat and food sources, termites causing structural problems and human influences such as, altered drainage, compaction or leaching of minerals.