ARBORICUTURAL IMPACT ASSESSMENT FOR 2023 DEVELOPMENT AT; MOREE HOSPITAL NSW 2400

1. INTRODUCTION.

NSW Health Infrastructure propose to redevelop the Moree Hospital, 35 Alice Street Moree, NSW 2400.

Moree Hospital Redevelopment (MHR) Project Description (Main Works REF)

The objective of the Moree Hospital Redevelopment (MHR) Project is to align the recommendations of the endorsed CSP with new contemporary patient care facilities to support the adoption of new and improved models of care. The primary focus of this Project is to provide asset replacement through consolidation of services into a new two-story Acute Services Building (ASB). The ASB will be located on the south section of the existing site along Alice Street and provide a new main access to the campus.

The Project scope to redevelop Moree Hospital, in line with the CSP, include the master planning and delivery of the following:

- Emergency care services
- Overnight inpatient beds
- Operating theatre
- Imaging services
- Birthing suites
- Pathology shell space
- Clinical support services

In addition to the above clinical services, the redevelopment will also incorporate associated works such as:

- A new hospital main entry and Front of House
- Back of House services
- Modifications to existing car parking
- Landscaping
- decommissioning & demolition of redundant existing facilities
- A new substation, and
- A new loading dock & services yard area

2. SCOPE AND PURPOSE.

The report has been commissioned by Michael McMahon - Savills Project Management Pty Ltd – on behalf of Health Infrastructure NSW. He can be contacted at mmcmahon@savills.com.au Mohammad Ashari of NSW Health Infrastructure is the Project Director – he can be contacted on 0410966694.

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A preliminary arboricultural assessment was conducted across the site and a report dated 21 June 2022 developed to guide the planning process relative to the existing tree population and provided recommendations for individual tree significance, trees identified as worth retaining within the development or trees identified for removal.

This report is designed to provide;

- accurate identification of tree vegetation and tree condition
- evaluation of the site tree population relative to their contribution to the environment, amenity, cultural and any other identified values
 - identify trees with high retention values and maximise existing canopy coverage
- evaluation of development impacts on the existing tree population
- recommendations for retention or removal of trees and management of any issues identified at this stage of planning.
- Accompany the development applications for planning approval.

Various drawings were supplied to aid in the evaluation process including the following;

- Moree Hospital Redevelopment 35 Alice Street Moree NSW 2400. Existing Site Plan.
 Document MHR-STH-AR-DR-SW-01XX01. Revision C Dated 05/09/2023.
- Moree Hospital Redevelopment 35 Alice Street Moree NSW 2400. Proposed Site Plan.
 Document Number MHR-STH-AR-DR-SW-10XX01 Revision E dated 05/09/2023.
- Moree Hospital Redevelopment 35 Alice Street Moree NSW 2400. Tree Removal and Retention Plan. Document number MHR-TB-LA-DR-SW-300. Revision P5 dated 02/11/2023. Taylor Brammer Landscape architects. .

These documents have been reproduced at the conclusion of this report.

<u>Annexure 1 – Tree Data File Impact Assessment for Development</u> provides a detailed list of the existing tree population and all salient data on each tree. It provides detailed evaluation criteria of the trees surrounding the development and impact assessment relative to each tree. It is also attached at the conclusion of the report.

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

Arboriculture Impact Assessment follows a process as outlined below.

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 Arboriculture Report is prepared for this purpose to assisting planning of a development and which specific trees are of the highest significance and retention value.

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- b. <u>Step 2.</u> The information and conclusions on tree values should be used to guide planning processes to retain trees and specifically higher value trees, and be used as a guide as to the likely impact assessment.
- c. <u>Step 3. Impact Assessment Report.</u> Once the development plan is determined or finalised then an impact assessment report is prepared.
 - 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 s a guide and interpretation as to what impacts can be managed and typical tree protection measures.
 - e. Annexure 1 will 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. <u>Step 4. Tree Protection Measures.</u> 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 plans.

3. SITE CONDITIONS AND BACKGROUND.

The site is bounded by Victoria Terrace to the north and Alice Street to the south. The current Hospital site consists of a range of buildings, car parks of varying ages and open space areas. As such there are also trees scattered across the site of various ages and conditions. All trees and shrubs on site are considered amenity plantings – there are no remnant trees identified, although there are Australian Native species. Some 80 trees and shrubs have been identified across the site including a number of tees that are controlled by Moree Plains Shire Council. The site area is approximately 34,000 square meters (NSW Spatial Map Viewer 2022.)

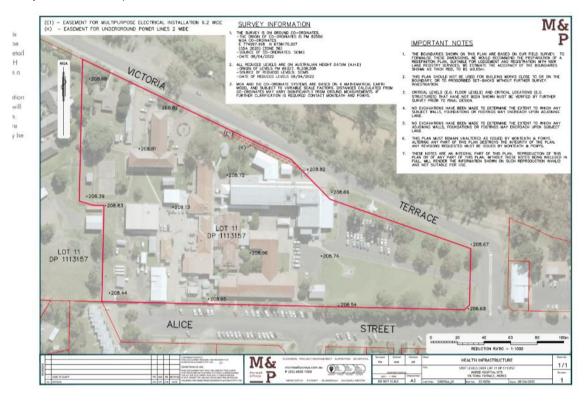


Diagram 1 - Site Location and lot boundary. Source – Adapted from supplied plans.

4. SUMMARY OF INITIAL TREE ASSESSMENT AND EVALUATION.

- 80 Trees and shrubs have been identified and recorded. Many of the trees and shrubs are small (less than 8 meters in height) and are of little significance. Note that several trees on the west boundary were not surveyed.
- Each tree is individually graded for its retention values within the development area based upon a range of criteria as detailed within *Annexure 1 Tree Data file* contained at the conclusion of the report. The following Table A is a summary of individual tree retention values.

	Table A – Summary of Existing Tree Evaluation										
Evaluation Category	Descriptors	Tree No's									
Retain Priority	 Tree Significance, High or Very High. Strong positive amenity and/or other values – normally long life expectancy. Replacement very long term 50 - 100 years or more Removal would be very difficult to justify 	5 Trees in total Tree numbers 37,40,41,49,68									
Retain	 Tree significance moderate or high Positive Amenity values and/or other values with longer life expectancy Replacement long term 30 - 80 years. Removal would be difficult to justify. 	26 Trees in Total Tree Numbers 19 to 36 inclusive 42,43,44,45,52,53,71 & 76									
Retain if Possible	 Tree with some positive landscape, amenity or other values 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. 	10 Trees in total. Tree numbers 47,48,51,52,54, 61,63,67,69,74									
Remove	 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 0-7 years. 	39 Trees in total Tree Numbers 1 to 18 Inclusive 38,39,50,55,56,57,58,59,60									

	Table A – Summary of Existing Tree Evaluation											
Evaluation Category	Descriptors	Tree No's										
	At this point a new tree is normally considered a better long term option.	62,64,65,66,70,72,73,75 77 to 80.										
Remove Priority	 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>1 Tree in total</u> Tree number 46.										

- The referenced drawings provided below provides the location of each tree and a tree number has been added where required.
- The Tree protection zone (TPZ) is expressed as radius meters form stem centre.

Significant Trees.

- Very High Significance No trees were identified with very high significance.
- o High Significance 6 Trees are identified. Tree numbers 37, 40, 41, 49, 52 and 68.
- o Moderate significance 31 Trees are identified.
- The line of 18 *Jacaranda mimosifolia* on Alice Street Council Verge (Tree numbers 19 to 36 inclusive) are also considered significant as a line or group of trees that provide quality amenity values.
- Existing Site Canopy coverage. The area of the site is approximated at 34,000 square meters. The theoretical canopy coverage from the survey indicated current canopy coverage of approximately 4,470 square meters. This equates to about 13% site canopy coverage that is considered quite a small percentage. Opportunity exists to improve this percentage.

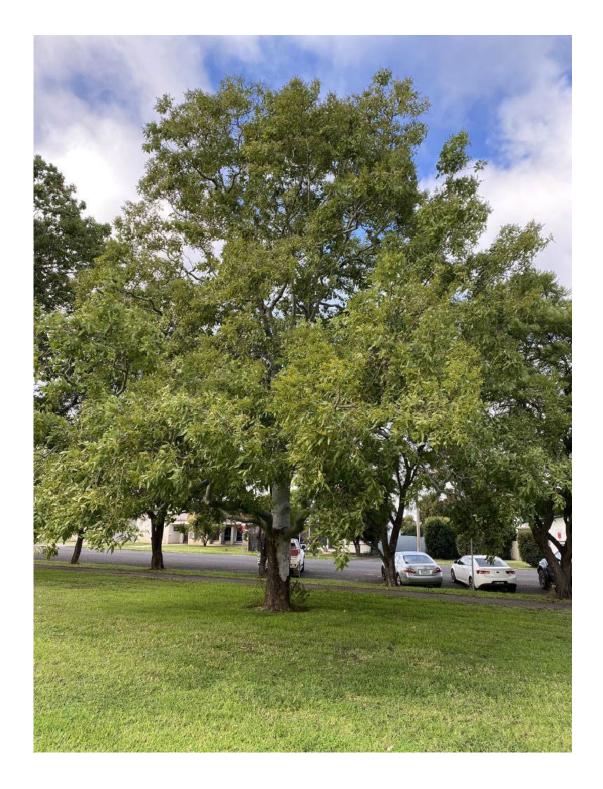


Photo 1 – Tree 41 - Corymbia tessellaris (Carbeen) in location near Alice Street – east end. Example of a tree evaluated with high significance. The tree is a young mature tree in excellent condition with long life expectancy and evaluated as 'Retain Priority'.





Photo 4 – Alice Street – Line of Jacaranda mimosifolia – Council Street verge trees.

Tree numbers 19 to 36 in sequence from left. Example of trees evaluated with individual moderate significance. Image from Google Street view 2010. At that time the trees offered quality amenity values which are now enhanced as the trees have grown further. As a line of quality trees the line can be considered as having high significance.

The photo provides an excellent example of trees that have the parking opportunity of shade and those that do not.

Tree Retention or Removal Decisions.

Existing site trees that are of some age, have good structure and longer life expectancy should be considered for retention and protection unless there is a compelling reason to remove them. New trees cannot replace such trees within short space of time. The loss of tree benefits and public amenity is immediate and replacement time frames are in the order of decades for larger trees.

Alternatively trees in poor condition and/or with short useful life expectancy are normally recommended for removal on the basis that the effort and cost of retention through the development is not commensurate with short term amenity value, or risk a tree may pose if it fails. Removal of the tree and establishing a new tree with a long life expectancy is a better option. Additionally the tree in poor condition often has little ability to cope with significant changes in its root zone from the development impact.

Where trees have major impacts to the tree protection zone then removal is likely the best alternative unless the tree is significant and specific measures and resources can be developed to assist the tree through the development.

It should be noted that the calculated tree protection zone (TPZ) is for the most part the minimum space required for the tree to maintain viability and stability, and the actual tree root zone will in most instances extend well past the calculated TPZ; meaning that if the development encroaches up to the TPZ a large amount of roots and root space is still lost for the tree.

<u>Tree Removal.</u> The loss of the existing tree benefits should be planned to be offset and improved. Tree canopies can easily be expected to reduce ground surface temperatures in the order of 15-20 degrees Celsius in summer periods which in turn results in effective mitigation of radiant heat. (Kaluarachichi et al 2020).

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 Refere	ence of Tree	Evaluation	and DA Im	pacts							
	Initial Evaluation and Recommendation											
Development Impacts	Remove Priority	Remove	Retain if possible	Retain	Retain Priority	Grand Total						
Remove	1	8		6	2	17						
Retain – Impacts to Manage		4	3	17	2	26						
Retain - Impacts unlikely		27	6	3	1	33						
Grand Total	1	39	9	26	5	80						

Key Points to Impact Assessment.

- The footprint of the Proposed Site Plan is confined to the east portion of the site where notable open space exists. Tree numbers 53 to 76 are not in the development area.
- Removals A total of 17 Trees are required to be removed 9 of which are evaluated for removal.

Removal of Trees of Significance.

- 6 Trees with moderate significance are required to be removed Evaluated as Retain.
- 2 Trees with High Significance are required to be removed Evaluated as Retain Priority.
- <u>Trees with known impacts to Manage</u>. 26 Trees are evaluated with development impacts to Manage.
 - Of the 26 Trees 21 are considered 'routine'
 - Significant Impacts to Manage. There are 6 Trees identified at this point with significant impacts to manage.
 - Tree numbers 37, 45, 49, 50, 51 and 52.
- <u>Impacts to Council Managed Trees -</u> Outside the site boundary.
 - The line of Jacaranda Trees on Alice Street 3 require removal to accommodate new access points. Shade to parked cars is removed; however parking places are also removed and replaced with driveways.
 - Tree 45 is a Council tree identified with significant impacts to manage.

Theoretic Canopy Loss.

- 21 Trees are identified as requiring removal to accommodate the building footprint. There is a theoretic loss of canopy coverage of 1300 square meters.
- o This represents 29% loss of existing canopy coverage and associated benefits;
- And reduces the approximate canopy coverage of the site to about 9% before any remedial landscape works are undertaken.

6. RECOMMENDATIONS.

A. <u>Tree Identification.</u>

- 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.
- Annexure 1 correlates to the cited drawing Tree Removal and Retention Plan

B. Appointment of Project Arborist and Tree Protection Plan.

- 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.
- 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 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 1490 square meters of canopy coverage that will be lost but there is significant 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 (Kaluarachichi et al 2020).
 - The Preliminary Arboricultural Assessment identified that the existing tree canopy coverage across the site was about 13%. This is considered very low and a target in the range of 20-30% mature canopy should be seriously considered.
 - Native vegetation or at least exotic trees that will tolerate the hot summer temperatures should be utilised.
 - Native vegetation provides better opportunity to improve the local eco-systems than do exotic plants - particularly on the Moree Site that is located close to the Mehi River - and some opportunity exists to link to that riparian zone.

<u>Draft Tree Protection Measures</u> that need to be considered for the <u>Tree Protection Plan</u> 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*.
 - o Trees 37, 45, 49, 50, 51 and 52.
 - 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.

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- 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, <u>but not</u> <u>excavation</u> 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.

Australian Standard (2009). Australian Standard 4970 -2009 Protection of trees on development sites.

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 accessed as stable as part of Visual Tree Assessment.

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

This report has been prepared as an independent assessment of the existing tree population and the interpreted impacts from the proposed development; based on the information known at this point in time.

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9 November 2023.

Wade Ryan Contracting – Independent Arboriculture Consultant AQF Level 5.

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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)





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Annexure 1 - Tree Date File - Impact Assessment for Development at Moree Hospital 2023 (V date 14/09/23)

Tree No	Species	Lat	Lon	General Location	Species Origin	General Size	Age Class	Stem base Ø (m)	DBH (m)	Height (m)			Tree Structure	Area	SRZ Radius in m from centre of stem	TPZ Radius in m from stem	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	Development Impact	Final Evaluation or Comment
1	Lagerstroemia spp . (crape myrtle)	-29.4711097	149.839392	Off Alice St	Exotic	Small	Mature	0.3	0.2	4	3	Good	Fair	7.07143	2.00	2.4	Lopped multiple times - some decay in stem systems and into lopping points	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
2	Viburnum tinus	-29.4709065	149.839474	building 5	Exotic	Very Small	Semi Mature	0.2	0.1	3	4	Good	Good	12.5714	1.68	1.5	small shrub	Very Low	15 plus	0-5	Low or nil	Poor	Remove	Retain - Impacts to Manage	
	(queen palm or Cocos palm)	-29.470908	149.83954	building 5	Exotic	Medium	Mature		0.28	9	5	Excellent	Excellent	19.6429		3.36	sound tree/palm	Very Low	15 plus	5-10	Low or nil	Fair	Remove	Remove	Direct Conflict with DA
	Photinia serratifolia	-29.4708859	149.839702	Internal court yard	Exotic	Small	Mature	0.55	0.3	6	9	Good	Good	63.6429	2.57	3.6	Large shrub of some age - may date construction of primary facility	Very Low	15 plus	5-10	Moderate	Fair	Remove	Retain - Impacts unlikely	
	Pyrus calleryana 'Capital'	-29.4708882	149.83979	Internal court yard	Exotic	Small	Semi Mature	0.18	0.16	7	2	Fair	Fair	3.14286	1.61	1.92	More recent ornamental planting	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
	Hibiscus spp.	-29.4708806	149.839813	Internal court yard	Exotic	Very Small	Mature	0.4	0.17	3	4	Good	Good	12.5714	2.25	2.04	small shrub	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
	Lagerstroemia spp . (crape myrtle)	-29.470828	149.839806	Internal court yard	Exotic	Small	Over Mature	1.4	0.25	5	8	Fair	Poor	50.2857	3.81	3	Aged coppice with 30 stems	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
	Duranta repens (Geisha Girl)	-29.4707835	149.839698	Internal court yard	Exotic	Medium	Mature	1.5	0.4	4	7	Good	Good	38.5	3.92	4.8	shrub	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
	Fraxinus ornus (Flowering Ash)	-29.4711347	149.839559	Alice St	Exotic	Small	Semi Mature	0.05	0.04	2	2	Good	Good	3.14286	1.50	1.5	recent amenity planting	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
0	Fraxinus ornus (Flowering Ash)	-29.4711397	149.839622	Alice St	Exotic	Small	Semi Mature	0.05	0.04	2	2	Good	Good	3.14286	1.50	1.5	recent amenity planting	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
1	Fraxinus ornus (Flowering Ash)	-29.4711422	149.839699	Alice St	Exotic	Small	Semi Mature	0.05	0.04	2	2	Good	Good	3.14286	1.50	1.5	recent amenity planting	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
2	Fraxinus ornus (Flowering Ash)	-29.4711335	149.839761	Alice St	Exotic	Small	Semi Mature	0.05	0.04	2	2	Good	Good	3.14286	1.50	1.5	recent amenity planting	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
3	Lagerstroemia spp . (crape myrtle)	-29.4711247	149.839806	Alice St	Exotic	Small	Semi Mature	0.27	0.15	3.5	4	Fair	Fair	12.5714	1.91	1.8	small mature tree	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
1	Morus species (Mulberry)	-29.4711272	149.83988	Alice St	Exotic	Small	Mature	0.5	0.24	5	5	Good	Poor	19.6429	2.47	2.88	basal crack in stem system with decay - lopped heavily	Very Low	0 to 5	0-5	Low or nil	Very Poor	Remove	Retain - Impacts unlikely	
	·	-29.4711172	149.839942	Alice St	Aus Native	Small	Mature		0.54	6			Fair	28.2857		6.48	lopped - light decay only	Low	15 plus	5-10	Low or nil	Fair	Remove	Retain - Impacts unlikely	
i .	-	-29.4710658	149.840145	Between Alice and car park	Exotic	Small	Mature		0.32				Good	28.2857		3.84	sound shrub	Very Low	5 to 15	0-5	Low or nil	Fair	Remove	Remove	Direct Conflict with DA
	(Lemon Scented Gum)	-29.4709718	149.840156	Between Alice and car park	Aus Native	Medium	Over Mature		0.53	10			Fair	63.6429		6.36	lopped at 5 m mark - epicormic attachment fair - minor decay - tree vigour only fair - tree considered	Medium	5 to 15	10-20	Low or nil	Fair	Remove	Remove	Direct Conflict with DA
	(queen palm or Cocos palm)		149.84	Between Car park and central building	Exotic	Medium	Mature		0.38	6			Excellent	12.5714		4.56		Very Low	15 plus	5-10	Low or nil	Fair	Remove	Remove	Direct Conflict with DA
	-	-29.4711748	149.84032	Council Verge - Alice St		Medium	Mature		0.39				Good	50.2857		4.68	west tree in line of 18 Council trees Line of trees considered significant	Very Low	40 plus	20+	Moderate	Excellent	Retain	Remove	Direct Conflict with DA
	-	-29.4711485	149.840394	_		Medium	Mature			10			Good	50.2857		5.76	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
		-29.4711291		Council Verge - Alice St		Medium	Mature			10			Good	50.2857		5.4	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
	-			Council Verge - Alice St			Mature		0.37					50.2857		4.44	Forms part of line of trees considered significant as a line			20+			Retain	Retain - Impacts to Manage	
				Council Verge - Alice St Council Verge - Alice St		Medium Medium	Mature Mature	0.31	0.38				Good	50.2857		4.56	Forms part of line of trees considered significant as a line Forms part of line of trees considered significant as		40 plus 40 plus	20+	Moderate Moderate		Retain Retain	Retain - Impacts to Manage Retain - Impacts to	
							Mature				J	Execution	3000				a line		To plus		Moderate	Executent	necom	Manage	
	·			Council Verge - Alice St		Medium	Mature		0.35				Good	50.2857		4.2	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate		Retain	Retain - Impacts to Manage	
		-29.471156		Council Verge - Alice St		Medium	Mature		0.44				Good	50.2857		5.28	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate		Retain	Retain - Impacts to Manage	
		-29.471136		Council Verge - Alice St		Medium	Mature	0.42					Good	50.2857		3.96	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate		Retain	Retain - Impacts to Manage	
				Council Verge - Alice St		Medium	Mature		0.28				Good	50.2857		3.36	Forms part of line of trees considered significant as a line		40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
0		-29.4711523 -29.471131		Council Verge - Alice St Council Verge - Alice St		Medium Medium	Mature Mature		0.48				Good	50.2857		3.84	Forms part of line of trees considered significant as a line Forms part of line of trees considered significant as		40 plus 40 plus	20+	Moderate Moderate	Excellent Excellent	Retain Retain	Retain - Impacts to Manage Retain - Impacts to	
1	Jacaranda mimosifolia	-29.4711397	149.841112	Council Verge - Alice St	Exotic	Medium	Mature	0.67	0.62	10	8	Excellent	Good	50.2857	2.80	7.44	a line Forms part of line of trees considered significant as	Very Low	40 plus	20+	Moderate	Excellent	Retain	Manage Retain - Impacts to	
	·			Council Verge - Alice St		Medium	Mature	0.32					Good	50.2857		3.84	a line - light decay in stem system at 1m Forms part of line of trees considered significant as a line		40 plus	20+	Moderate	Excellent	Retain	Manage Remove	Direct Conflict with DA
33	Jacaranda mimosifolia	-29.4711448	149.841281	Council Verge - Alice St	Exotic	Medium	Mature	0.29	0.27	10	8	Excellent	Good	50.2857	1.97	3.24	Forms part of line of trees considered significant as a line	Very Low	40 plus	20+	Moderate	Excellent	Retain	Remove	Direct Conflict with DA

Tree No	Species	Lat	Lon	General Location	Species Origin	General Size	Age Class	Stem base Ø (m)	DBH He		nopy Tree Vigour	Tree Structure	Canopy Area (M²)	SRZ Radius in m from centre of stem	TPZ Radius in m from stem	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	Development Impact	Final Evaluation or Comment
34	Jacaranda mimosifolia	-29.471146	149.841339	Council Verge - Alice St	Exotic	Medium	Mature	0.6	0.44 10) 8	Excellent	Good	50.2857		5.28	Forms part of line of trees considered significant as a line	Very Low	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
35	Jacaranda mimosifolia	-29.471151	149.841397	Council Verge - Alice St	Exotic	Medium	Mature	0.56	0.48 10) 8	Excellent	Good	50.2857	2.59	5.76	Forms part of line of trees considered significant as a line	Very Low	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
36	Jacaranda mimosifolia	-29.4711397	149.841507	Council Verge - Alice St	Exotic	Medium	Mature	0.57	0.55 10) 8	Excellent	Good	50.2857	2.61	6.6	Forms part of line of trees considered significant as a line	Very Low	40 plus	20+	Moderate	Excellent	Retain	Retain - Impacts to Manage	
37	Corymbia tessellaris (Carbeen)	-29.4710758	149.841348	Lawn area Alice and Victoria	Aus Native	Medium	Mature	0.9	0.9 15	5 16	Excellent	Excellent	201.143	3.17	10.8	sound mature tree with long life expectancy	Medium	40 plus	50+	High	Excellent	Retain Priority	Retain - Impacts to Manage	Significant Impacts to manage
38	Corymbia citriodora (Lemon Scented Gum)	-29.471081	149.841198	Lawn area Alice and Victoria	Aus Native	Medium	Over Mature	0.35	0.47 12	2 8	Fair	Good	50.2857	2.13	5.64	canopy dieback 50%	Low	0 to 5	5-10	Low or nil	Poor	Remove	Remove	Direct Conflict with DA
39	Eucalyptus camaldulensis (River Red Gum)	-29.4709755	149.841202	Lawn area Alice and Victoria	Aus Native	Medium	Over Mature	0.8	0.67 10	9	Poor	Poor	63.6429	3.01	8.04	lopped at 6-7 m response poor - epicormic shoots only 60 mm diameter - light decay mistletoe	Low	5 to 15	10-20	Low or nil	Poor	Remove	Remove	Direct Conflict with DA
40	Corymbia tessellaris (Carbeen)	-29.4710749	149.840959	Lawn area Alice and Victoria	Aus Native	Large	Mature	1	0.9 17	18	Excellent	Excellent	254.571	3.31	10.8	sound mature tree with long life expectancy	Medium	40 plus	50+	High	Excellent	Retain Priority	Remove	Direct Conflict - loss of Significant Tree
41	Corymbia tessellaris (Carbeen)	-29.4710733	149.840779	Lawn area Alice and Victoria	Aus Native	Medium	Mature	0.82	0.72 14	14	Excellent	Excellent	154	3.04	8.64	sound mature tree with long life expectancy	Medium	40 plus	50+	High	Excellent	Retain Priority	Remove	Direct Conflict - loss of Significant Tree
42	Ulmus parvifolia (Chinese elm)	-29.4707646	149.840892		Exotic	Medium	Mature	0.9	0.4 7	13	Good	Excellent	132.786	3.17	4.8	sound mature tree with long life expectancy	Low	40 plus	20+	Moderate	Excellent	Retain	Remove	Direct Conflict with DA
43	Ulmus parvifolia (Chinese elm)	-29.4708029	149.841059	Lawn area - off Victoria - East	Exotic	Medium	Semi Mature	1	0.9 12	14	Good	Poor	154	3.31	10.8	3 enclosed bark unions in stem - open crack no decay evident - minor separation of stems	Low	15 plus	20+	Moderate	Fair	Retain	Remove	Direct Conflict - loss of Significant Tree
44	Ulmus parvifolia (Chinese elm)	-29.47083	149.841274	Lawn area - off Victoria - East	Exotic	Large	Mature	0.7	0.72 11	16	Good	Excellent	201.143	2.85	8.64	significant tree	Low	40 plus	20+	Moderate	Excellent	Retain	Remove	Direct Conflict - loss of Significant Tree
45	Albizia species??	-29.4707743	149.841447	Lawn area - off Victoria - East	Exotic	Medium	Mature	0.67	0.56 14	9	Good	Good	63.6429	2.80	6.72	partial lopping for power line clearance enclosed bark union at 3m only moderate failure	Low	15 plus	20+	Moderate	Good	Retain	Retain - Impacts to Manage	Significant Impacts to manage
46	Ulmus parvifolia (Chinese elm)	-29.4707345	149.841372	Lawn area - off Victoria - East	Exotic	Very Small	Over Mature	0.2	0.12 3	3	Poor	Fair	7.07143	1.68	1.5	small tree failed planting	Very Low	0	0-5	Low or nil	Very Poor	Remove Priority	Remove	
47	Ulmus parvifolia (Chinese elm)	-29.4707138	149.841233	Lawn area - off Victoria - East	Exotic	Small	Mature	0.46	0.36 8	8	Good	Fair	50.2857	2.39	4.32	moderate bird chewing in branch unions through canopy - no significant decay	Low	5 to 15	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts to Manage	
48	Ulmus parvifolia (Chinese elm)	-29.4706708	149.841113	Lawn area - off Victoria - East	Exotic	Large	Mature	0.67	0.47 8	11	Good	Good	95.0714	2.80	5.64		Low	40 plus	10-20	Moderate	Good	Retain if possible	Retain - Impacts to Manage	
49	Ulmus parvifolia (Chinese elm)	-29.4706214	149.840935	Lawn area - off Victoria - East	Exotic	Medium	Mature	0.75	0.83 10) 15	Excellent	Excellent	176.786	2.93	9.96		Low	40 plus	20+	High	Excellent	Retain Priority	Retain - Impacts to Manage	Significant Impacts to manage
50	Eucalyptus camaldulensis (River Red Gum)	-29.4705416	149.840874	B/T car park and Victoria	Aus Native	Medium	Over Mature	0.7	0.65 11	. 9	Poor	Fair	63.6429	2.85	7.8	Lopped 5-6 meters -epicormic attachment fair - decay noted in unions. Mistletoe heavy in canopy about 40% effected	Medium	5 to 15	20+	Low or nil	Poor	Remove	Retain - Impacts to Manage	Significant Impacts to manage
51	Eucalyptus camaldulensis (River Red Gum)	-29.4705122	149.84076	B/T car park and Victoria	Aus Native	Medium	Over Mature	1.7	1.4 14	12	Poor	Poor	113.143	4.14	15	Tree lopped at 7m epicormic attachment poor - decay present tree response poor - hollow in north stem at 2m notable decay with strong reaction	Medium	5 to 15	50+	Moderate	Fair	Retain if possible	Retain - Impacts to Manage	Significant Impacts to manage
52	Eucalyptus camaldulensis (River Red Gum)	-29.4704818	149.840578	B/T car park and Victoria	Aus Native	Medium	Over Mature	1.14	0.93 15	12	Fair	Fair	113.143	3.50	11.16	lopped at 6-7 m - epicormic attachment fair - 150- 200mm Ø. Failure potential at least moderate	High	15 plus	50+	High	Fair	Retain	Retain - Impacts to Manage	Significant Impacts to manage
53	Livistonia australis (cabbage or fan palm)	-29.4702185	149.840095	Service Driveway off Victoria	Aus Native	Large	Mature	0.82	0.56 24	6	Excellent	Excellent	28.2857	3.04	6.72		Medium	15 plus	50+	Moderate	Good	Retain	Retain - Impacts unlikely	
54	Phoenix canariensis (Canary Island date palm)	-29.470181	149.840086	Service Driveway off Victoria	Exotic	Large	Semi Mature	0.11	0.95 8	6	Excellent	Excellent	28.2857	1.50	11.4		Low	40 plus	10-20	Moderate	Fair	Retain if possible	Retain - Impacts unlikely	
55	Lagerstroemia spp . (crape myrtle)	-29.4700664	149.839832	Garden area off Victoria	Exotic	Small	Over Mature	1	0.25 4	4	Poor	Poor	12.5714	3.31	3	14 stems off old coppice - aged small tree heavily lopped	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
56	Lagerstroemia spp . (crape myrtle)	-29.4700403	149.839782	Garden area off Victoria	Exotic	Small	Over Mature	0.6	0.25 4	3	Good	Fair	7.07143	2.67	3	8 stems	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
57	Hibiscus spp.	-29.4700283	149.839748	Garden area off Victoria	Exotic	Small	Mature	0.5	0.2 3	4	Good	Fair	12.5714	2.47	2.4	small shrub	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
58	Duranta repens (Geisha Girl)	-29.4700789	149.839771	Garden area off Victoria	Exotic	Small	Mature	0.7	0.2 4	5	Excellent	Fair	19.6429	2.85	2.4	small shrub	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
59	Callistemon Species (Bottle Brush)	-29.4702131	149.839692	Garden area off Victoria	Aus Native	Small	Mature	0.3	0.26 4	5	Good	Fair	19.6429	2.00	3.12	small shrub	Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
60	Magnolia spp	-29.4701788	149.839675	Garden area off Victoria	Exotic	Very Small	Semi Mature	0.8	0.5 2	1.5	Poor	Fair	1.76786	3.01	6	notable injury to lower stem base - tree not performing well at site - unless cultural values then do not retain	Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
61	Fraxinus ornus (Flowering Ash)	-29.4701848	149.839597	Garden area off Victoria	Exotic	Small	Mature	0.4	0.35 7	10	Good	Excellent	78.5714	2.25	4.2		Very Low	15 plus	5-10	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	
62	Murraya paniculata (orange jasmine)	-29.4702305	149.839516	Garden area off Victoria	Exotic	Small	Semi Mature	1	0.3 4	6	Excellent	Good	28.2857	3.31	3.6	15 stems off coppice	Very Low	5 to 15	0-5	Moderate	Poor	Remove	Retain - Impacts unlikely	
63	Corymbia citriodora (Lemon Scented Gum)	-29.4701173	149.839721	Garden area off Victoria	Aus Native	Medium	Over Mature	0.7	0.7 13	3 13	Fair	Fair	132.786	2.85	8.4	canopy coverage only 60% of expected - partial cut for power line clearance - heavy bird chewing to branch inions in upper canopy moderate dead wood to 25mm Ø	Medium	5 to 15	10-20	Low or nil	Fair	Retain if possible	Retain - Impacts unlikely	
64	Cercis siliquastrum (Judas tree)	-29.4699854	149.839606	Garden area off Victoria	Exotic	Small	Over Mature	0.38	0.35 5	6	Excellent	Fair	28.2857	2.20	4.2	lopped at 2m	Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	
65	Nerium oleander (oleander - variegated)	-29.469921	149.839434	Garden area off Victoria	Exotic	Small	Mature	1.7	0.3 4	5	Fair	Fair	19.6429	4.14	3.6		Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts unlikely	

Tree No	Species	Lat	Lon	General Location	Species	General	Age Class	Stem	DBH	Height	Canopy	Tree	Tree	Canopy	SRZ	TPZ	Factors. Observed Conditions or Issues	Enviro	Estimated	Replacement	Significant	Retention	Recommended	Development	Final Evaluation or
	J-7-3-3-3				Origin	Size		base	(m)	(m)	ø	Vigour	Structure	Area	Radius in m	Radius in m	Commentary on tree	Rating or	remaining	Time Frame	Tree	Value	Action for	Impact	Comment
					05	0.20		Ø (m)		(,		1.,500.	January 1	(M²)	from centre of	from stem	Commentary on tree	Value	useful life		Value	Tuille !	planning	past	
								(,						(,,,	stem	liioiii steiii		Value	userur inc		Value		pidining		
										_	_											_	_		
66	Nerium oleander	-29.4698942	149.83938	Garden area off	Exotic	Small	Mature	1.7	0.3	4	5	Fair	Fair	19.6429	4.14	3.6		Very Low	5 to 15	0-5	Low or nil	Poor	Remove	Retain - Impacts	
	(oleander)			Victoria																				unlikely	
67	Callistemon Species	-29.4699368	149.839376	Garden area off	Aus Native	Small	Mature	0.33	0.22	4	5	Fair	Fair	19.6429	2.08	2.64		Low	5 to 15	0-5	Low or nil	Fair	Retain if possible	Retain - Impacts	
	(Bottle Brush)			Victoria																				unlikely	
68	Corymbia citriodora	-29.4700194	149.839335	Garden area off	Aus Native	Large	Mature	0.9	0.81	17	17	Good	Excellent	227.071	3.17	9.72	sound large tree	Medium	40 plus	50+	High	Good	Retain Priority	Retain - Impacts	
	(Lemon Scented Gum)			Victoria																				unlikely	
69	Corymbia citriodora	-29.4701062	149.839431	Garden area off	Aus Native	Medium	Over Mature	0.75	0.65	16	16	Poor	Good	201.143	2.93	7.8	canopy only 50-60% of expected - canopy dieback	Medium	5 to 15	20+	Moderate	Fair	Retain if possible	Retain - Impacts	
	(Lemon Scented Gum)			Victoria													and dead wood to 20mm Ø							unlikely	
70	Callistemon Species	-29.4700833	149.839377	Garden area off	Aus Native	Small	Over Mature	0.33	0.22	3	7	Fair	Poor	38.5	2.08	2.64	failed leader	Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts	
	(Bottle Brush)			Victoria																				unlikely	
71	Corymbia citriodora	-29.4700992	149.839272	Garden area off	Aus Native	Large	Mature	0.93	0.77	20	16	Fair	Good	201.143	3.21	9.24	canopy 80% of expected - dead wood to 90mm Ø	Medium	15 plus	50+	Moderate	Good	Retain	Retain - Impacts	
	(Lemon Scented Gum)			Victoria																				unlikely	
72	Lagerstroemia spp .	-29.4698178	149.839169	Aged care - Victoria	Exotic	Small	Over Mature	0.6	0.2	3.5	2	Fair	Poor	3.14286	2.67	2.4	crack in stem base	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts	
	(crape myrtle)																							unlikely	
73	Lagerstroemia spp .	-29.4697709	149.839131	Aged care - Victoria	Exotic	Small	Over Mature	0.6	0.3	4	4	Fair	Poor	12.5714	2.67	3.6	7 stems - moderate decay in stem	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Retain - Impacts	
	(crape myrtle)								\sqcup					ļ										unlikely	
74	Duranta repens	-29.4700803	149.839104	East Side aged care	Exotic	Small	Mature	0.7	0.2	4	1	Excellent	Excellent	0.78571	2.85	2.4	small shrub	Very Low	15 plus	0-5	Low or nil	Fair	Retain if possible		
	(Geisha Girl)						ļ													ļ				unlikely	
75	Lagerstroemia spp .	-29.4697659	149.839072	Aged care - Victoria	Exotic	Small	Mature	0.2	0.125	3	2	Fair	Poor	3.14286	1.68	1.5	highly supressed	Very Low	0 to 5	0-5	Low or nil	Very Poor	Remove	Retain - Impacts	
-	(crape myrtle)								<u> </u>							1				l		l		unlikely	
76	Brachychiton populous	-29.4697599	149.839035	Aged care - Victoria	Aus Native	Medium	Semi Mature	0.44	0.4	8	12	Excellent	Excellent	113.143	2.34	4.8		Medium	40 plus	50+	Moderate	Good	Retain	Retain - Impacts	
77	(Kurrajong)	20.470647	4.40.020557	alamah mada ada a	Frankla	\/	Materia	0.45	0.45	2	_	Cood	Fair	7.074.62	4.50	1.0	should be a size to size the same	Manual au	F 4= 4F	0.5	1 1	D	D	unlikely	Discret Conflict with DA
77	Viburn species			shrub under shade	Exotic Aug Noting	Very Small	Mature	_	0.15	<u> </u>	1.5	Good		7.07143		1.8	shrub species insignificant	Very Low		0-5	Low or nil	Poor	Remove	Remove	Direct Conflict with DA
/8	Callestemon species	-29.470565	149.839/02	north court yard	Aus Native	Very Small	Mature	0.15	0.15	3	1.5	Good	Poor	1.76786	1.50	1.8	Partial failure in gournd - stem with notable lean	Very Low	0 to 5	0-5	Low or nil	Poor	Remove	Remove	Direct Conflict with DA
70	(Bottle Brush)	20 470545	140 020774	north court yard	Fuetie	Small	Matura	0.2	0.2	3.5	2	Fair	Fair	7.07143	1.00	2.4		Vanular	15 plus	0-5	Laurar mil	Deer	Domesia	Retain - Impacts to	
/9	Murraya species	-29.470545	149.839774	north court yard	Exotic	Singii	Mature	0.2	0.2	5.5	3	ralf	rdif	7.0/143	1.08	2.4		Very Low	To binz	U-5	Low or nil	Poor	Remove		
00	Murrous species	-29.470595	140 02070	north court yard	Exotic	Small	Mature	0.25	0.25	4	4	Good	Good	12.5714	1.05	1,	-	Vanulau	15 plus	0-5	Low or nil	Poor	Remove	Manage Retain - Impacts to	
80	Murraya species	-29.4/0595	149.839/9	north court yard	EXOUC	Sifidii	iviature	0.25	0.25	4	+	Good	G000	12.5/14	1.03	ľ		Very Low	13 binz	0-3	LOW OF THE	15001	nelliove		
-		+				+	+	 	\vdash			Theoretic	al canony	4470.32		+		+	+	 	1	+	+	Manage	
			l			1			1				al canopy	44/0.32		1			1	1					
-	-	+				+		 	\vdash			Coverage		34141	-	1	+	+	+	 	1	1	+	+	
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canopy coverage current

0.090799918

				Annexure	2 - Assessment and Evaluation criteria - Definitions. (Version o	date 02/06/2022)					
	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	
Endemic	Species is native to this location	Large	18-25m	Young	Sapling, extended growth remaining	Good	0 to 5	Good	Good	tree condition, species	
Aus Native	Species native to Australia but not this location	Medium	10-18m	Semi Mature	Some remaining growth to reach maturity for the site and species	Fair	5 to 15	Fair	Fair	performance in local environment, expected	
		Small	< 10m	Mature	Considered mature size for site and species - typically no sign of decline	Poor	15 plus	Poor	Poor	remaining life significance of	
Exotic	Species introduced to Australia	Very Small	< 3m	Over Mature	Tree has commenced to decline - obvious signs	Very Poor	40 plus	Very Poor	Very Poor	tree in landscape and	
	·] '		Senescent	Extended signs of decline - recovery not expected	,	l '	1 1		replacement time frame	
i		Ī		Dead	Little or no metabolic function remaining		i	1 1			
				Dead	Ettic of no netabolic fariction remaining	1					
Environmental Rating/Value			Em	vironmental Eva	luation Considerations/criteria				Picks	s	
Very High	Normally Old growth Remnant Tree, multiple hollow	s important to thre	tened or endangered	fauna, replacer	nent would be well in excess of 150 years			Replacement times	1	Very High	
High	Large or mature Endemic Tree or Aus Native that ha	s high substitute va	lues as endemic tree	with or without	hollows, plays an important part in local ecology - replacement would take 50-100	years		0-5	2	High	
Medium	Young or semi mature Endemic tree or Aust native s	pecies that has som	ne positive values for l	ocal fauna/ecos	ystems - replacement would take 20 or more years. Large Exotic tree with elevate	d general values.		5-10	3	Moderate	
Low	Normally exotic species, or small, young endemic or	native that could b	e replaced in the shor	t term 5-10 yea	rs			10-20	4	Low or nil	
Very Low	Listed Weed or nuisance species; or very small value	or insignificant to I	ocal ecology - could b	e replaced with	in 5 years or readily replaced with species of greater value			20+	5	Yes	
				-			•	50+		No	
	Significant Tree value considerations/				Recommended Action for DA/Development			100+			
	Defined as Significant Tree by regulatory or other au	thority or		_		Very Significant tree				-	
Very High	Environmental rating 1 or			_		Significant Tree		Known Develop	ment Impact		
	Heritage Listed or Very High Cultural or heritage Values			-		Sound tree suited to site		Remove	_		
	Environmental rating 2 or				Remove Remove Priority	Positive amenity values		Retain - Impacts to N	-		
	Medium or large tree in good/excellent condition, su	lited to local enviro	nment or	1	Remove Priority	Unsuitable for location		Retain - Impacts unli Other	keiy		
High	imposing within the local landscape with long life ex			1		Not suited to Environment		Not determined			
	strong amenity values or some cultural or heritage li			_		Condition or Safety		Not determined		_	
Moderate	A tree that is somewhat noteworthy - it is likely to gr		it tree			Replaced in short term		Direct Conflict with I	DA		
Not Significant	A tree with low or very values to the en]		Direct Conflict with DA		Direct Conflict - loss		e	
						Exempt species		Loss of significant tre			
	Other Definitions					Exempt height Weed Species		Significant Impacts to	o manage		
	Other Demittons					···cca species	1				

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

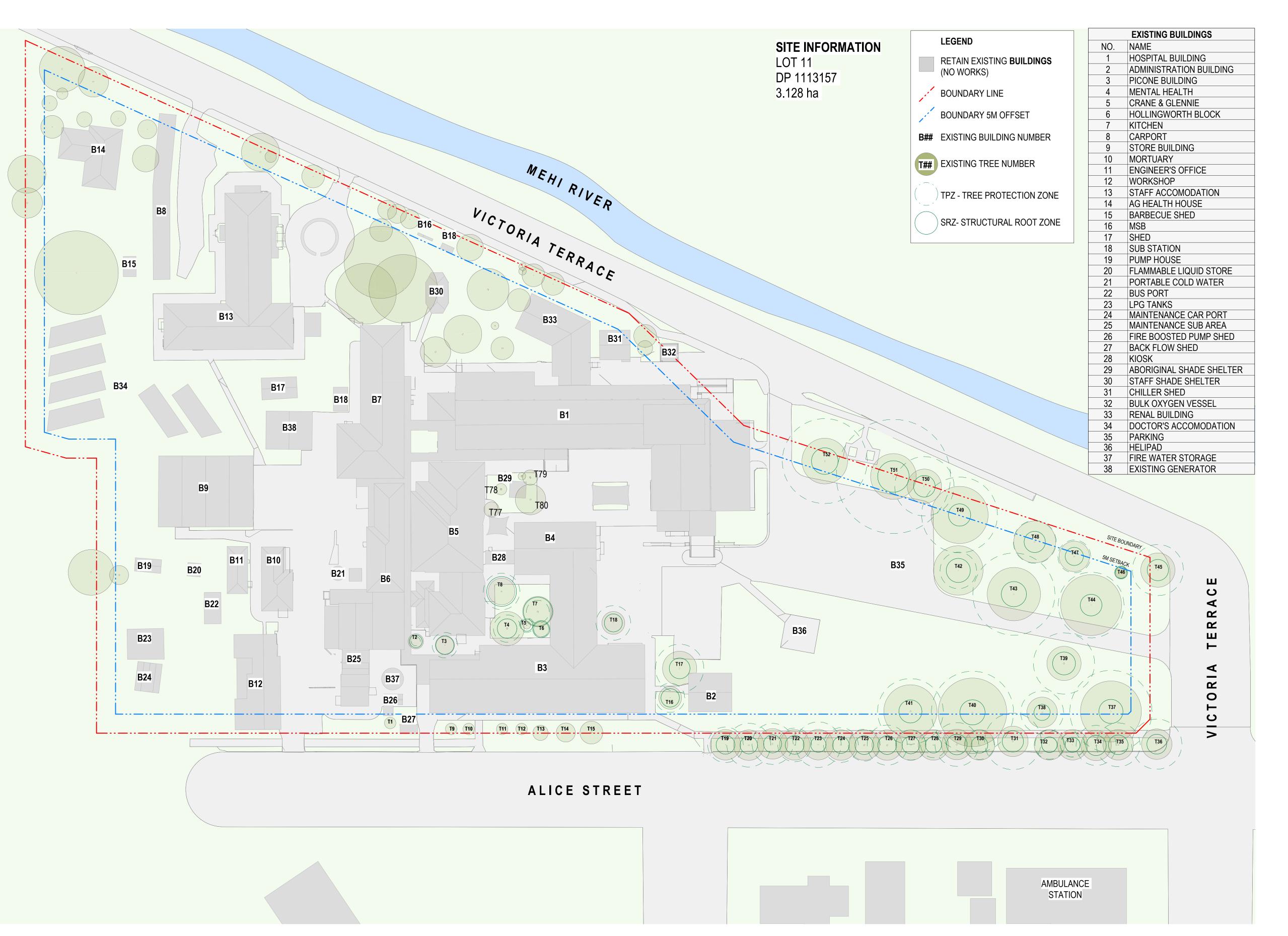
TP2 - Tree Protection Zone - specified area above and below ground and at a given distance from the trunk set aside for the protection of the tree's roots and crown to provide for the viability of a tree to be retained where it is potentially subject to damage by development.

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.

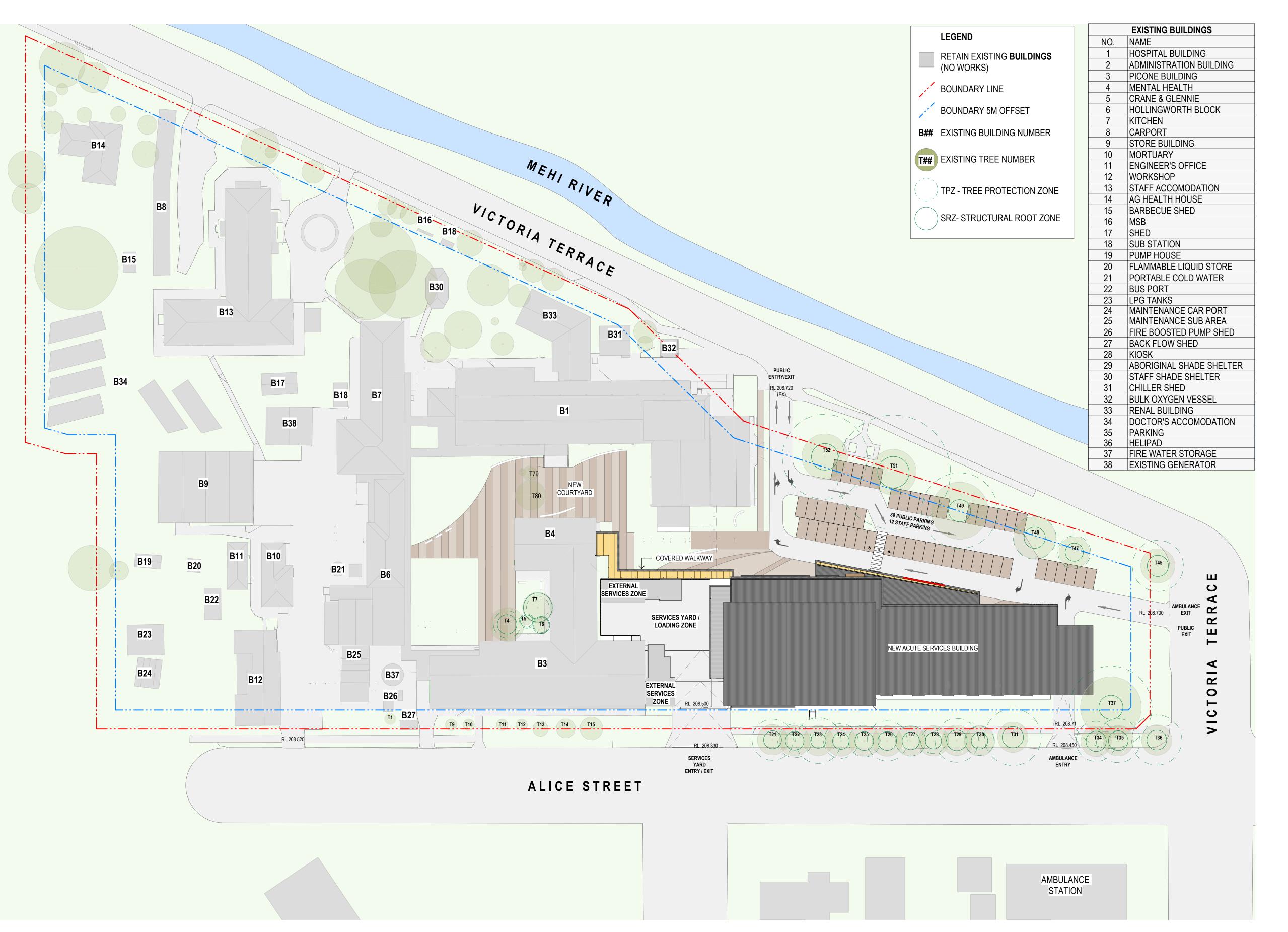
From Australian Standard 4970-2009 Protection of Trees on development sites TPZ and SRZ are calculated from AS 4970

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.

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



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	OSCAPE ARCHITECTS -	EFEC	Tayle 218 OXFORD ST,	orBra sydney, nsw	(02) 9270 1000
		LEVE	EL 20, 2 MARKET ST, PH: (02) 9437 10		JHA 7, 2000, AUSTRALIA Sphaengineers.com.au
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CON	TRACTOR —	PH: (02) 8	SIX	@sth.com.au .	tpac
PRO	JECT MANAGER ———		KET STREET, SYDN	Sa	avills
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CONTINUON	BESIX	Wa	tpac
PROJECT MANAGER -	LEVEL 24, 44 MARKET STREET, SY		•
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PROPOSED S	ITE PLAN		
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Tree Number	Tree Species	Tree Protection Zone (TPZ)
Tiee Number	Tree opedies	(11 2)
2	Viburnum tinus	1200
3	Syagrus romanzoffiana	3360
4	Photinia serratifolia	3600
5	Pyrus calleryana	1920
6 7	Hibiscus spp. Lagerstroemia spp .	2040 3000
<u>, </u>	Duranta repens	4800
13	Lagerstroemia spp .	1800
14	Morus species	2580
15	Melaleuca species	6480
<u>16</u> 17	Photinia serratifolia Corymbia citriodora	3840 6360
18	Syagrus romanzoffiana	4560
19	Jacaranda mimosifolia	4680
20	Jacaranda mimosifolia	5760
21	Jacaranda mimosifolia	5400
22	Jacaranda mimosifolia	4440
23 24	Jacaranda mimosifolia Jacaranda mimosifolia	6000 4560
25	Jacaranda mimosifolia	4200
26	Jacaranda mimosifolia	5280
27	Jacaranda mimosifolia	3960
28	Jacaranda mimosifolia	3360
29 30	Jacaranda mimosifolia Jacaranda mimosifolia	5760 3840
31	Jacaranda mimosifolia	7440
32	Jacaranda mimosifolia	840
33	Jacaranda mimosifolia	3240
34	Jacaranda mimosifolia	5280
35 36	Jacaranda mimosifolia Jacaranda mimosifolia	5760 6600
37	Corymbia tessellaris	10800
38	Corymbia citriodora	5640
39	Eucalyptus camaldulensis	8040
40	Corymbia tessellaris	10800
41 42	Corymbia tessellaris Ulmus parvifolia	8640 4800
43	Ulmus parvifolia	10800
44	Ulmus parvifolia	8640
45	Albizia sp.	6720
46	Ulmus parvifolia	1500
47 48	Ulmus parvifolia Ulmus parvifolia	4320 5640
40 49	Ulmus parvifolia	9960
50	Eucalyptus camaldulensis	7800
51	Eucalyptus camaldulensis	15000
52	Eucalyptus camaldulensis	11160
53 54	Livistona australis	6720
54 55	Phoenix canariensis Lagerstroemia spp .	11400 3000
56	Lagerstroemia spp .	3000
57	Hibiscus spp.	2400
58	Duranta repens	2400
59 60	Callistemon sp	3120
60 61	Magnolia sp Fraxinus ornus	6000 4200
62	Murraya paniculata	3600
63	Corymbia citriodora	8400
64	Cercis siliquastrum	4200
65	Nerium oleander	3600
66 A 66 B	Nerium oleander Nerium oleander	3600 3600
67	Callistemon sp	2640
68	Corymbia citriodora	9720
69	Corymbia citriodora	7800
70	Callistemon sp	2640
71	Corymbia citriodora	9240
72 75	Lagerstroemia spp . Lagerstroemia spp .	2400 1500
76 76	Brachychiton populous	1640
77	Viburn sp.	20
78	Callestemon sp.	20
79	Murraya sp.	20
Stump	Murraya sp.	20
Stump	Ī	20

Tree Removal and Retention Plan