

**ARBORICUTURAL IMPACT ASSESSMENT - FOR 2024 DEVELOPMENT AT;
TEMORA HOSPITAL NSW 2666.**

1. INTRODUCTION.

Health Infrastructure NSW commenced the planning for a redevelopment at the Temora Hospital in 2023. This will involve demolition of existing buildings and construction of new facilities within the site. A preliminary assessment and evaluation report of the existing tree population was undertaken and provided in 2023 to assist planning of the development.

A detailed proposal has been developed and this report now provides an arboriculture impact assessment based on the footprint of the design and the impact on the existing tree population.

2. SCOPE AND PURPOSE.

The report has been commissioned by Capital Insight Pty Limited on behalf of NSW Health Infrastructure.

Contact - Louise Coote - Senior Project Manager. Louise.Coote@capitalinsight.com.au

Mobile - 0429 400 404

The site was formally assessed on 10 May 2023. This impact assessment is based on the survey on that date.

Arboricultural Impact Assessment for development overview;

- a. Step 1. Preliminary Assessment Report. All trees are individually accessed and graded for their values, condition, life expectancy, significance within the environment and landscape; stem diameter, canopy coverage and other salient data is gathered and compiled in Annexure 1 - Tree Data File. A conclusion on their individual retention value is made - Table A in this report will provide a summary of the information from Annexure 1. Ideally a Preliminary Arboricultural Report is prepared for this purpose to assisting planning of a development and which specific trees are of the highest significance and retention value.
- b. Step 2. Review tree values and existing tree retention The information and conclusions on tree values should be used to guide planning processes to maximise retention of existing trees; and specifically higher value trees, and be used as a guide as to the likely impact assessment.
- c. Step 3. Impact Assessment Report. Once the development plan is determined or finalised then an impact assessment report is prepared for submission with the DA.
 - a. Each tree is then reviewed in the context of the development footprint and other relevant plans/issues and determination is made as to what trees require removal to accommodate the development;
 - b. What trees can be retained with impacts to manage
 - c. What trees are unlikely to be impacted.

- d. *Australian Standard 4970 -2009 protection of trees on development sites* is used as a guide and interpretation as to what impacts can be managed and typical tree protection measures.
 - e. *Annexure 1 will be updated and provide all specific tree information and data and impacts on each tree*
 - f. A summary of the tree impacts is then provided - Table B will provide a summary cross reference to table A - Tree retention values against development impacts.
 - g. The Impact Assessment Report is developed for submission with the development application to provide the planning authority with detailed information as to the arboricultural impact, and any subsequent loss of the tree values within the environment and landscape of the proposed development including canopy coverage or other relevant details to that site.
- d. Step 4. Tree Protection Measures. The Tree Impact Assessment report will provide guidance and in some instances specific tree protection measures that are required to be developed as part of a Tree Protection Plan.
- e. Step 5. The Tree Protection Plan cannot be fully developed until the final conditions of consent and demolition and construction methods are known. Normally the Tree Protection Plan will be a condition of consent, and the appointment of a Project Arborist. The Project Arborist should prepare the Tree Protection Plan, based on the Impact Assessment Report, Conditions of consent, demolition and construction methods and any other salient site issues including installation of services and utilities.
- a. The tree protection plan should form part of the construction/demolition project plan.

The following Drawings were supplied to identify trees on the site and identify the development footprint and subsequent arboriculture impact.

Plan of features, Level and Services, lot 2 in DP572392 169-189 Loftus Street Temora. For Health Infrastructure. Walpole Surveying, Albury NSW. Surveyors reference 22146 - version 2 dated 18/10/2022.

TEMORA HOSPITAL REDEVELOPMENT TEMORA NSW 2666. SITE PLAN - PROPOSED 130908-HDR-AR-DWG-1301. Issue 5 Preliminary dated 31/01/2024. HDR Pty Ltd Martin Place Sydney 2000.

These drawings has been marked up with tree numbers and salient issues and can be located at the conclusion of the report.

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

[Diagram one and two](#) provides identification of the site and proposed footprint of the development.

[Annexure 1 – Tree Data File and Annexure 2 Assessment criteria](#) provides a detailed list and evaluation criteria of the trees across the site - including canopy dimensions and tree protection zones. It has been reproduced at the conclusion of the report. It has also been provided in Microsoft Excel format for data analysis purposes only.

3. SITE CONDITIONS AND BACKGROUND.

The Temora Hospital is located off Loftus street Temora NSW 2666. The site is approximately 3.2 hectares in area, and comprises various buildings that present of some age, and significant open space, lawns and treed areas.

Only a few remnant trees were identified on site; however there has been considerable plantings of Australian Native trees and exotic trees. The general tree population is considered quite mature, and it is obvious that quite a number of trees have been removed in recent decades, assumed due to poor condition. There are quite a number of large and imposing trees across the site, and the trees and grounds can be considered as currently providing quality amenity values. Some recent new plantings of small tree species has occurred.

Based on rudiment calculations of tree canopy dimensions and the site area - the Temora Hospital has about 39% canopy coverage - which can be considered good in our modern developed areas.



Diagram 1 – Site location off Loftus Street Temora.

Source – Adapted from NSW Spatial Mapping 2023.

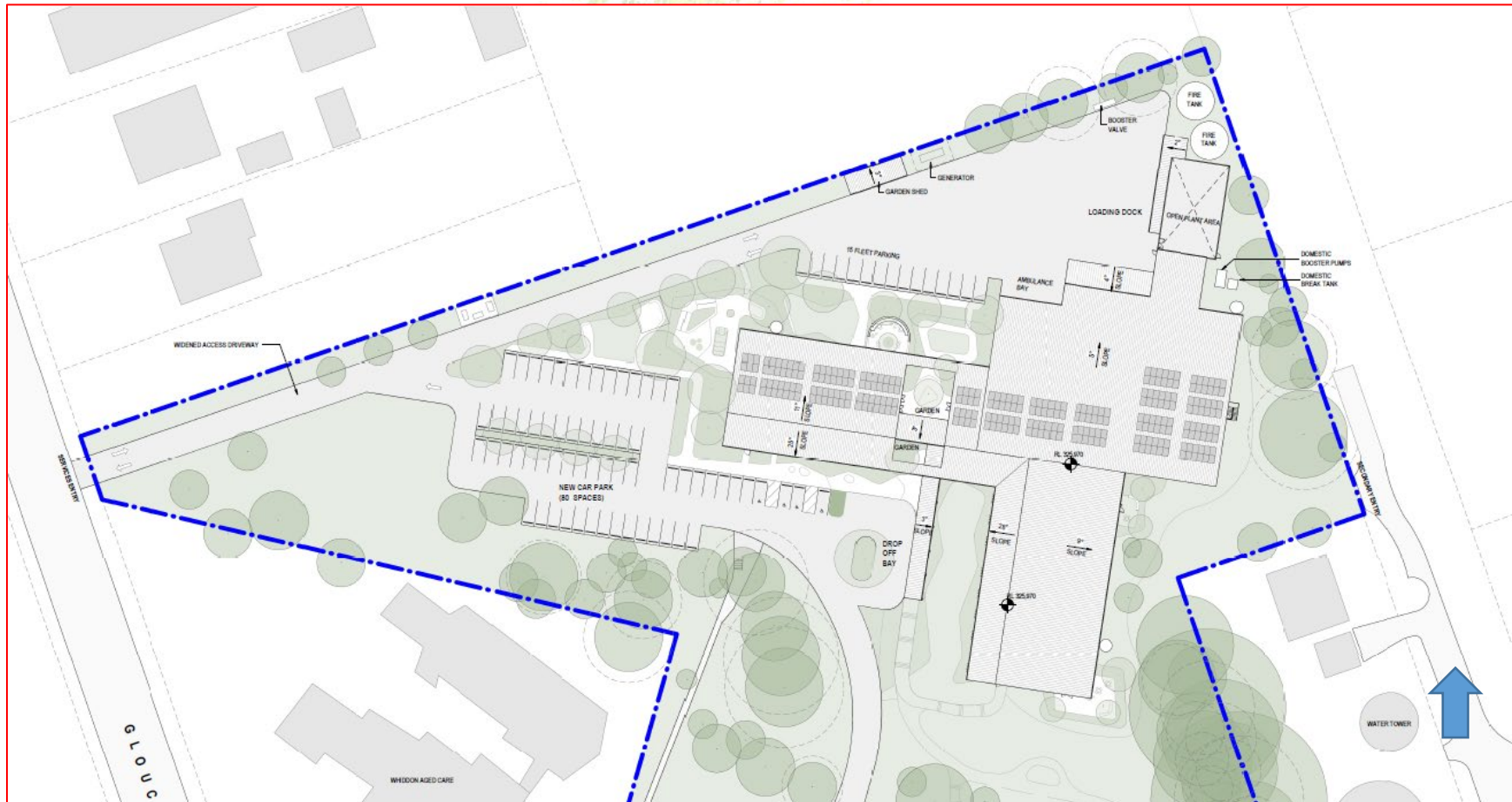


Diagram 2 - Proposed footprint of new development.
Development is confined to the north portion of the site.
Source - Adapted from cited drawing.

4. SUMMARY OF INITIAL TREE ASSESSMENT AND EVALUATION.

- 146 Trees were logged and evaluated in the assessment.
 - 76 of the 146 Trees were identified as Australian or NSW native species - 52% of the tree population.
 - 62 Trees were identified as NSW Native Vegetation as defined by *State Environmental Planning Policy (Biodiversity and Conservation) 2021 - section 2.2.*
 - 64 of the 146 trees are identified as exotic in origin - 44%.
 - The most common species was *Brachychiton populneus* (Kurrajong) - which accounted for 40 of the 146 trees - a species endemic to the region. This is considered a positive value for the local ecosystems.
 - *Jacaranda mimosifolia* accounted for 17 of the 146 trees - an exotic species somewhat suited to the local environment.
 - *Corymbia citriodora*, (Lemon Scented Gum,) a NSW Native vegetation species accounted for 11 of the 146 trees. The species is not endemic to the region, but is a species that is well suited to the local Temora environment.
- Theoretical canopy coverage is approximately 12,500 square meters on a site of 32,000 square meters which equates to about 39% canopy coverage. This is considered very good and any development needs to consider the values that the existing canopy coverage provides.
- Each tree is individually graded for its retention values within the development area based upon a range of criteria as detailed within *Annexure 1 & 2 – Tree Data file and evaluation criteria*. The following Table A is a summary of retention values.
- Annexure 3 contains locations of all trees with priority tree locations.

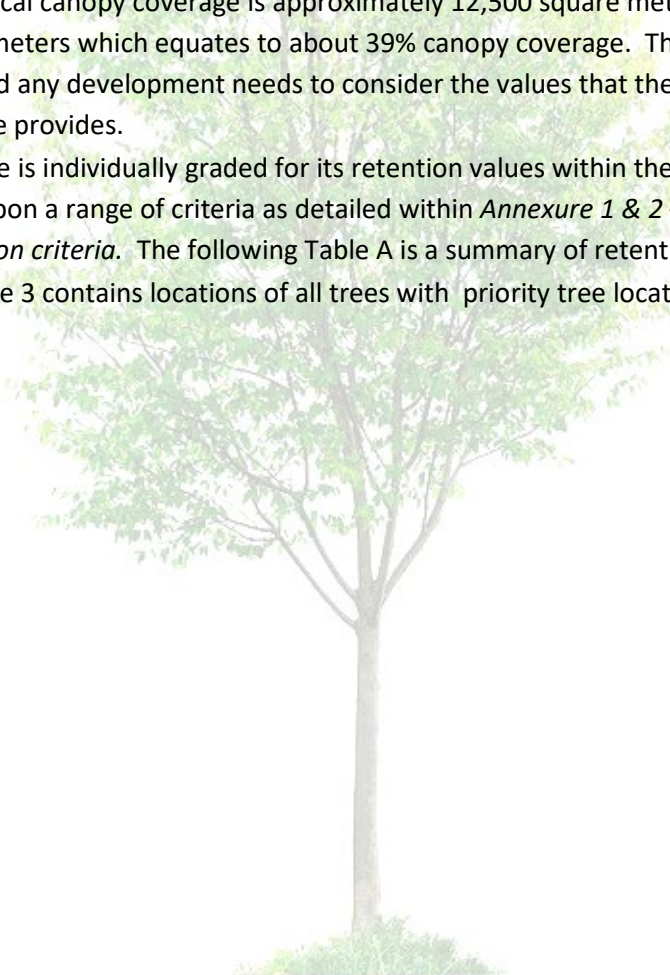


Table A – Summary of Tree Evaluation		
Evaluation Category	Descriptors	Tree No's
Retain Priority	<ul style="list-style-type: none"> A tree with High or very High significance Strong positive amenity and/or other values – normally long life expectancy. Replacement very long term 60 - 100 years or more Removal would be very difficult to justify 	<u>9 trees total</u> 6,22,23,50,73,89,92,133,134
Retain	<ul style="list-style-type: none"> Tree with moderate or high significance Positive Amenity values and/or other values with longer life expectancy <ul style="list-style-type: none"> Replacement long term 40 - 80 years. Removal would be difficult to justify. 	<u>32 Trees total.</u> 2,,16,25,29,30,39,52,54 71,87,90,91,93,94,95,96 99,100,101,102,103,105,106,108 121,122,123,126,128,143,144
Retain if Possible	<ul style="list-style-type: none"> Tree with some positive landscape, amenity or other values <ul style="list-style-type: none"> In fair to good condition with some useful remaining life. OR a younger semi mature tree in Excellent or good condition with long life expectancy or expected contribution. However if the impost on the development of retention is very high or the development impact on the tree is high then removal or replacement can be considered a valid decision. On balance of considerations the tree is worth retaining. 	<u>53 Trees in total.</u> 1,4,7,8,10,11,12,15,17,18,19,20 24,27,28,33,35,37,40,41,44,45,46,47 53,56,63,64,68,69,70,74,75,77,78,83 84,86,88,104,109 to 117 120,129,131,146
Remove	<ul style="list-style-type: none"> The tree is normally in poor condition with short useful life expectancy, or Structurally unsound to a point not worth effort of ameliorating. OR A small tree where the impost of retention is not justified. It would easily be replaced in 0-5 years. At this point a new tree is normally considered a better long term option. 	<u>31 Trees in total.</u> 3,13,14,26,31,32,36,42,43,48,49 55,72,79,80,81,82,85,97,107, 124,125,127,130,137,138,139 140,141,142,145

Remove Priority	<ul style="list-style-type: none">• An insignificant tree (shrub) - very small or• the tree is in very poor condition or a weed species or• structurally very poor or short useful life expectancy• a replacement tree/s is a far better option	<u>21 Trees total</u> 5,9,21,34,38,51,57 to 62 65,66,76,118,119,132,135,136
--------------------	--	---



Photo 1 - Trees numbers 22 and 23 - *Corymbia calophylla*, (Marri).

Example of two trees evaluated as 'Retain Priority'.

Both trees are plantings of some age. Large imposing trees in excellent condition with long life expectancy. Significant amenity and environmental values.



Photo 2

Trees 133 and 134

***Corymbia citriodora*,
(Lemon Scented Gum,)**

**Further examples of trees
evaluated at Retain Priority.**

*Large imposing trees in
excellent condition with long
life expectancy; that frame the
driveway entrance.*



Photo 3 - Tree 143 Eucalyptus cladocalyx, (sugar gum) to left and tree 144 Eucalyptus albens (White Box) to right.

Example of a trees graded as 'Retain'.

Medium to larger trees in good condition with long life expectancy.



Photo 4 - Tree 1 - Brachychiton populneus (Kurrajong).

Example of a tree graded as 'Retain if possible'.

The tree has notable attributes with notable useful life expectancy. Alternatively its loss is not considered significant.



Photo 5 - Tree 129 *Fraxinus angustifolia* subsp. *oxycarpa* (Desert Ash).
Further example of a tree graded as 'Retain if possible'.
A medium exotic tree with notable attributes and some useful life expectancy.



***Photo 6 - Tree 55 - Ulmus glabra 'Lutescens' (Golden Elm).
Example of a tree graded as 'Remove'.***

A small tree where the impost of retention in a development is not justifiable as the tree can easily be replaced within 0-5 years.

Additionally this species typically does not perform well in the Temora Environment.



***Photo 7 - Tree 14 - Grevillea robusta (Silky Oak).
Further example of a tree graded as 'Remove'.***

The tree has poor vigour for a species with typically much larger mature dimensions. Its loss can easily be offset within a short period of time 4-5 years.



***Photo 8 - Tree 59 Tamarix aphylla (Athol Pine).
Example of a tree graded as 'Remove Priority'.
Remains of an aged tree that is now in very poor condition and very short remaining
metabolic function expectancy.***

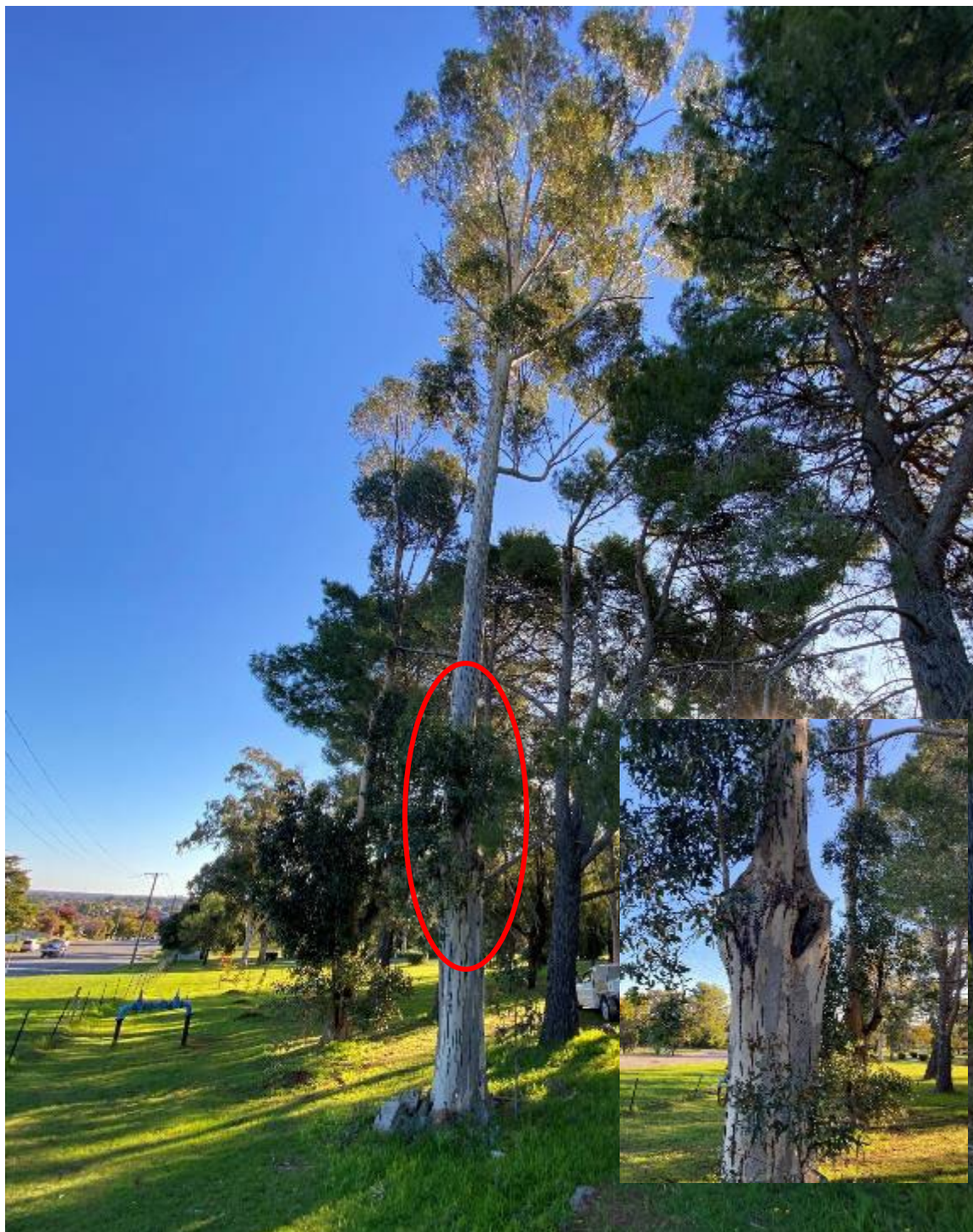


Photo 9 - Tree 118 - *Eucalyptus cladocalyx*, (sugar gum)

Further example of tree graded as 'Remove Priority'.

Australian native widely planted in the greater Riverina Region. The main stem has a significant cavity and decay in the stem at 3 m - and extends 4 m vertically. The stem is evaluated as high risk of failure. Tree should be removed.

5. DEVELOPMENT IMPACTS ON EXISTING TREE POPULATION.

The proposed building footprint and the impact to the existing tree population is depicted from the Proposed Site Plan.

It needs to be noted that other impacts from trenching, demolition and construction methods and supply of services may have potential for other impacts that are not identified at this point.

Table B provides a summary of the development footprint impact on the tree population – relative to the initial evaluation of the trees - a cross reference.

Table B – Cross Reference of Tree Evaluation and DA Impacts						
	Initial Evaluation and Recommendation					
Development Impacts	Remove Priority	Remove	Retain if possible	Retain	Retain Priority	Grand Total
Not determined	2	3				5
Remove - Direct Conflict	9	7	10			26
Retain - Impacts to Manage	1	2	15	5	3	26
Retain - Significant impacts to manage				2	1	3
Retain - Impacts unlikely	9	19	28	25	5	87
Grand Total	21	31	53	32	9	146

Key Points to Impact Assessment.

- The footprint of the Proposed Site Plan is confined to the north portion of the site - where buildings and infrastructure already exists. A substantial portion of existing trees on site are not impacted by development.
- Removals - A total of 26 Trees are required to be removed - 16 of which are evaluated for removal.
- Removal of Trees of Significance.
 - 2 Trees with moderate significance are required to be removed - Evaluated as Retain if Possible.
 - There are no trees with high or very high significance required to be removed.
 - There are no trees evaluated as 'Retain' or Retain Priority' required to be removed.

- Trees with known impacts to Manage. 29 Trees are evaluated with development impacts to Manage.
 - Of the 29 Trees 26 are considered 'routine'
 - Significant Impacts to Manage. There are 3 Trees identified at this point with significant impacts to manage.
 - Tree numbers 54, 71 and 73
 - Tree 54 has moderate significance
 - Trees 71 and 73 have high significance
- Not Determined.
 - 5 Trees are noted as 'Not Determined' at this point. These trees are adjacent to the development and present as not in direct conflict. However;
 - The trees are graded in poor condition or in the case of tree 51 with high potential for failure.
 - These 5 trees are recommended for removal.
 - Tree numbers 48, 51, 55, 56 and 72 apply.
- Theoretic Canopy Loss.
 - Adding the 5 trees evaluated at 'not determined' the total loss of the 31 trees from the development, there is a theoretic loss of canopy coverage of 1370 square meters.
 - This represents 10% loss of existing canopy coverage and associated benefits;
 - And reduces the approximate canopy coverage of the site to about 35% before any remedial landscape works are undertaken.

6. DISCUSSION ON DEVELOPMENT IMPACTS.

East Boundary Screening is maintained.

Proposed development supports retention of the trees 85 to 105 inclusive located on the east boundary fence. The bulk of these trees are *Brachychiton populneus* (Kurrajong), which form an excellent visual and amenity barrier from the development site to screen the town water supply system on the east boundary. Most of the trees have excellent useful life expectancy, are identified as NSW native vegetation. They currently provide excellent screening from within the Hospital site and also traffic approaching from the west - travelling east.



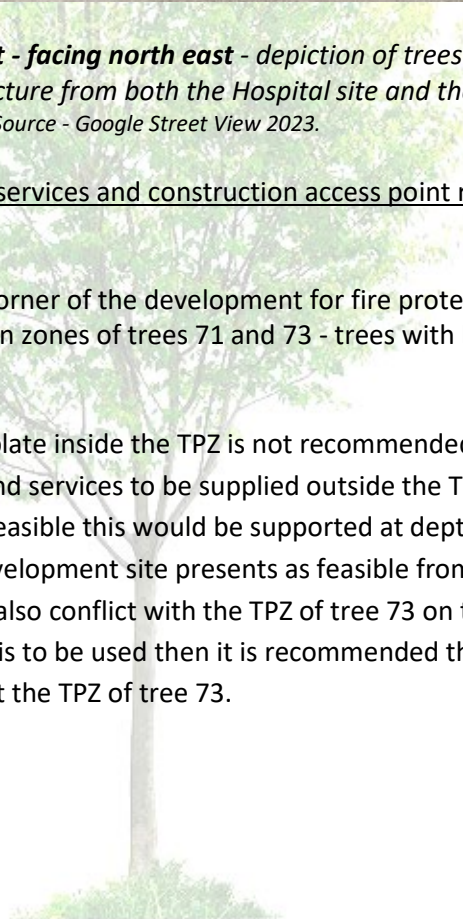
Exhibit 1 - View from Loftus Street - facing north east - depiction of trees 85 to 105 that screen the town water infrastructure from both the Hospital site and the main road.

Source - Google Street View 2023.

Potential issues with underground services and construction access point relative to Trees 71 and 73.

Supply of water to the north east corner of the development for fire protection services may need to consider the tree protection zones of trees 71 and 73 - trees with high significance and large tree protection zones.

- Trenching across the root plate inside the TPZ is not recommended - and design needs to consider any underground services to be supplied outside the TPZ.
 - If under-boring is feasible this would be supported at depth of about 1 m.
- Access to the proposed development site presents as feasible from the Bundawarra Road. This will potentially also conflict with the TPZ of tree 73 on the south side.
 - If this access point is to be used then it is recommended that trees 76 and 77 are removed to protect the TPZ of tree 73.



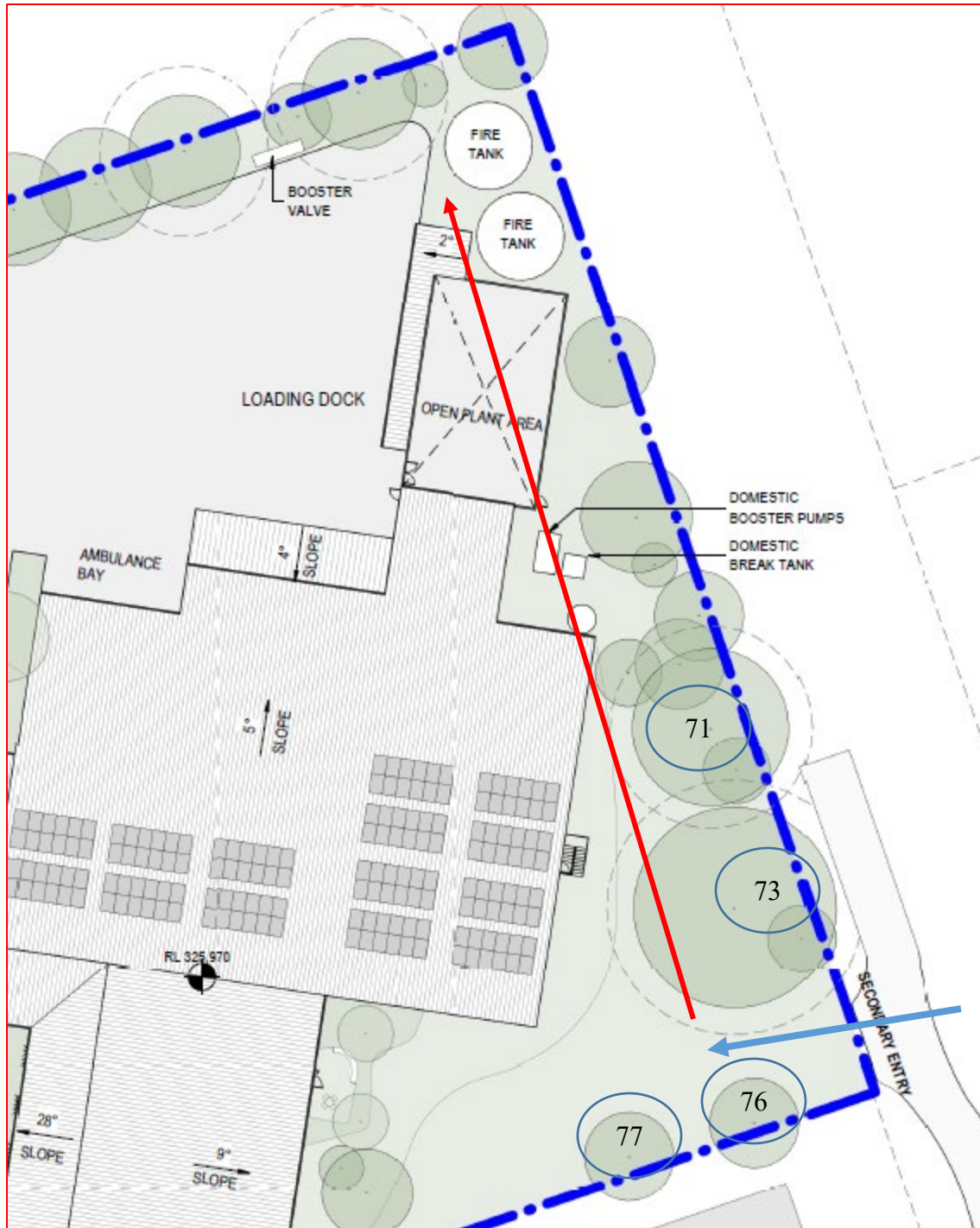


Diagram 3 - TPZ of tree 71 and 73 - significant trees - needs to be respected for any underground services in the vicinity of red arrow - and access point blue arrow.
If secondary access is to be used for construction purposes then remove trees 76 and 77 to protect tree 73.

7. RECOMMENDATIONS.

A. Tree Identification.

- a. The current development footprint has been evaluated within Annexure 1 - Tree Data File and this reference should be used as the relevant list of trees to be removed as part of the demolition (or other) phase of works and those trees that are to be clearly identified as being retained and protected.
- b. Annexure 1 correlates to the cited marked up drawing *Plan of Features*.**

B. Appointment of Project Arborist and Tree Protection Plan.

- a. Once the Development consent conditions are determined a Project Arborist should be appointed and a Tree Protection Plan developed that shall form part of the demolition, any early works and construction plans.
- b. A detailed Tree Protection Plan cannot be fully developed until all conditions of consent are known and work methods relative to the tree population are known and consulted with relevant demolition/construction organisations.
 - i. Draft Tree Protection Measures that should be considered relevant at this point in the process are listed below.

C. The loss of the existing tree benefits. The project Landscaping Plan should seek to not only replace the approximate 1370 square meters of canopy coverage that will be lost – but there is opportunity to improve the canopy coverage across the site. Medium and if appropriate space exists larger species should be planted to maximise the benefits that larger trees provide across our environment and society. Larger trees with dense canopies shade surfaces, reduce surface temperatures, which reduces radiant heat (Kaluvarachichi et al 2020).

- a. Native vegetation or at least exotic trees that will tolerate the hot summer temperatures should be utilised.

Draft Tree Protection Measures that need to be considered for the **Tree Protection Plan** include.

- A Project Level 5 Arborist should be appointed prior to the demolition and construction phase to review the conditions of consent, final drawings and develop the Tree Protection Plan.
- All trees marked for removal need to be positively identified on site before demolition occurs to ensure that the correct trees are removed and retained.
- Trees identified for retention should have effective Tree Protection fencing effected prior to commencement of demolition and construction - at the limit of the TPZ - or the limit of identified and planned works within the TPZ

- There should be no parking of vehicles, or plant or storage of any materials within the TPZ fenced of the retained trees.
- TPZ zones should be clearly sign posted as 'No go Zones'.
- TPZ zones should form part of the site worker induction.
- Specific measures and work methods will need to be developed in relation to all trees identified as Significant *Impacts to Manage*.
 - Trees 54, 71 and 73.
 - Amelioration for root loss may require periodic irrigation of these trees depending on specific environmental conditions prevailing at the time.
- Some construction hold points and attendance of the Project Arborist to site would be prudent for trees with moderate and high significance so that appropriate measures are adhered to and tree vitality is maintained through and past project completion.
 - Excavation works inside the SRZ can lead to tree destabilisation and whole tree failure.
- There should be no trenching or excavation works within the TPZ without prior consultation with the Project Arborist to evaluate the impacts on the trees. This specifically includes, trenching for services, electricity, water, gas communications sewer or irrigation pipes, general earth works, including landscaping, that disturbs the soil profile.
- Boring of post holes in the order of 150 to 200 mm diameter for the erection of boundary fence posts are identified as an acceptable impact within the TPZ, but not excavation of soil for the laying of strip footings.
- The landscaping plan for the project needs to consider the TPZ of the trees and look to maximise the opportunity for root retention and future root development – which will be important for the longevity of the trees.
- Any specified pruning, or clearance pruning of trees for machinery operation should be conducted before commencement of any works so that an effective tree protection barrier (fence) can be installed and the canopy not damaged by demolition or construction process.
 - Arborist with Level 3 qualifications (Certificate III) should be engaged to conduct the pruning so that it is conducted in accordance with *Australian Standard 4373 -2007 - pruning of amenity Trees*.
- Other specific measures outlined in *Australian Standard 4970 -2009 protection of trees on development sites* may be appropriate once final consent condition and demolition/construction works are determined.

There is little point in trying to preserve trees through a demolition and construction project if the development does not respect the requirements of the trees.

Reference.

Kaluarachichi T.U.N., Tjoelker M.G. and Pfautsch S. (2020). *Temperature Reduction in Urban Surface Materials through Tree Shading Depends on Surface Type Not Tree Species*. Forests 2020, 11, 1141.

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 assessed 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.

This report is provided in good faith and forms the opinion and recommendations based on the visual assessment conducted on the specified date.



4 April 2024

Wade Ryan – Independent Arboriculture Consultant AQF Level 5.

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.



Quantified Tree Risk Assessment

4519

Developed Wade Ryan Contracting 0408 300 989 waggatreeconsultancy.com.au waderyan1@bigpond.com				Annexure 1 - Tree Date File - AIA - for Development at Temora Hospital 2024 - 4 April 2024																							
Tree No	Lat	Lon	Species	Species Origin	NSW Native Veg	General Size	Age Class	Stem base Ø (m)	DBH (m)	Height (m)	Canopy Ø	Canopy Area (M²)	SRZ Radius in m centre of stem	TPZ Radius in m from stem	Tree Vigour	Tree Structure	Factors, Observed Conditions or Issues Commentary on tree	Enviro Rating or Value	Estimated remaining useful life	Replacement Time Frame	Significant Tree Value	Retention Value	Recommended Action for planning of development	Development Impact	Other Comments		
1	-34.44415	147.5423	Brachychiton populneus (Kurrajong)	Endemic	Yes	Small	Semi Mature	0.5	0.3	9	6	28.2857	2.47	3.6	Good	Good		Low	40 plus	5-10	Low or nil	Good	Retain if possible	Retain - Impacts unlikely			
2	-34.44412	147.5424	Eucalyptus sideroxylon, mugga ironbark, or red ironbark)	NSW Native	Yes	Large	Mature	1.12	0.99	17	17	227.071	3.47	11.88	Good	Good		High	40 plus	20+	High	Excellent	Retain	Retain - Impacts unlikely			
3	-34.44413	147.5425	Brachychiton populneus (Kurrajong)	Endemic	Yes	Small	Semi Mature	0.46	0.31	7	5	19.6429	2.39	3.72	Fair	Good	Supressed tree by larger	Low	40 plus	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely	Needs to be considered as part of tree 2		
4	-34.443949	147.5425	Eucalyptus sideroxylon, mugga ironbark, or red ironbark)	NSW Native	Yes	Large	Mature	1.2	0.88	25	15	176.786	3.57	10.56	Fair	Fair	Notable mistletoe in canopy. 2 x 200 mm Ø limb failures and 1 x 100 mm limb failure	High	5 to 15	20+	Moderate	Good	Retain if possible	Retain - Impacts unlikely	Tree may be in early stages of decline - multiple limb failure and mistletoe impacts		
5	-34.44384	147.5425	Eucalyptus torquata (Coral Gum)	Aus Native	No	Medium	Mature	0.24	0.17	5	3	7.07143	1.82	2.04	Poor	Poor	Heavily supressed - large necrotic zones on stem and cavity	Very Low	0 to 5	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely			
6	-34.443839	147.5426	Corymbia citriodora , (Lemon Scented Gum,)	NSW Native	Yes	Large	Mature	0.99	0.69	20	19	283.643	3.30	8.28	Good	Good	some dead wood to 75 mm Ø	High	40 plus	20+	High	Excellent	Retain Priority	Retain - Impacts unlikely			
7	-34.443534	147.5428	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.47	0.46	11	12	113.143	2.41	5.52	Good	Good		Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
8	-34.443532	147.5428	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.46	0.36	8	5	19.6429	2.39	4.32	Fair	Fair		Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
9	-34.443565	147.5429	Tamarix aphylla (Athol Pine)	Exotic	No	Small	Senescent	0.76	0.63	11	8	50.2857	2.95	7.56	Very Poor	Fair	Heavy die back 40% dead wood to 150 mm Ø	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely			
10	-34.44356	147.543	Brachychiton populneus (Kurrajong)	Endemic	Yes	Small	Semi Mature	0.54	0.34	9	6	28.2857	2.55	4.08	Fair	Fair		Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
11	-34.44351	147.543	Grevillea robusta (Silky Oak)	Aus Native	No	Medium	Mature	0.43	0.3	12	5	19.6429	2.32	3.6	Fair	Poor	Stem failed at 8m mark	Low	5 to 15	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
12	-34.44351	147.543	Quercus robur (English Oak)	Exotic	No	Medium	Semi Mature	0.84	0.53	12	12	113.143	3.08	6.36	Good	Good		Medium	15 plus	10-20	Low or nil	Good	Retain if possible	Retain - Impacts unlikely			
13	-34.443474	147.543	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.31	0.27	9	8	50.2857	2.02	3.24	Poor	Fair	Suppressed tree	Very Low	15 plus	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely			
14	-34.443421	147.5431	Grevillea robusta (Silky Oak)	Aus Native	No	Small	Mature	0.33	0.22	10	5	19.6429	2.08	2.64	Poor	Fair	Tree has performed poorly	Low	5 to 15	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely			
15	-34.443398	147.5431	Grevillea robusta (Silky Oak)	Aus Native	No	Small	Semi Mature	0.37	0.24	10	5	19.6429	2.18	2.88	Fair	Fair		Low	5 to 15	0-5	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
16	-34.443347	147.5432	Corymbia citriodora , (Lemon Scented Gum,)	NSW Native	Yes	Medium	Semi Mature	0.77	0.56	18	14	154	2.97	6.72	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage			
17	-34.443313	147.5431	Olea europaea (Common olive)	Exotic	No	Small	Mature	1.23	0.68	12	16	201.143	3.61	8.16	Good	Good	Planting of some age	Very Low	40 plus	20+	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
18	-34.443266	147.543	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.49	0.39	8	10	78.5714	2.45	4.68	Fair	Good		Very Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
19	-34.44328	147.543	Liquidambar styraciflua (Sweet Gum)	Exotic	No	Medium	Mature	0.88	0.53	14	12	113.143	3.14	6.36	Fair	Good		Low	15 plus	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
20	-34.443229	147.543	Lagunaria patersonia (Norfolk Island hibiscus)	Aus Native	No	Small	Mature	0.44	0.24	9	6	28.2857	2.34	2.88	Fair	Fair		Low	5 to 15	0-5	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
21	-34.443146	147.5429	Lagunaria patersonia (Norfolk Island hibiscus)	Aus Native	No	Small	Senescent	0.26	0.18	5	3	7.07143	1.88	2.16	Poor	Poor		Very Low	0 to 5	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely			
22	-34.4432	147.5431	Corymbia calophylla, (Marri)	Aus Native	No	Large	Mature	1.27	1.02	16	22	380.286	3.66	12.24	Excellent	Excellent	Tree of some age	High	40 plus	50+	Very High	Excellent	Retain Priority	Retain - Impacts to Manage			
23	-34.443121	147.5431	Corymbia calophylla, (Marri)	Aus Native	No	Large	Mature	1.109	0.99	20	18	254.571	3.46	11.88	Excellent	Excellent	Tree of some age	Very High	40 plus	50+	Very High	Excellent	Retain Priority	Retain - Impacts to Manage			
24	-34.44302	147.5431	Fraxinus angustifolia subsp. oxycarpa (Desert Ash)	Exotic	No	Large	Mature	0.64	0.64	10	14	154	2.74	7.68	Fair	Fair	4 branch failures 100 mm Ø	Low	15 plus	20+	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely			
25	-34.442946	147.5431	Jacaranda mimosifolia	Exotic	No	Medium	Mature	0.9	0.9	14	14	154	3.17	10.8	Excellent	Excellent	Tree of some age	Low	40 plus	20+	Moderate	Good	Retain	Retain - Impacts to Manage			
26	-34.442993	147.543	Jacaranda mimosifolia	Exotic	No	Small	Semi Mature	0.21	0.22	9	5	19.6429	1.72	2.64	Fair	Fair	Supressed tree by larger	Very Low	5 to 15	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely			
27	-34.442913	147.543	Melaleuca species	Aus Native	No	Small	Semi Mature	0.59	0.48	11	5	19.6429	2.65	5.76	Good	Fair		Low	5 to 15	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage			
28	-34.442937	147.5429	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.65	0.51	11	11	95.0714	2.76	6.12	Fair	Fair		Very Low	15 plus	5-10	Moderate	Fair	Retain if possible	Retain - Impacts to Manage			
29	-34.44306	147.5428	Corymbia citriodora , (Lemon Scented Gum,)	NSW Native	Yes	Very Large	Mature	0.97	0.77	25	20	314.286	3.27	9.24	Excellent	Good	Stick next present	High	40 plus	20+	High	Excellent	Retain	Retain - Impacts unlikely			
30	-34.442987	147.5428	Cedrus deodara, (Himalayan cedar)	Exotic	No	Large	Mature	1	0.66	20	16	201.143	3.31	7.92	Good	Excellent		Medium	40 plus	20+	Moderate	Good	Retain	Retain - Impacts unlikely			
31	-34.442934	147.5428	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.5	0.37	8	7	38.5	2.47	4.44	Fair	Good	Supressed tree by larger	Very Low	15 plus	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely			
32	-34.442957	147.5427	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.35	0.25	9	7	38.5	2.13	3	Fair	Fair	Supressed tree by larger	Very Low	15 plus	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely			
33	-34.442818	147.5428	Jacaranda mimosifolia	Exotic	No	Medium	Mature	0.65	0.57	10	7	38.5	2.76	6.84	Good	Good	Adjacent to power pole - some canopy pruning for clearances -	Very Low	5 to 15	10-20	Moderate	Fair	Retain if possible	Remove - Direct Conflict			

Tree No	Lat	Lon	Species	Species Origin	NSW Native Veg	General Size	Age Class	Stem base Ø (m)	DBH (m)	Height (m)	Canopy Ø	Canopy Area (M²)	SRZ Radius in m centre of stem	IPZ Radius in m from stem	Tree Vigour	Tree Structure	Factors, Observed Conditions or Issues Commentary on tree	Enviro Rating or Value	Estimated remaining useful life	Replacement Time Frame	Significant Tree Value	Retention Value	Recommended Action for planning of development	Development Impact	Other Comments
34	-34.442887	147.5428	<i>Eucalyptus torquata</i> (Coral Gum)	Aus Native	No	Medium	Mature	0.37	0.3	6	8	50.2857	2.18	3.6	Fair	Poor	Stem with 45 degree lean to car park - cavity present canopy 100% to lean - heavily supressed with heavy epicormic shoots on stem	Low	0 to 5	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	Remove tree high risk of failure to proposed carpark
35	-34.44289	147.5427	<i>Grevillea robusta</i> (Silky Oak)	Aus Native	No	Medium	Mature	0.45	0.35	14	4	12.5714	2.37	4.2	Fair	Fair		Low	5 to 15	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	
36	-34.442914	147.5427	<i>Eucalyptus</i> species (possible <i>E. torquata</i>)	Aus Native	No	Small	Mature	0.52	0.42	10	10	78.5714	2.51	5.04	Fair	Poor	Canopy poorly unbalanced	Low	0 to 5	5-10	Low or nil	Fair	Remove	Retain - Impacts unlikely	
37	-34.44302	147.5426	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Semi Mature	0.6	0.54	12	8	50.2857	2.67	6.48	Fair	Excellent	Supressed tree by larger	Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	
38	-34.442975	147.5425	<i>Melia azedarach</i> , (White Cedar)	Aus Native	No	Medium	Mature	0.67	0.56	9	12	113.143	2.80	6.72	Fair	Very Poor	Extensive basal cavity - sounding of stem very poor for whole of circumference estimated sound wood less than 10%	Low	0	10-20	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely	
39	-34.44297	147.5426	<i>Eucalyptus sideroxylon</i> , mugga ironbark, or red ironbark)	NSW Native	Yes	Medium	Mature	0.89	0.64	15	18	254.571	3.15	7.68	Good	Fair		Medium	5 to 15	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
40	-34.442831	147.5425	<i>Eucalyptus sideroxylon</i> , mugga ironbark, or red ironbark)	NSW Native	Yes	Medium	Mature	0.89	0.64	17	14	154	3.15	7.68	Good	Fair	5 limb failures to 170 mm Ø Root zone heavily impacted by pavement	Medium	5 to 15	20+	Moderate	Fair	Retain if possible	Remove - Direct Conflict	Car park impact at or near SRZ
41	-34.442863	147.5424	<i>Eucalyptus sideroxylon</i> , mugga ironbark, or red ironbark)	NSW Native	Yes	Medium	Mature	0.83	0.64	14	14	154	3.06	7.68	Good	Fair	Root system heavily impacted by pavement	Medium	5 to 15	20+	Moderate	Fair	Retain if possible	Retain - Impacts to Manage	
42	-34.442803	147.5424	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Over Mature	0.47	0.28	10	5	19.6429	2.41	3.36	Poor	Fair	Heavy root impacts	Low	0 to 5	5-10	Low or nil	Poor	Remove	Remove - Direct Conflict	
43	-34.442774	147.5424	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Over Mature	0.48	0.36	10	7	38.5	2.43	4.32	Poor	Fair	Heavy root impacts	Low	0 to 5	5-10	Low or nil	Poor	Remove	Remove - Direct Conflict	
44	-34.44294	147.5421	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.66	0.51	9	10	78.5714	2.78	6.12	Good	Excellent		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
45	-34.442863	147.542	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.72	0.62	10	10	78.5714	2.88	7.44	Good	Excellent		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
46	-34.442886	147.5419	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.49	0.44	9	8	50.2857	2.45	5.28	Excellent	Excellent		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
47	-34.442805	147.5418	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.65	0.52	8	6	28.2857	2.76	6.24	Excellent	Excellent		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
48	-34.442727	147.5419	<i>Melaleuca styphelioides</i> , (prickly-leaved paperbark)	NSW Native	Yes	Small	Mature	0.58	0.35	9	4	12.5714	2.63	4.2	Excellent	Poor		Low	5 to 15	5-10	Low or nil	Poor	Remove	Not determined	If roadway upgraded then remove tree
49	-34.442212	147.5436	<i>Sapium sebiferum</i> , (Chinese Tallow tree)	Exotic	No	Small	Mature	0.42	0.34	7	8	50.2857	2.30	4.08	Fair	Good		Very Low	5 to 15	0-5	Low or nil	Fair	Remove	Remove - Direct Conflict	
50	-34.442135	147.5436	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Large	Mature	0.93	0.67	20	20	314.286	3.21	8.04	Good	Good		High	40 plus	20+	High	Excellent	Retain Priority	Retain - Impacts to Manage	
51	-34.442121	147.5437	<i>Eucalyptus sideroxylon</i> , mugga ironbark, or red ironbark)	NSW Native	Yes	Large	Mature	1.01	0.85	14	15	176.786	3.32	10.2	Good	Poor	Stem with significant cavity and decay at 1m - failure most likely to paddock	High	0 to 5	20+	Moderate	Poor	Remove Priority	Not determined	Remove tree high risk of failure to proposed carpark
52	-34.442086	147.5438	<i>Eucalyptus cladocalyx</i> , (sugar gum)	Aus Native	No	Large	Mature	0.85	0.63	20	18	254.571	3.09	7.56	Excellent	Good		High	40 plus	20+	High	Good	Retain	Retain - Impacts to Manage	
53	-34.442056	147.5439	<i>Koelreuteria paniculata</i> (Golden Rain Tree)	Exotic	No	Small	Mature	0.44	0.32	7	12	113.143	2.34	3.84	Excellent	Good		Very Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
54	-34.44205	147.5439	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Medium	Semi Mature	0.85	0.65	15	18	254.571	3.09	7.8	Good	Good		Medium	40 plus	10-20	Moderate	Excellent	Retain	Retain - Significant impacts to manage	
55	-34.44205	147.5439	<i>Ulmus glabra</i> 'Lutescens' (Golden Elm)	Exotic	Yes	Small	Mature	0.28	0.18	5	4	12.5714	1.94	2.16	Fair	Fair	Light infestation of elm leaf beetle	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Not determined	Remove if required
56	-34.442011	147.544	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Medium	Semi Mature	0.76	0.46	14	15	176.786	2.95	5.52	Fair	Good		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts to Manage	
57	-34.442047	147.544	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
58	-34.442088	147.544	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
59	-34.442139	147.5441	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
60	-34.442182	147.5441	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
61	-34.442221	147.5441	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
62	-34.442276	147.5441	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.65	6.5	5	19.6429	3.31	7.8	Very Poor	Very Poor	Heavy dieback - later stages of decline	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	
63	-34.442141	147.5441	<i>Fraxinus oxycarpa</i> "Raywoodii" (Claret Ash)	Exotic	No	Small	Semi Mature	0.26	0.2	9	8	50.2857	1.88	2.4	Excellent	Good		Very Low	15 plus	5-10	Low or nil	Good	Retain if possible	Retain - Impacts to Manage	
64	-34.442238	147.5442	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Medium	Semi Mature	0.57	0.43	14	14	154	2.61	5.16	Good	Excellent		Medium	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts to Manage	
65	-34.442405	147.5442	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	2	0.87	10	8	50.2857	4.43	10.44	Poor	Poor		Very Low	0 to 5	5-10	Low or nil	Very Poor	Remove Priority	Retain - Impacts to Manage	
66	-34.442446	147.5442	<i>Tamarix aphylla</i> (Athol Pine)	Exotic	No	Small	Senescent	1	0.69	5	4	12.5714	3.31	8.28	Poor	Poor		Very Low	0 to 5	5-10	Low or nil	Very Poor	Remove Priority	Not determined	Recommend removal
67	-34.442474	147.5441	<i>Tamarix aphylla</i>	Exotic	No	Small	Senescent	1	0.69	5	4	12.5714	3.31	8.28	Poor	Poor		Very Low	0 to 5	5-10	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	

Tree No	Lat	Lon	Species	Species Origin	NSW Native Veg	General Size	Age Class	Stem base Ø (m)	DBH (m)	Height (m)	Canopy Ø	Canopy Area (M²)	SRZ Radius in m centre of stem	IPZ Radius in m from stem	Tree Vigour	Tree Structure	Factors, Observed Conditions or Issues Commentary on tree	Enviro Rating or Value	Estimated remaining useful life	Replacement Time Frame	Significant Tree Value	Retention Value	Recommended Action for planning of development	Development Impact	Other Comments
68	-34.442486	147.5441	Fraxinus oxycarpa "Raywoodii"	Exotic	No	Medium	Semi Mature	0.36	0.36	12	9	63.6429	2.15	4.32	Good	Good		Very Low	15 plus	5-10	Low or nil	Good	Retain if possible	Remove - Direct Conflict	
69	-34.442487	147.544	Fraxinus oxycarpa "Raywoodii"	Exotic	No	Medium	Semi Mature	0.4	0.3	9	6	28.2857	2.25	3.6	Fair	Good		Very Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Remove - Direct Conflict	
70	-34.442503	147.5439	Grevillea robusta (Silky Oak)	Aus Native	No	Medium	Mature	0.6	0.4	12	6	28.2857	2.67	4.8	Fair	Good		Medium	15 plus	10-20	Low or nil	Fair	Retain if possible	Remove - Direct Conflict	
71	-34.442522	147.5442	Corymbia citriodora , (Lemon Scented Gum,)	NSW Native	Yes	Large	Semi Mature	0.96	0.75	18	18	254.571	3.25	9	Excellent	Excellent		High	40 plus	20+	High	Excellent	Retain	Retain - Significant impacts to manage	
72	-34.442592	147.5443	Olea europaea (Common olive)	Exotic	No	Small	Semi Mature	0.15	0.15	5	4	12.5714	1.50	1.8	Good	Good	Likely seeded in location	Very Low	15 plus	0-5	Low or nil	Poor	Remove	Not determined	Remove if required
73	-34.442692	147.5443	Corymbia citriodora , (Lemon Scented Gum,)	NSW Native	Yes	Large	Mature	1.4	0.95	20	20	314.286	3.81	11.4	Excellent	Excellent		High	40 plus	50+	High	Excellent	Retain Priority	Retain - Significant impacts to manage	construction traffic likely
74	-34.442732	147.5444	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Semi Mature	0.44	0.25	5	4	12.5714	2.34	3	Excellent	Fair		Medium	5 to 15	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
75	-34.442638	147.5441	Jacaranda mimosifolia	Exotic	No	Small	Mature	0.33	0.3	7	10	78.5714	2.08	3.6	Good	Good		Very Low	5 to 15	5-10	Low or nil	Fair	Retain if possible	Remove - Direct Conflict	
76	-34.442874	147.5443	Schinus molle (Peppercorn)	Exotic	No	Small	Over Mature	1	0.8	7	8	50.2857	3.31	9.6	Good	Poor	Extensive basal decay	Very Low	0 to 5	5-10	Low or nil	Very Poor	Remove Priority	Remove - Direct Conflict	Remove to protect tree 73 use this area for construction traffic
77	-34.442893	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Semi Mature	0.6	0.48	8	8	50.2857	2.67	5.76	Good	Good		Low	40 plus	10-20	Low or nil	Fair	Retain if possible	Remove - Direct Conflict	Remove to protect tree 73 use this area for construction
78	-34.442936	147.5437	Fraxinus angustifolia subsp. oxycarpa (Desert Ash)	Exotic	No	Medium	Mature	1.02	0.64	12	12	113.143	3.34	7.68	Good	Good		Very Low	15 plus	20+	Low or nil	Good	Retain if possible	Remove - Direct Conflict	
79	-34.442874	147.5438	Schinus molle (Peppercorn)	Exotic	No	Small	Over Mature	1.15	0.64	8	8	50.2857	3.51	7.68	Poor	Poor	extensive basal and stem decay	Very Low	0 to 5	5-10	Low or nil	Poor	Remove	Remove - Direct Conflict	
80	-34.442891	147.5439	Lagunaria patersonia (Norfolk Island hibiscus)	Aus Native	No	Small	Over Mature	0.3	0.28	6	5	19.6429	2.00	3.36	Poor	Fair		Low	5 to 15	0-5	Low or nil	Poor	Remove	Remove - Direct Conflict	
81	-34.442908	147.5439	Jacaranda mimosifolia	Exotic	No	Small	Over Mature	0.23	0.2	6	5	19.6429	1.79	2.4	Poor	Poor		Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Remove - Direct Conflict	
82	-34.442937	147.5439	Lagunaria patersonia (Norfolk Island hibiscus)	Aus Native	No	Small	Mature	0.6	0.35	10	5	19.6429	2.67	4.2	Good	Fair		Low	5 to 15	5-10	Low or nil	Fair	Remove	Remove - Direct Conflict	
83	-34.442991	147.5439	Grevillea robusta (Silky Oak)	Aus Native	No	Medium	Mature	0.5	0.35	13	6	28.2857	2.47	4.2	Fair	Fair		Medium	15 plus	5-10	Low or nil	Good	Retain if possible	Remove - Direct Conflict	
84	-34.44304	147.5438	Arbutus unedo (Irish strawberry tree)	Exotic	No	Medium	Mature	1.5	0.7	6	12	113.143	3.92	8.4	Good	Good	Tree of some age	Very Low	15 plus	10-20	Low or nil	Good	Retain if possible	Remove - Direct Conflict	
85	-34.44304	147.5441	Schinus molle (Peppercorn)	Exotic	No	Medium	Mature	1	0.85	12	12	113.143	3.31	10.2	Good	Poor	Canopy 100% to north side of stem	Very Low	5 to 15	10-20	Low or nil	Poor	Remove	Retain - Impacts to Manage	
86	-34.443078	147.5441	Schinus molle (Peppercorn)	Exotic	No	Medium	Mature	0.9	0.6	9	8	50.2857	3.17	7.2	Good	Good		Very Low	15 plus	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	
87	-34.443096	147.544	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Small	Mature	0.87	0.6	10	8	50.2857	3.12	7.2	Fair	Excellent		Medium	40 plus	20+	Moderate	Good	Retain	Retain - Impacts to Manage	
88	-34.443125	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Small	Mature	0.46	0.28	8	4	12.5714	2.39	3.36	Fair	Fair		Low	40 plus	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
89	-34.443165	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	1.36	0.8	10	10	78.5714	3.77	9.6	Good	Excellent	Very aged tree	High	40 plus	50+	High	Excellent	Retain Priority	Retain - Impacts unlikely	
90	-34.443229	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.7	0.6	10	8	50.2857	2.85	7.2	Fair	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
91	-34.443297	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.71	0.55	10	10	78.5714	2.87	6.6	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
92	-34.443326	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	1.3	1.1	11	13	132.786	3.69	13.2	Good	Good		High	40 plus	50+	High	Excellent	Retain Priority	Retain - Impacts unlikely	
93	-34.443355	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.65	0.58	10	12	113.143	2.76	6.96	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
94	-34.443433	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.93	0.8	9	9	63.6429	3.21	9.6	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
95	-34.443485	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.75	0.56	9	8	50.2857	2.93	6.72	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
96	-34.443635	147.5443	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.6	0.55	10	12	113.143	2.67	6.6	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
97	-34.443159	147.544	Olea europaea (Common olive)	Exotic	No	Small	Semi Mature	0.6	0.28	5	5	19.6429	2.67	3.36	Good	Fair		Very Low	40 plus	0-5	Low or nil	Fair	Remove	Retain - Impacts unlikely	
98	-34.44323	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Small	Mature	0.6	0.5	9	6	28.2857	2.67	6	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
99	-34.443302	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.66	0.46	9	10	78.5714	2.78	5.52	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
100	-34.443339	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.66	0.37	9	5	19.6429	2.78	4.44	Fair	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
101	-34.443372	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.4	0.36	10	9	63.6429	2.25	4.32	Excellent	Excellent		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
102	-34.443415	147.5441	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.57	0.4	10	10	78.5714	2.61	4.8	Fair	Fair		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
103	-34.443575	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Medium	Mature	0.97	0.64	14	14	154	3.27	7.68	Excellent	Fair	stems low risk of failure	Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
104	-34.443592	147.5442	Brachychiton populneus (Kurrajong)	NSW Native	Yes	Small	Mature	0.4	0.28	8	4	12.5714	2.25	3.36	Fair	Fair		Medium	40 plus	20+	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	

Tree No	Lat	Lon	Species	Species Origin	NSW Native Veg	General Size	Age Class	Stem base Ø (m)	DBH (m)	Height (m)	Canopy Ø	Canopy Area (M²)	SRZ Radius in m centre of stem	IPZ Radius in m from stem	Tree Vigour	Tree Structure	Factors, Observed Conditions or Issues Commentary on tree	Enviro Rating or Value	Estimated remaining useful life	Replacement Time Frame	Significant Tree Value	Retention Value	Recommended Action for planning of development	Development Impact	Other Comments
105	-34.443571	147.5441	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Mature	0.84	0.58	9	10	78.5714	3.08	6.96	Fair	Fair		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
106	-34.443546	147.5441	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Mature	0.59	0.4	10	11	95.0714	2.65	4.8	Fair	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts unlikely	
107	-34.443508	147.5441	<i>Schinus molle</i> (Peppercorn)	Exotic	No	Medium	Over Mature	0.14	0.9	6	7	38.5	1.50	10.8	Fair	Poor	massive basal cavity	Very Low	0 to 5	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely	
108	-34.443504	147.544	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Mature	0.9	0.54	11	9	63.6429	3.17	6.48	Good	Good		Medium	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
109	-34.443618	147.544	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Small	Young	0.3	0.2	9	4	12.5714	2.00	2.4	Excellent	Excellent		Very Low	40 plus	5-10	Low or nil	Good	Retain if possible	Retain - Impacts unlikely	
110	-34.443673	147.5441	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Semi Mature	0.88	0.73	10	7	38.5	3.14	8.76	Fair	Fair		Medium	15 plus	20+	Moderate	Fair	Retain if possible	Retain - Impacts unlikely	
111	-34.443711	147.544	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.88	0.6	9	8	50.2857	3.14	7.2	Good	Good		Medium	40 plus	10-20	Low or nil	Good	Retain if possible	Retain - Impacts unlikely	
112	-34.443508	147.5439	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Semi Mature	0.46	0.31	8	7	38.5	2.39	3.72	Good	Good		Medium	40 plus	10-20	Low or nil	Good	Retain if possible	Retain - Impacts to Manage	
113	-34.443445	147.5438	<i>Schinus molle</i> (Peppercorn)	Exotic	No	Small	Over Mature	1	0.9	8	11	95.0714	3.31	10.8	Good	Fair	Large cavity in stem - low risk of failure	Very Low	15 plus	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
114	-34.443565	147.5438	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Young	0.34	0.24	7	4	12.5714	2.10	2.88	Excellent	Excellent		Low	40 plus	5-10	Low or nil	Good	Retain if possible	Retain - Impacts to Manage	
115	-34.443646	147.5438	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Young	0.34	0.24	7	4	12.5714	2.10	2.88	Excellent	Excellent		Low	40 plus	5-10	Low or nil	Good	Retain if possible	Retain - Impacts to Manage	
116	-34.443759	147.5438	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	0.58	0.36	17	8	50.2857	2.63	4.32	Excellent	Good		Low	40 plus	20+	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
117	-34.443742	147.5437	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	1.02	0.77	20	14	154	3.34	9.24	Poor	Good		Low	40 plus	20+	Moderate	Good	Retain if possible	Retain - Impacts unlikely	
118	-34.443819	147.5436	<i>Eucalyptus cladocalyx</i> , (sugar gum)	Aus Native	No	Very Large	Over Mature	1.03	0.8	28	9	63.6429	3.35	9.6	Fair	Poor	Cavity in stem at 3m, open on two sides - stem failure potential high. Tree very exposed to wind loading - other tree recently removed - all wind loading is well above weak point in stem. Decay extends 4m vertically and further hollows	High	0 to 5	50+	Moderate	Poor	Remove Priority	Retain - Impacts unlikely	Pruning is not considered a viable option - due to canopy structure remove tree.
119	-34.443839	147.5435	<i>Eucalyptus cladocalyx</i> , (sugar gum)	Aus Native	No	Very Large	Over Mature	1.08	0.68	24	6	28.2857	3.42	8.16	Fair	Poor	Extensive decay in stem at 3m - High probability of failure other defects in canopy	High	0 to 5	50+	Moderate	Poor	Remove Priority	Retain - Impacts unlikely	Pruning is not considered a viable option - due to canopy
120	-34.443748	147.5435	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	1.08	0.78	18	18	254.571	3.42	9.36	Fair	Fair	failed stem at 12m mark - 280mm Ø all of canopy unbalanced to north	Low	5 to 15	50+	High	Fair	Retain if possible	Retain - Impacts unlikely	Canopy requires weight reduction - pruning to retain in high use amenity area.
121	-34.443777	147.5434	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	1.1	0.71	27	10	78.5714	3.44	8.52	Fair	Good	Stem unions considered lower risk	Low	15 plus	50+	High	Good	Retain	Retain - Impacts unlikely	
122	-34.443814	147.5433	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	1.12	0.85	25	13	132.786	3.47	10.2	Good	Good		Low	40 plus	50+	High	Good	Retain	Retain - Impacts unlikely	
123	-34.443822	147.5432	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Large	Mature	1.1	0.9	26	15	176.786	3.44	10.8	Good	Fair	Stem has moved in ground decades ago - now considered normalised - low risk of failure	Low	40 plus	50+	High	Good	Retain	Retain - Impacts unlikely	
124	-34.443726	147.5433	<i>Eucalyptus sideroxylon</i> , mugga ironbark, or red	NSW Native	Yes	Medium	Mature	6	0.47	12	10	78.5714	7.02	5.64	Fair	Fair	stem has failed at 3m mark - cavity in stem with very extended above cavity - failure potential	Medium	5 to 15	10-20	Low or nil	Poor	Remove	Retain - Impacts unlikely	
125	-34.443716	147.5434	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Medium	Semi Mature	0.72	0.43	15	7	38.5	2.88	5.16	Fair	Fair	Supressed tree by larger	Low	15 plus	10-20	Low or nil	Poor	Remove	Retain - Impacts unlikely	
126	-34.443687	147.5434	<i>Pinus halepensis</i> , (Aleppo pine),	Exotic	No	Medium	Semi Mature	0.76	0.54	20	15	176.786	2.95	6.48	Good	Fair	4 small branch fails - less than 100 mm Ø	Medium	40 plus	20+	Moderate	Good	Retain	Retain - Impacts unlikely	
127	-34.44362	147.5435	<i>Brachychiton populneus</i> (Kurrajong)	NSW Native	Yes	Small	Over Mature	0.3	0.2	8	6	28.2857	2.00	2.4	Fair	Fair		Low	5 to 15	5-10	Low or nil	Poor	Remove	Retain - Impacts unlikely	
128	-34.443514	147.5435	<i>Eucalyptus albens</i> (White Box)	Remnant	Yes	Medium	Over Mature	1.14	0.82	15	14	154	3.50	9.84	Good	Poor	Extensive basal cavity - two stems from ground with Kurrajong tree/stem 300 mm Ø growing in cavity - structure presents as moderate to high risk of failure. Tree has been lopped at 6-7 m mark - epicormic shoots off lopping point about 75 mm Ø - present with good attachment. No evidence of decay in lopping point.	High	40 plus	50+	High	Fair	Retain	Retain - Impacts unlikely	
129	-34.443371	147.5436	<i>Fraxinus angustifolia subsp. oxycarpa</i>	Exotic	No	Medium	Mature	1.06	0.51	11	9	63.6429	3.39	6.12	Good	Fair		Very Low	15 plus	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
130	-34.443378	147.5435	<i>Schinus molle</i> (Peppercorn)	Exotic	No	Medium	Over Mature	1.4	1.2	7	12	113.143	3.81	14.4	Fair	Poor	extensive basal cavity in stem extends well into stem system	Very Low	5 to 15	10-20	Low or nil	Poor	Remove	Retain - Impacts to Manage	
131	-34.443329	147.5434	<i>Fraxinus angustifolia subsp. oxycarpa</i>	Exotic	No	Small	Mature	1.2	0.5	8	8	50.2857	3.57	6	Fair	Fair		Very Low	5 to 15	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
132	-34.443586	147.5434	<i>Fraxinus excelsior</i> 'Aurea' (Golden Ash)	Exotic	No	Very Small	Over Mature	0.33	0.15	4	2	3.14286	2.08	1.8	Very Poor	Very Poor	failed tree - species not suited to climate.	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely	
133	-34.443526	147.5432	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Large	Semi Mature	0.7	0.48	25	16	201.143	2.85	5.76	Good	Good		High	40 plus	20+	High	Excellent	Retain Priority	Retain - Impacts unlikely	
134	-34.443572	147.5432	<i>Corymbia citriodora</i> , (Lemon Scented Gum,)	NSW Native	Yes	Large	Semi Mature	1.03	0.78	27	20	314.286	3.35	9.36	Good	Good		High	40 plus	20+	High	Excellent	Retain Priority	Retain - Impacts unlikely	
135	-34.443646	147.5432	<i>Fraxinus angustifolia subsp. oxycarpa</i>	Exotic	No	Small	Senescent	0.68	0.49	7	6	28.2857	2.81	5.88	Very Poor	Very Poor		Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely	
136	-34.443687	147.5431	<i>Fraxinus angustifolia subsp. oxycarpa</i>	Exotic	No	Small	Senescent	0.66	0.4	7	7	38.5	2.78	4.8	Poor	Fair		Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Retain - Impacts unlikely	

[illegible]

Annexure 2 - Assessment and Evaluation criteria - Definitions. (Version date 13/03/2023)										
Species Origin		General Tree Size		Age Class		Overall Condition - summation of all considerations. Includes Stem/Canopy Structure Defects, Form, Canopy Vigour, Extent of any decay, Pest and Disease influences	ERL - estimated remaining useful life in years under current Situation	Tree Vigour	Retention value	
Remnant	Endemic species naturally occurring	Very Large	> 25m	New	Recent Planting - last year or two	Excellent	0	Excellent	Excellent	Interpretation Based on overall tree condition, species performance in local environment, expected remaining life significance of tree in landscape and replacement time frame
Endemic	Species is native to this location but not remnant	Large	18-25m	Young	Sapling, extended growth remaining	Good	0 to 5	Good	Good	
NSW Native	Meets definition of Native Vegetation - SEEP (Biodiversity and Conservation)	Medium	10-18m	Semi Mature	Some remaining growth to reach maturity for the site and species	Fair	5 to 15	Fair	Fair	
		Small	< 10m	Mature	Considered mature size for site and species - typically no sign of decline	Poor	15 plus	Poor	Poor	
		Very Small	< 3m	Over Mature	Tree has commenced to decline - obvious signs	Very Poor	40 plus	Very Poor	Very Poor	
Aus Native	Species native to Australia but not this location and does not meet definition of NSW Native			Senescent	Extended signs of decline - recovery not expected					
				Dead	Little or no metabolic function remaining					
Exotic	Species introduced to Australia									
Environmental Rating/Value	Environmental Evaluation Considerations/criteria							Picks		
Very High	Normally Old growth Remnant Tree, multiple hollows important to threatened or endangered fauna, replacement would be well in excess of 150 years							Replacement times 0-5 5-10 10-20 20+ 50+ 100+	1	Very High
High	Large or mature Endemic Tree or Aus Native that has high substitute values as endemic tree with or without hollows, plays an important part in local ecology - replacement would take 50-100 years								2	High
Medium	Young or semi mature Endemic tree or Aust 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.								3	Moderate
Low	Normally exotic species, or small, young endemic or native that could be replaced in the short term 5-10 years								4	Low or nil
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								5	Yes
Significant Tree value considerations/criteria						Recommended Action for DA/Development	Primary Reasons		No	

Significant Tree value considerations/criteria	
Very High	Defined as Significant Tree by regulatory or other authority or
	Environmental rating very high or
	Heritage Listed or
	Very High Cultural or heritage Values
High	Environmental rating high or
	Medium or large tree in good/excellent condition, suited to local environment or
	imposing within the local landscape with long life expectancy and or
	strong amenity values or some cultural or heritage links
Moderate	A tree that is somewhat noteworthy - it is likely to grow into a significant tree
Not Significant	A tree with low or very values to the environment or local amenity

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
	Not suited to Environment
	Condition or Safety
	Low amenity values
	Direct Conflict with DA
	Exempt species
	Exempt height
	Weed Species
	Other

Known Development Impact	
Remove - Direct Conflict	
Retain - Significant impacts to manage	
Retain - Impacts to Manage	
Retain - Impacts unlikely	
Not determined	

Other Definitions

Significance - 'sufficiently great or important to be worthy of attention; noteworthy'. Oxford Dictionary (2022).

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

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.

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

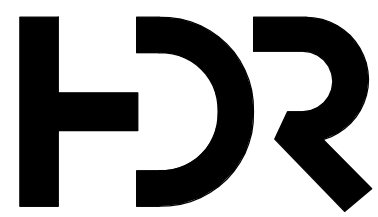
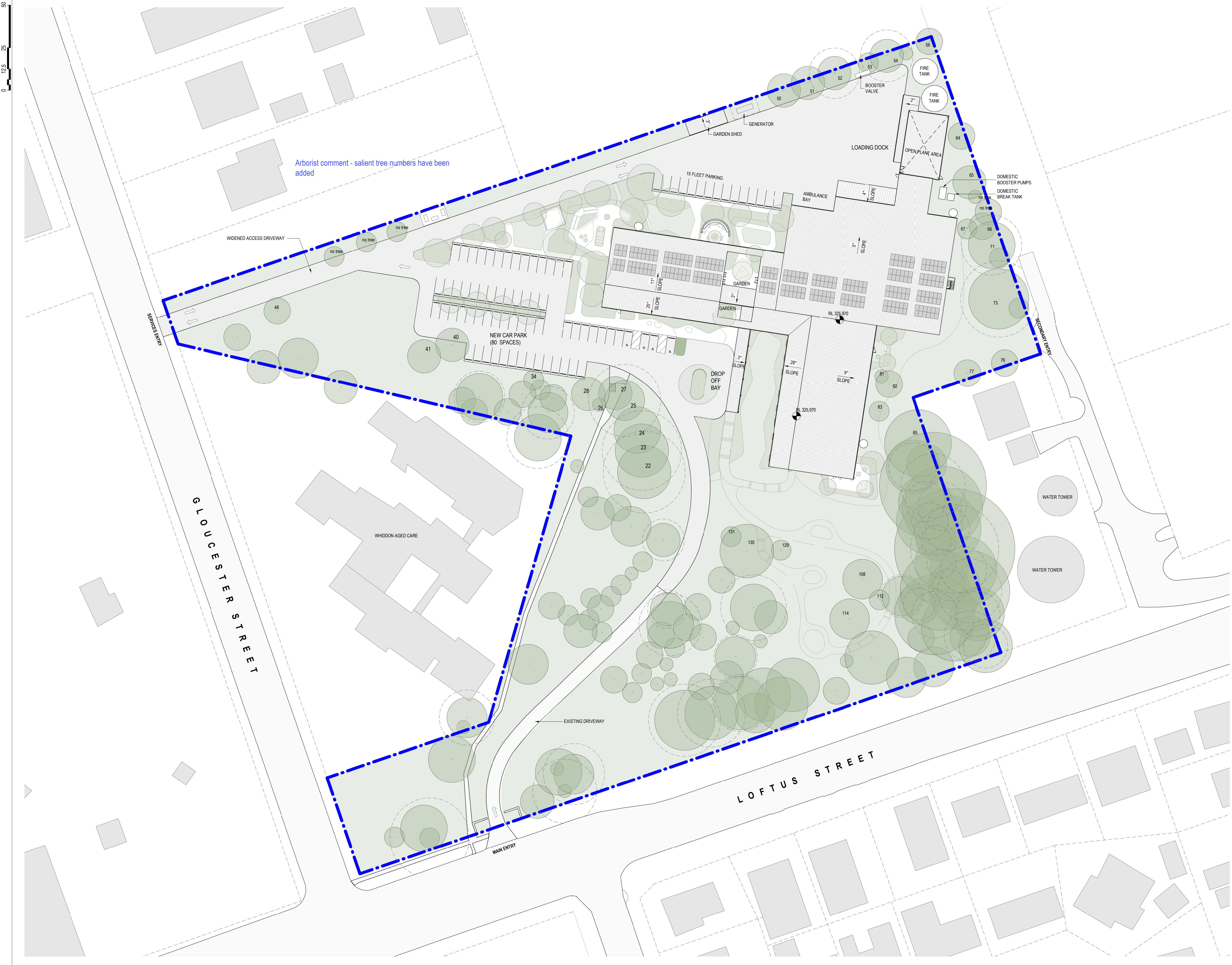
TPZ and SRZ are calculated from AS 4970

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.

Detailed explanation of Recommendations for Development	
Retain Priority	The Tree is a high value tree from an amenity, environmental or other perspective - its removal should only occur under some extenuating circumstance
Retain	The tree has good or excellent retention values - a compelling reason should exist to remove the tree
Retain if Possible	The tree has some positive values for retention - it will not be significant - the 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 a new tree is a better option
Remove Priority	The tree condition, structure, size species of other consideration dictates that the tree should be removed and not retained for stated reasons.



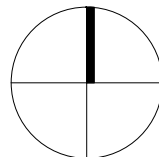
Annexure 3 - Priority Tree Locations. Trees graded as Retain Priority or Retain. Source - adapted from Google Earth 2023.



Level 24, 25 Martin Place, Sydney NSW, 2000, Australia
+61 2 9566 2666 | hdnrc.com
HDR Pty. Limited ABN 76 158 075 220 trading as HDR
NOMINATED ARCHITECT: Cate Cowlishaw 10786 (NSW)

THIS DOCUMENT IS THE COPYRIGHT OF HDR.
ALL INFORMATION ILLUSTRATED ON THIS DOCUMENT IS TO BE
CHECKED AND VERIFIED ON SITE. IN THE EVENT OF DISCREPANCIES
REFER TO ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK. DO
NOT SCALE DRAWINGS MANUALLY OR ELECTRONICALLY.

NORTH POINT



KEY PLAN

TREE PROTECTION ZONE FOR
HIGHER RETENTION VALUE TREES

REV	DESCRIPTION OF CHANGE	DATE	CHECKED	ISSUED
0	PRELIMINARY	13/10/23	HDR	
1	PRELIMINARY	16/10/23	HDR	
2	FOR INFORMATION	14/12/23	HDR	
3	FOR INFORMATION	21/12/23	HDR	
4	FOR INFORMATION	10/01/24	HDR	
5	PRELIMINARY	31/01/24	HDR	

DRAWING LEGEND

- SITE BOUNDARY
- LOT BOUNDARY
- PROPOSED HOSPITAL BUILDING - ROOF
- PROPOSED CARPARK / DRIVEWAYS / WALKWAYS
- EXISTING CARPARK / DRIVEWAYS / WALKWAYS
- TREES RETAINED
- PROPOSED TREES
- PROPOSED LANDSCAPE AREAS
- TREE PROTECTION ZONE FOR HIGHER RETENTION VALUE TREES

CLIENT



PROJECT
**TEMORA HOSPITAL
REDEVELOPMENT
TEMORA NSW 2666**

DRAWING TITLE
SITE PLAN - PROPOSED

SCALE
1 : 500 @ A1
DRAWING NUMBER

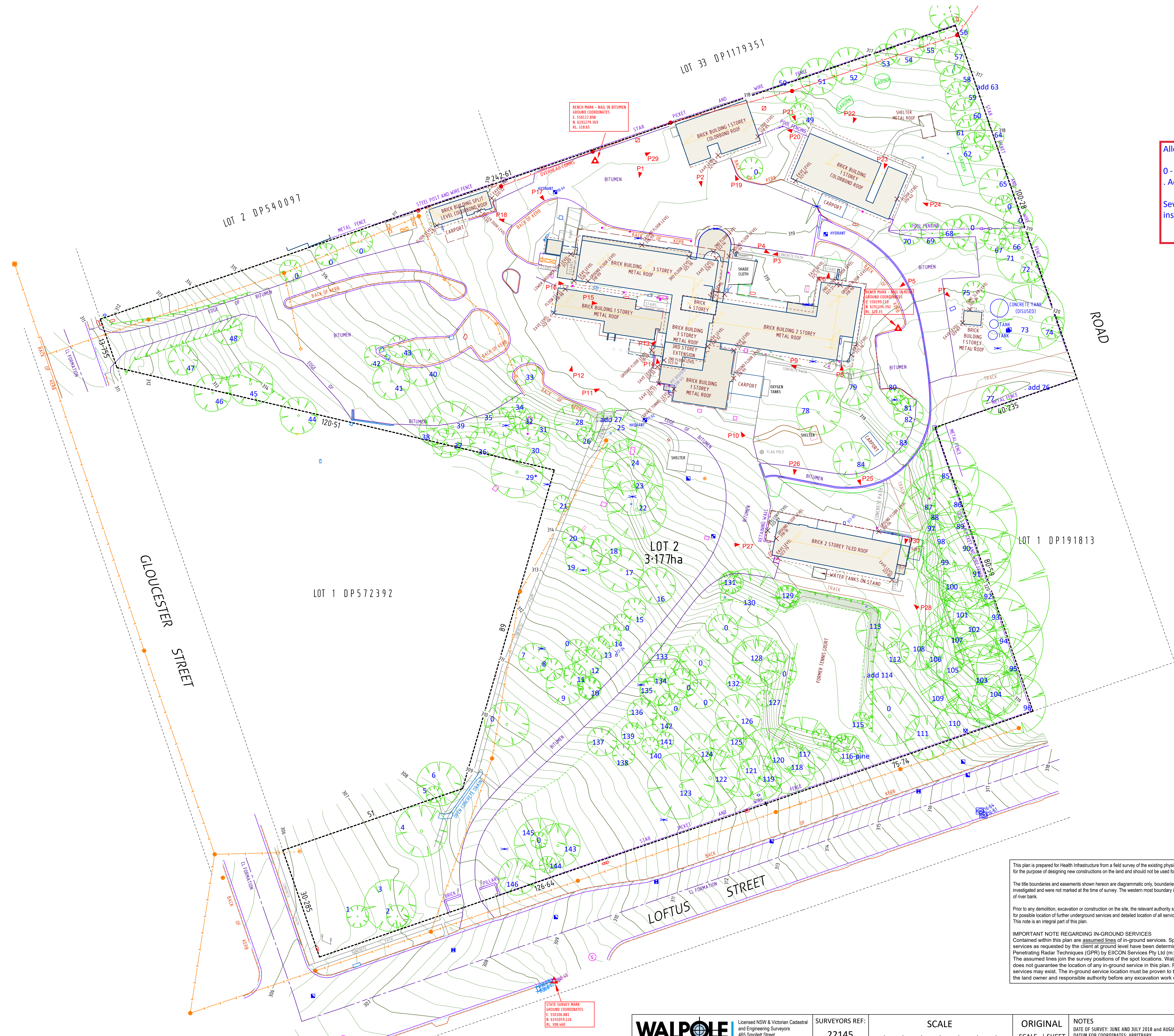
130908-HDR-AR-DWG-1301

PROJECT STATUS
PRELIMINARY

PROJECT NUMBER
130908

ISSUE
5

31/01/2024 3:41:03 PM



Allocation of tree numbers to plan. Arborist - Wade Ryan 23/05/2023

0 - No tree present - has been removed
 . Add tree - include new tree at this location with tree number

Several small shrubs around tree 116 form part of 116 or are insignificant

LEGEND

● ELECTRIC POLE	■ STOP VALVE
● POLE & TRANSFORMER	■ FIRE HYDRANT
● ELECTRIC STAY	● WATER METER
● POLE & LIGHT	● GAS MARKER
● LIGHT POLE	● GAS METER
● COMMS PIT	● SEWER PIT SQUARE
● COMMS MARKER POST	● SEWER MAN HOLE
● COMMS PILLAR	● SEWER INSPECTION
● BOLLARD	● ACCESS SHAFT UNCLASS
● COMMS POLE	● SIGN
■ SUBSTATION	■ DRAINAGE PIT
■ GENERATOR	■ ROUND POST
■ ELECTRIC STAY	■ CONC POST
■ ELECTRICITY OVERHEAD	
— ROOF LINE	
— BUILDING WALL	
— EAVE AND GUTTER	
— VERANDAH/BALCONY	
— KERB BACK	
— KERB INVERT	
— KERB LIP	
— 0-3 UNDERGROUND POWERLINES	
— 0-3 SEWERAGE LINE AND DEPTH	
— 0-3 STORMWATER DRAINAGE LINE AND DEPTH	
— 0-3 WATER MAIN AND DEPTH	
— 0-3 COMMUNICATIONS LINE AND DEPTH	
— 0-3 UNDERGROUND GAS LINE AND DEPTH	
— SEWER APPROX FROM OLD HOSPITAL PROPOSED PLANS	
— UNDERGROUND GAS PLOTTED FROM DBYD	
— UNDERGROUND WATER PLOTTED FROM COUNCIL RECORDS	

► P27 - PHOTO AND DIRECTION AND PHOTO NUMBER

DATUM FOR COORDINATES:
 GROUND - APPLY CSF 0.999578 ABOUT 0.0 FOR GRID

UNDERGROUND SERVICES AS DETERMINED BY EIICON: 0419 568331
 QUALITY LEVEL B (AS 5488.1:2019)

SERVICES NOTES:

- ONLY THOSE SERVICES VISIBLE AT THE TIME OF SURVEY HAVE BEEN LOCATED AND IF SHOWN AS "36.48" ARE QUALITY LEVEL A AS DEFINED BY AS 5488.1:2019. LEVELS SHOWN ARE SURFACE LEVELS UNLESS NOTED OTHERWISE.
- UNDERGROUND SERVICES HAVE BEEN LOCATED FOR POSITION AND DEPTH AND HAVE BEEN DETERMINED FROM USING EIICON 25/08/2022. ALL RELEVANT AUTHORITIES MUST BE CONTRACTED TO DETERMINE THE FULL EXTENT OF SERVICES PRIOR TO ANY PLANNING OR WORKS NEAR THE SITE.

1:50m
 DENOTES POINT MARK MEASURED AND DEPTH



GPR methodology in finding services is limited due to materials of construction. PVC and clay are difficult to locate and may need other methods to determine location.
 (As advised by EIICON and maintenance)

This plan is prepared for Health Infrastructure from a field survey of the existing physical features of the site for the purpose of designing new constructions on the land and should not be used for any other purpose.

The title boundaries and easements shown hereon are diagrammatic only, boundaries have not been fully investigated and were not marked at the time of survey. The western most boundary is determined by top of river bank.

Prior to any demolition, excavation or construction on the site, the relevant authority should be contacted for possible location of further underground services and detailed location of all services.
 This note is an integral part of this plan.

IMPORTANT NOTE REGARDING IN-GROUND SERVICES
 Contained within this plan are assumed lines of in-ground services. Spot locations of services as requested by the client at ground level have been determined using Ground Penetrating Radar Techniques (GPR) by EIICON Services Pty Ltd (m: 0419 568331). The assumed lines join the survey positions of the spot locations. Walpole Surveying does not guarantee the location of any in-ground service in this plan. Further in-ground services may exist. The in-ground service location must be proven to the satisfaction of the land owner and responsible authority before any excavation work commences.

WALPOLE SURVEYING

Licensed NSW & Victorian Cadastral and Engineering Surveyors
 465 Smidell Street
 PO Box 3186, Albury, NSW 2640
 p: 02 6021 2233 | f: 02 6021 1411
 info@walpolesurveying.com.au

SURVEYORS REF:
 22145
 VERSION 2
 18/10/2022

SCALE
 5 10 15 20 25
 LENGTHS ARE IN METRES

ORIGINAL
 SCALE
 1:500
 SHEET
 SIZE
 A1

NOTES
 DATE OF SURVEY: JUNE AND JULY 2018 AND AUGUST 2022
 DATUM FOR COORDINATES: ARBITRARY
 DATUM FOR LEVELS: AHD VIDE 55M100248
 CONTOUR INTERVAL: 0.2m
 TREES SHOWN ARE APPROXIMATELY TO SCALE

PLAN OF FEATURES, LEVELS AND SERVICES
 LOT 2 IN DP572392
 169-189 Loftus Street, Temora
 For Health Infrastructure