The Forest High School
Arboricultural Impact Assessment

School Infrastructure NSW

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Abbreviations

Abbreviation	Description
AQF	Australian Qualifications Framework
AS	Australian Standards
DBH	Diameter at Breast Height
ELA	Eco Logical Australia
m	Metre
mm	Millimetre
NDE	Non-Destructive Excavation
NO	Number
NSW	New South Wales
SP	Species
SRZ	Structural Root Zone
TPZ	Tree Protection Zone
VTA	Visual Tree Assessment

1. Background

This Arboricultural Impact Assessment (AIA) was prepared for School Infrastructure NSW in relation to the new Forest High School development at Allambie Heights. The address of the subject site, along with additional information is detailed in Table 1. The location of the subject site mapped in Figure 1. The purpose of this report is to:

- identify the trees within the site that are likely to be affected by the proposed works
- undertake a visual tree assessment of the subject trees
- assess the current overall health and condition of the subject trees
- evaluate the retention value of the subject trees
- determine the likely impacts on trees to be retained
- recommend tree protection measures to minimise adverse impacts.

Features of the subject site are tabulated below.

Table 1: Development site

Criteria	Description	
Street address	Allambie Road, Allambie Heights	
Local Government Area	Northern Beaches Council	
General land use	SP1 Special Activities	
Lot and DP prior to transfer and registration of Title	**Lot and DP after transfer and registration of Title**	**Current Lot and DP as at 27/10/2022**
Lot 750 DP 1271174	Lot 4 DP 1280781	Lot 750 DP 1271174
Lot 751 DP 1271174	Lot 5 DP 1280781	Lot 751 DP 1271174
Lot 13 DP 1112906	Lot 6 DP 1280781	Lot 6 DP 1280781
Part Lot 11 DP 1194177	Lot 7 DP 1280781	Lot 7 DP 1280781

The description of the proposed activity in Table 2 is based on information available at the time of preparing this report.

Table 2: Proposed activity

Activities that can impact trees	Description of proposed activities
Clearing vegetation	Yes, 231 trees are proposed to be cleared. Of these, 12 trees (Trees 73, 74, 76, 77, 83, 84, 87 (group of 5) and 88) are proposed for removal due to the IPA bushfire requirements and the remaining 219 trees are proposed to be cleared for the proposed works.
Pruning vegetation	No

Activities that can impact trees	Description of proposed activities
Earthworks including regrading, excavation and trenching	Yes, proposed buildings, carpark, playing field and paved areas.
Compaction	Yes, all onsite parking, temporary site compounds, storage of materials, installing of structures, stockpiling fill or materials will be positioned outside of the TPZ of trees to be retained.
Refuelling and chemical use (e.g. herbicides)	No, all vehicle wash down will be completed off site
Erection of scaffolding	Yes, erection of scaffolding for the construction of buildings will be positioned within the impact area outlined in Appendix C.
Vehicle movements	Yes, access for construction machinery will be positioned within the impact area outlined in Appendix C or will be positioned on existing roads.
Changes to stormwater management	Yes, see Appendix F for site plan
Landscaping	Yes, see Appendix F Schematic site plan. ELA understands that no excavation works will be completed for the soft landscaping works within the TPZ/SRZ of trees to be retained.

Figure 1: Development site

2. Method

2.1 Definition of a tree

A tree is defined under the Australian Standard, *AS 4970-2009, Protection of Trees on Development Sites* as a long lived woody perennial plant greater than (or usually greater than) 3 m in height with one or relatively few main stems or trunks.

For the purpose of this report this AIA has assessed trees in line with the local Councils definition of a tree. Northern Beaches Council defines a tree as:

'a palm or woody perennial plant with a single or multiple stem greater than 5 m in height' (Warringah Council 2011).

2.2 Visual tree assessment

The subject trees were assessed in accordance with a stage one visual tree assessment (VTA) as formulated by Mattheck and Breloer (1994) and practices consistent with modern arboriculture.

A total of 406 trees were tagged and inspected in December 2020 and February, October and November 2021 by AQF Level 5 Consulting Arborists, David Bidwell and Craig Kenworthy. A total of 34 trees (Trees 1-9, Tree 10 (group of 4), Tree 11 (group of 5), Trees 12-17, 20, 22-27, 30, 31 and 70) have previously been approved for removal under DA2011/1633 (Oculus 2022) and therefore, have not been included in the impact assessment, reducing the **total tree count to 372.**

The following limitations apply to this methodology:

- Trees were inspected from ground level, without the use of any invasive or diagnostic tools and testing.
- Trees were inspected within limits of site access. Areas that were previous inaccessible during the initial site inspections (December 2020 & February 2021) were accessed during the October and November 2021 site inspection through the use of a small chainsaw/whipper snipper under the instruction of a supervising ecologist (SLR Ecologists).
- No aerial inspections or root mapping was undertaken.
- Tree heights, canopy spread and diameter at breast height (DBH) were estimated, unless otherwise stated.
- Tree identification was based on broad taxonomical features present and visible from ground level at the time of inspection.
- The locations of the subject trees were recorded by ELA in the field using hand-held GPS units referred to as 'GPS unit' in Appendix D. Tree locations were subsequently matched to the CMS Survey (2021) survey where possible, some surveyed locations used different tree IDs therefore these have been noted as 'Survey (different ID)' in Appendix D. The remaining tree survey locations were matched to Near map (2020) aerial imagery using geographic information systems (GIS) techniques.

2.3 Retention value

The retention value or importance of a tree or group of trees, is determined in accordance with the Institute of Australian Consulting Arborists (IACA) Significance of a Tree Assessment Rating System (STARS©), which is summarised in Appendix A. The method considers the Useful Life Expectancy (ULE) and landscape significance of a tree. Trees are provided one of the following ratings:

- **High - priority for retention:** These trees are considered important and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by Australian Standard AS 4970–2009 Protection of trees on development sites.
- **Medium - consider for retention:** These trees are moderately important for retention. Their removal should only be considered if adversely affected by the proposed works and all other alternatives have been considered and exhausted.
- **Low - consider for removal:** These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
- **Priority for removal:** These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

2.4 Protection zones

2.4.1 Tree protection zone (TPZ)

The TPZ is a specific area above and below ground and at a distance from the trunk set aside for the protection of a 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 the development. The TPZ (as defined by AS 4970-2009) requires restriction of access during the development process. Groups of trees with overlapping TPZs may be included within a single protection area. Tree sensitive measures must be implemented if works are to proceed within the TPZ.

2.4.2 Structural root zone (SRZ)

The SRZ is the area of the root system (as defined by AS 4970-2009) used for stability, mechanical support and anchorage of the tree. It is critical for the support and stability of trees. Severance of roots within the SRZ is not recommended as it may lead to the destabilisation and/or decline of the tree.

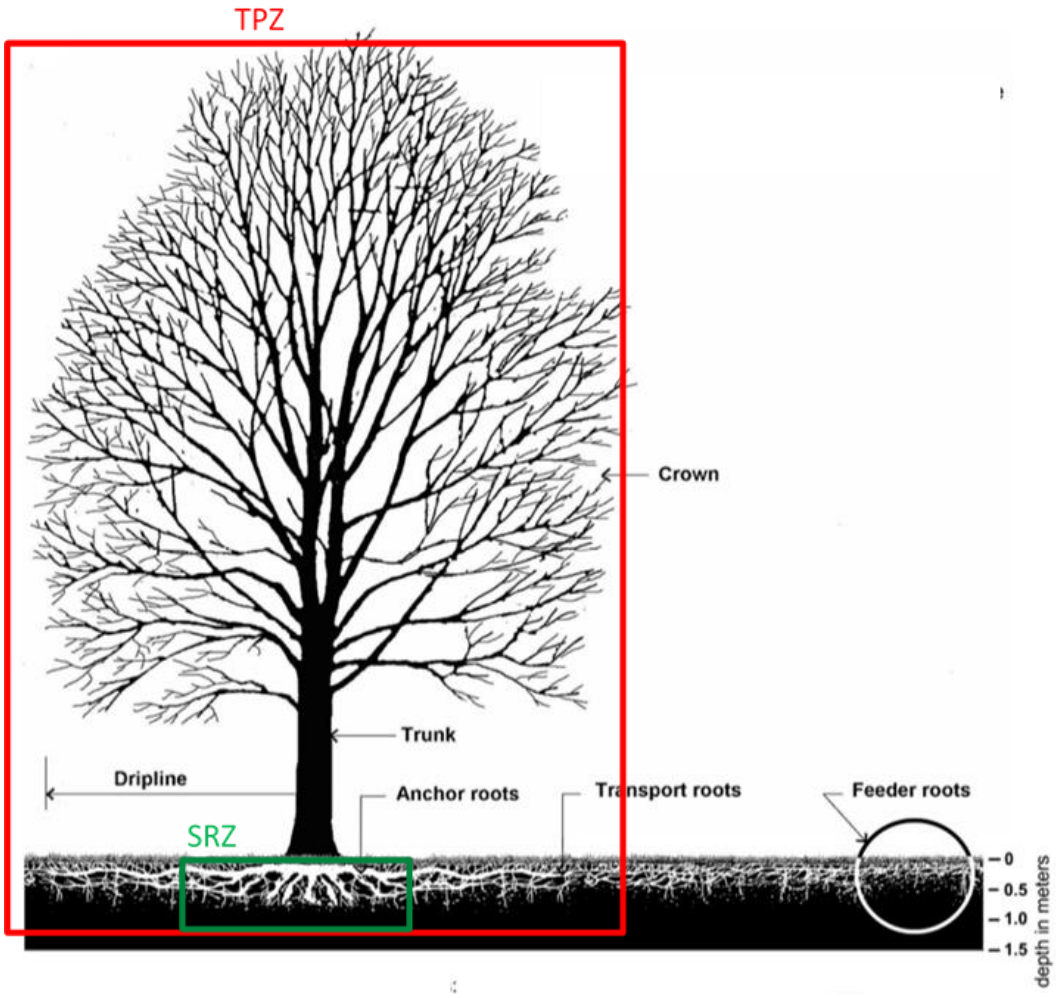

Figure 2: Representative tree structure and indicative TPZ and SRZ

2.5 Potential impacts

Trees may be impacted by physical or chemical damage to roots or above tree parts. Examples include impacts associated with site grading, soil compaction, excavation, stock piling within TPZ as well as changes in site hydrology, changes in soil level and site contamination. The extent of encroachment to the TPZ and SRZ determines the level of potential impact. AS 4970-2009 defines types of encroachment as follows and as illustrated in Appendix B:

- **Major encroachment -** If the proposed encroachment is greater than 10% of the TPZ or inside the SRZ, the project arborist must demonstrate that the tree(s) would remain viable. The location and distribution of roots may be determined through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), Air Spade or manual extraction. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.
- **Minor encroachment –** If the proposed encroachment is less than 10% of the TPZ, and outside of the SRZ, detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the TPZ.

For the purposes of this Arboricultural Impact Assessment, impacts were calculated using GIS techniques and defined as follows

- **High impact:** The SRZ is directly affected, or the proposed encroachment is greater than 20% of the TPZ. Trees may not remain viable if they are subject to high impact. These trees cannot be retained unless the proposal is changed.
- **Medium impact:** If the proposed encroachment is greater than 10% of the TPZ (but less than 20% of the TPZ) and outside of the SRZ, the project arborist may require detailed root investigation to demonstrate that the tree(s) would remain viable. These trees may be retained subject to further investigation and mitigation measures.
- **Low impact:** If the proposed encroachment is less than 10% (total area) of the TPZ, and outside of the SRZ, detailed root investigations should not be required. These trees can be retained.
- **No impact:** No likely or foreseeable encroachment within the TPZ. These trees can be retained.

Impacts are calculated using GIS techniques.

2.6 Proposed action

The proposed actions to either retain or remove each tree are determined by the impact from the proposed design footprint, conversations of intent with the client and corresponding mitigation measures. The following are the definition of these actions:

- **Remove:** Trees that are to be impacted by the proposed development to the extent whereby retention is not suitable and / or incompatible if the current plans are approved. All tree removal must comply with guidelines specified in section 4 of this report and subject to regulatory approval.
- **Retain:** Trees that are suitable for retention granted they follow the specific mitigation measures discussed in section 3 and / or the tree protection measures outlined in section 4 and / or the tree protection guidelines outlined in Appendix E.
- **Potential to be retained:** The Project Arborist will need to confirm the viability of tree retention depending on proposed construction methods

3. Results and discussion

Results of the arboricultural assessment are summarised in Table 3. Detailed results are included in Appendices C and D. Tree protection guidelines are provided in Appendix E and the site plans are outlined in Appendix F. Photos of all high retention value trees are provided in Appendix G.

Table 3: Summary of tree retention values and impacts

	Proposed to be removed		**Potential to be retained**		**Proposed to be retained**		
	Remove for bushfire IPA requirements	High Impact	High Impact	Medium Impact	Low Impact	No impact	**Total**
Priority for retention (High)	-	10	2	7	2	4	**25**
Consider for retention (Medium)	1	46	-	1	3	27	**78**
Consider for removal (Low)	11	163	-	1	7	87	**269**
Total	**12**	**219**	**2**	**9**	**12**	**118**	**372**

TREES PROPOSED FOR REMOVAL (HIGH IMPACT)

A total of **231 trees** are proposed to be removed. Of these, a total of 12 trees are proposed for removal due to the IPA bushfire requirements and 219 trees will be subject to high impact (>20% TPZ encroachment) from the proposed development. Tree IDs and retention values are as follows:

Remove for bushfire IPA requirements

- **Medium retention: one** medium retention value tree (Tree 88)
- **Low retention: 11** low retention value trees (Trees 83 and 87 (group of 5))

High impact (>20% TPZ and / or SRZ encroachment)

- **High retention: 10** high retention value trees (Trees 32, 39, 40, 52, 59, 110, 110.1, 126, 309 and 311)
- **Medium retention: 46** medium retention value trees (Trees 18, 19, 29, 37, 53, 69, 90, 91, 92, 93, 95, 97, 98, 99, 100, 102, 103, 104, 105, 108, 109, 114, 115, 117, 122, 127, 149, 153, 155, 162, 163, 173, 175, 188, 230, 232, 266, 268, 269, 274, 276, 308, 315, 321, 326 and 330)
- **Low retention: 163** low retention value trees (see Appendices C and D for Tree IDs)

Any loss of trees should be offset with replacement planting in accordance with the relevant offset policy.

TREES POTENTIAL TO BE RETAINED SUBJECT TO MITIGATION MEASURES (MEDIUM IMPACT)

A total **11 trees** have potential to be retained subject to further investigation (i.e. root mapping) and or mitigation measures. Of these, **two trees** will be subject to high impact (>20% TPZ and/or SRZ

encroachment) from the proposed driveway and soft landscaping works and **9 trees** will be subject to medium impact (<20% TPZ but >10% TPZ encroachment) from the proposed works. Specific impacts, tree IDs and retention values are as follows:

High impact (>20% TPZ and / or SRZ encroachment)

- **High retention: two** high retention value trees (Tree 28 and 58)

Tree 28 can potentially be retained pending detailed design and subject to no excavation being completed within the TPZ and all works (including the removal of existing driveway pavement) to be completed by hand and under the supervision of the appointed Project Arborist (AQF L5).

Tree 58 can potentially be retained subject to further investigations such as root mapping is to be completed in order to determine if retention is viable with the proposed location of the stormwater infrastructure and paved areas.

Medium impact (10-20% TPZ encroachment)

- **High retention: seven** high retention value trees (Trees 57, 66, 72, 75, 82, 128 and 322)
- **Medium retention: one** medium retention value tree (Tree 85)
- **Low retention: one** low retention value trees (Tree 198)

Trees 57, 66, 72, 75 and 322 can potentially be retained subject to no excavation being completed within the TPZ for the paved areas and soft landscaping work. All works to be completed by hand and under the supervision of the appointed Project Arborist (AQF L5).

Trees 82 & 85 have the potential to be retained subject to supervision of the appointed Project Arborist (AQF L5) during the installation of the decomposed granite, bike rack footprint, paved areas and stormwater when located within the TPZ.

Trees 128 & 198 can potentially be retained subject to further investigations such as root mapping to be completed in order to determine if retention is viable with the proposed location of the earthworks.

TREES PROPOSED TO BE RETAINED (LOW/NO IMPACT)

A total of **130 trees** are proposed to be retained. Of these, **12 trees** will be subject to low impact (<10% TPZ encroachment) and **118 trees** will be subject to no impact (0% TPZ encroachment) from the proposed works. Tree IDs and retention values are as follows:

Low impact (<10% TPZ encroachment)

- **High retention: two** high retention value trees (Trees 44 and 56)
- **Medium retention: three** medium retention value trees (Trees 43, 86 and 263)
- **Low retention: seven** low retention value trees (Trees 140, 218, 219, 227, 236, 237 and 265)

No Impact (0% TPZ encroachment)

- **High retention: four** high retention value trees (Trees 49, 50, 135 and 206)
- **Medium retention: 27** medium retention value trees (Trees 41, 42, 55, 60, 62, 63, 64, 65, 67, 71, 81, 136, 139, 148, 205, 207, 208, 220, 221, 250, 253, 261, 287, 288, 289, 298 and 323)
- **Low retention: 87** low retention value trees (see Appendices C and D for Tree IDs)

A tree protection plan for trees to be retained is outlined in section 4 with tree protection guidelines provided in Appendix E.

4. Tree protection plan

- All tree pruning and removal is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture.
- All tree work must be in accordance with Australian Standard *AS 4373-2007, Pruning of Amenity Trees* and the NSW WorkCover Code of Practice for the Amenity Tree Industry (1998).
- Permission must be granted from the relevant consent authority prior to removing or pruning of any of the subject trees. Approved tree works should not be carried out before the installation of tree protection measures.
- Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist and must comply with *AS 4970-2009 - Protection of trees on development sites.*
- All works within the TPZ of trees to be retained (including soft landscaping), should be undertaken under in consultation with the project arborist.

Tree protection measures are summarised in Table 4 and further information is in Appendix E.

Table 4: Summary of tree protection measures

Type	More details	Comment
Signage	Appendix E1	Prominently sign posted with 300 mm x 450 mm boards stating, “NO ACCESS - TREE PROTECTION ZONE”.
Tree protection fencing	Appendix E1	Protective cyclone chain wire link fence to be erected around the TPZ to protect and isolate retained trees from the construction works. Existing boundary fencing may be used.
Crown protection	Appendix E2	Where required, crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.
Trunk and branch protection	Appendix E3	When fencing is not practical or prior to any activities within the TPZ, trunk protection is required and consist of a layer geotextile fabric or similar followed by 1.8 m lengths of softwood timbers spaced evenly around the trunk and secured with a galvanised hoop strap.
Ground protection	Appendix E4	Install and maintain 100mm thick layer of mulch around tree in TPZ. For machine or vehicle access within TPZ geotextile fabric beneath crushed rock or rumble boards may be required.
Soil moisture		Soil moisture levels should be regularly monitored by the project arborist. Temporary irrigation or watering may be required within TPZ.
Root protection and investigation	Appendix E5	If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity using non-destructive excavation (NDE) methods.
Underground services	Appendix E6	All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive

Type	More details	Comment
		excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches.

5. Hold points, inspection and certification

An AQF Level 5 Consulting Arborist needs to be engaged to supervise work within the TPZ of trees to be retained, provide advice regarding tree protection and monitor compliance. This includes consultation with the project arborist where soft landscaping is proposed within the TPZ of trees to be retained. Once each stage is reached, the work will be inspected and certified by the project arborist and the next stage may commence. Alterations to this schedule may be required due to necessity, however, this shall be through consultation with the project arborist only.

A copy of this report must be available on-site prior to the commencement of works, and throughout the entirety of the project. Hold points have been specified in the schedule of works below to ensure trees are adequately protected during construction. It is the responsibility of the principal contractor to complete each of the tasks.

Pre-construction

Prior to any construction, an onsite meeting should be conducted with attendee's subject but not limited to the project arborist (AQF Level 5 Consulting Arborist), site manager and construction personnel team to walkthrough the tree protection measures requirements. All trees approved for removal are to be indicated clearly with spray paint on trunks.

To ensure the viable retention of two high retention value trees (Tree 28 & 58) subject to high impact (>20% TPZ and/or SRZ encroachment) the following is required in order to determine if retention is viable:

- Tree 28: detailed design is to be in consultation with the Project Arborist, utilizing existing pavement where possible. In addition, no excavation is to be completed within the TPZ and for all proposed works (including the removal of existing driveway pavement) are to be completed by hand and under the supervision of the appointed Project Arborist (AQF L5).
- Tree 58: further investigations such as root mapping is required to be completed in order to determine if retention is viable with the proposed location of the stormwater infrastructure and paved areas.

To ensure the viable retention of the 10 high retention value trees (Trees 57, 66, 72, 75, 77, 82, 85, 128, 198 and 322) subject to medium impact (10-20% TPZ encroachment) the following is required in order to determine if retention is viable:

- Trees 57, 66, 72, 75, 77 Tree 322 can potentially be retained subject to no excavation being completed within the TPZ for the paved areas and soft landscaping work. All works to be completed by hand and under the supervision of the appointed Project Arborist (AQF L5).

- Trees 82 & 85 have the potential to be retained subject to supervision of the appointed Project Arborist (AQF L5) during the installation of the decomposed granite, bike rack footprint, paved areas and stormwater when located within the TPZ.
- Trees 128 & 198 can potentially be retained subject to further investigations such as root mapping to be completed in order to determine if retention is viable with the proposed location of the earthworks.

Permission to remove trees located outside the site boundary is to be sought by the landowner prior to construction and permission must be granted from the relevant consent authority prior to removing any of the subject trees.

During construction

Monthly inspection of trees by the Project Arborist (or other timing as agreed with the project arborist).

Post-construction

Final inspection of trees by project arborist after all major construction has ceased and following the removal of tree protection measures.

6. References

6.1 General references

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6.2 Project specific references

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Appendix A Tree retention assessment method

A1 Tree Significance Assessment Criteria - STARS©

The tree is to have a minimum of three criteria in a category to be classified in that group.

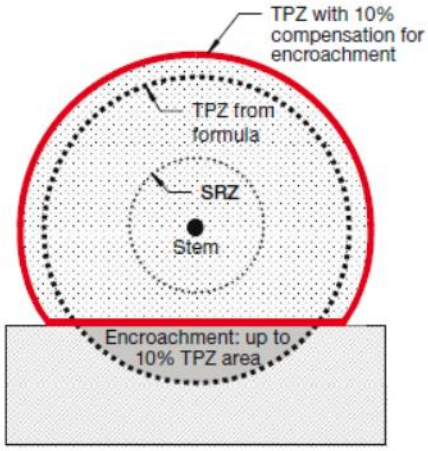
Low	Medium	High
The tree is in fair-poor condition and good or low vigour.	The tree is in fair to good condition and good or low vigour	The tree is in good condition and good vigour
The tree has form atypical of the species	The tree has form typical or atypical of the species	The tree has a form typical for the species
The tree is not visible or is partly visible from the surrounding properties or obstructed by other vegetation or buildings	The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area	The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age.
The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area	The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street	The tree is listed as a heritage item, threatened species or part of an endangered ecological community or listed on Council's significant tree register
The tree is a young specimen which may or may not have reached dimensions to be protected by local Tree Preservation Orders or similar protection mechanisms and can easily be replaced with a suitable specimen	The tree provides a fair contribution to the visual character and amenity of the local area	The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity.
The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ – tree is inappropriate to the site conditions	The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ	The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values.
The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms		The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa in situ – tree is appropriate to the site conditions.
The tree has a wound or defect that has the potential to become structurally unsound.		
Environmental Pest / Noxious Weed The tree is an environmental pest species due to its invasiveness or poisonous/allergenic properties. The tree is a declared noxious weed by legislation.		
Hazardous /Irreversible Decline The tree is structurally unsound and / or unstable and is considered potentially dangerous. The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.		

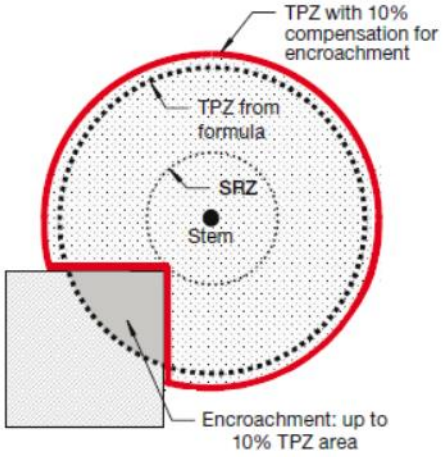
A2 Matrix assessment - STARS©

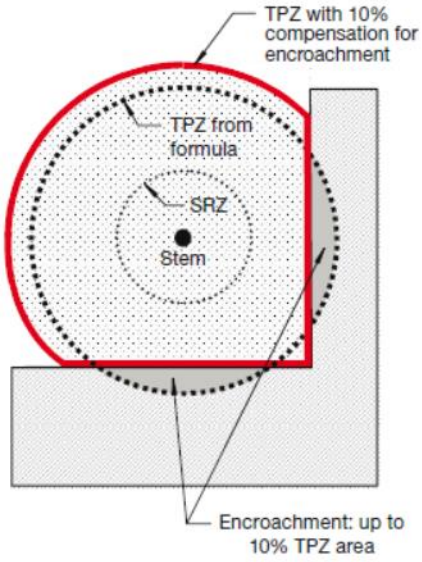
		Tree significance				
		High	Medium	Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest/Noxious Weed Species	Hazardous/ Irreversible Decline
Useful Life Expectancy	Long >40 years					
	Medium 15-40 years					
	Short <1-15 years					
	Dead					

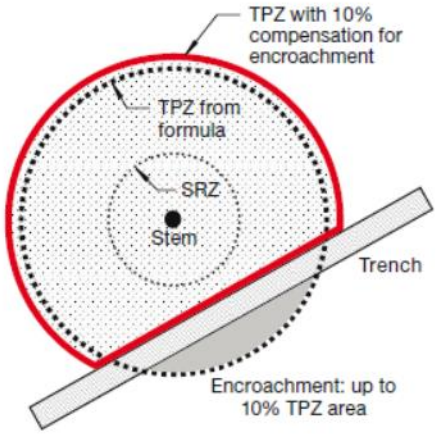
	Priority for retention (High): Tree considered important so should be retained and protected. Design modification or re-location of structure should be considered to accommodate the setbacks as prescribed by the *Australian Standard AS4970 Protection of trees on development sites*. Tree sensitive construction measures must be implemented if works are to proceed within the Tree Protection Zone.
	Consider for retention (Medium): Tree considered less important; however, retention should remain priority. Removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for removal (Low): Tree not considered important for retention, nor requiring special works or design modification to be implemented for their retention.
	Priority for removal: These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

Appendix B Encroachment into tree protection zones - AS 4970-2009









Appendix C Maps

Figure 3: Overview

Figure 4: Tree locations in accessible areas, page 1

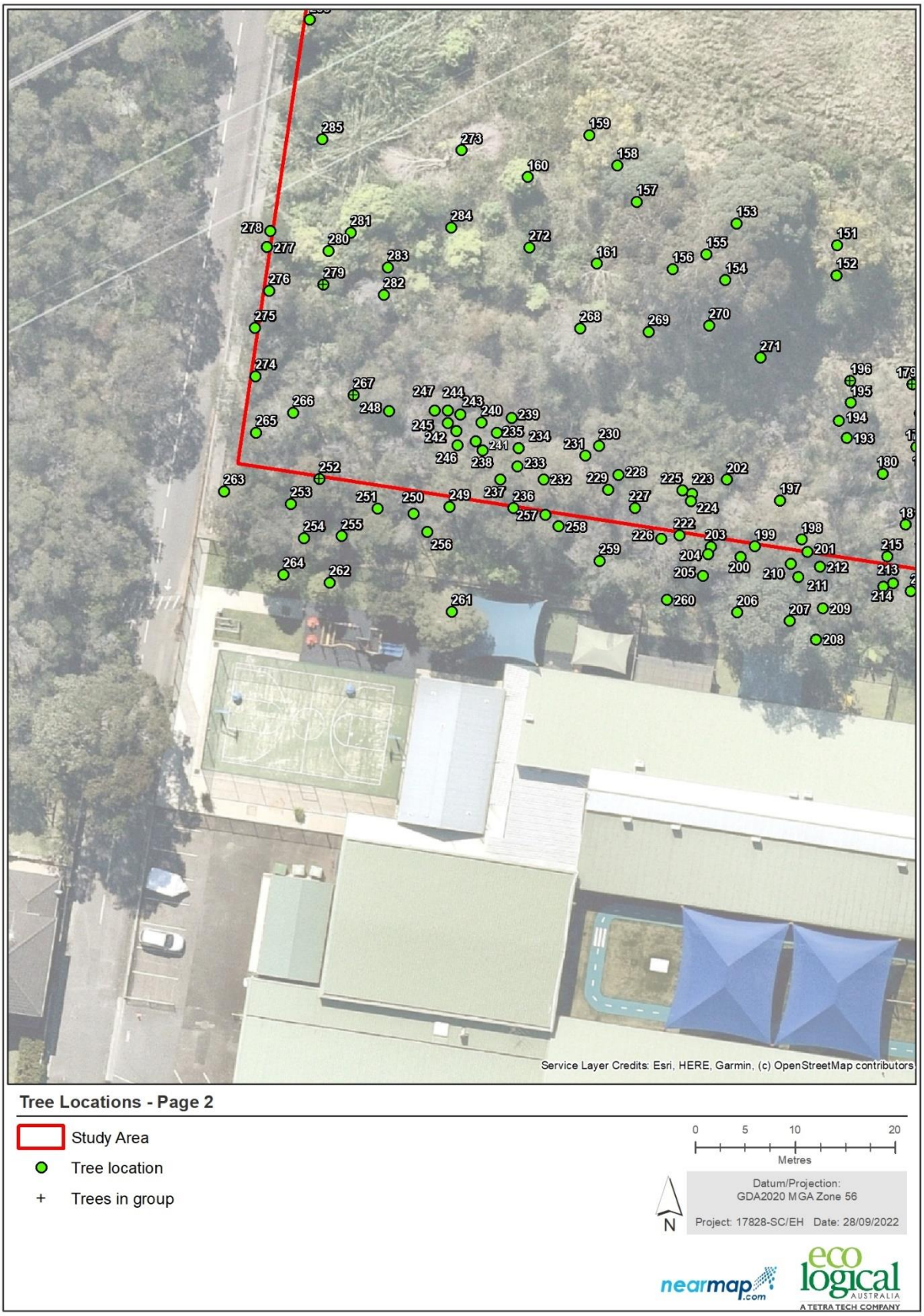


Figure 5: Tree locations in accessible areas, page 2

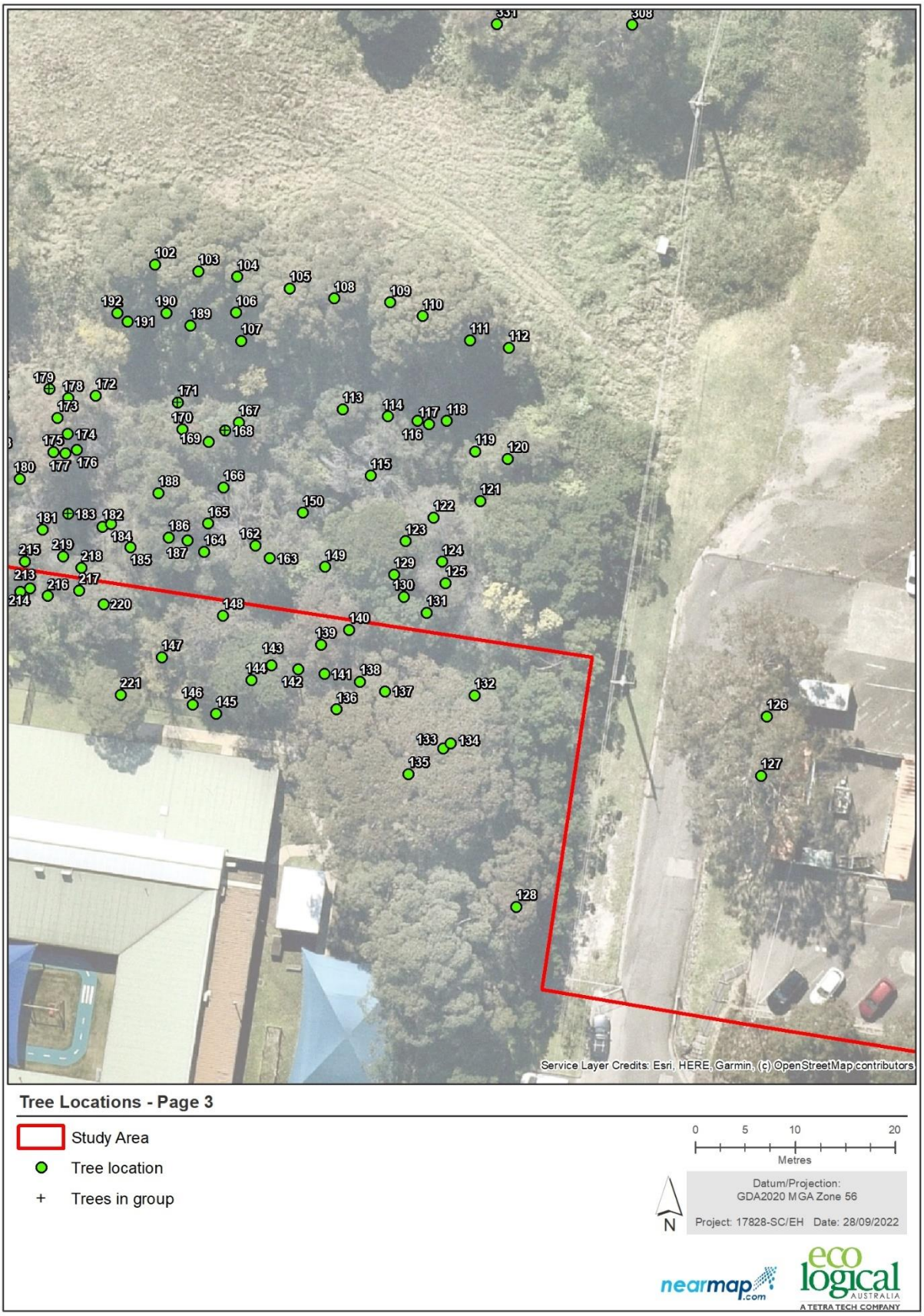


Figure 6: Tree locations in accessible areas, page 3

Figure 7: Tree locations in accessible areas, page 4

Figure 8: Tree locations in accessible areas, page 5

Figure 9: Tree retention values in accessible areas, page 1

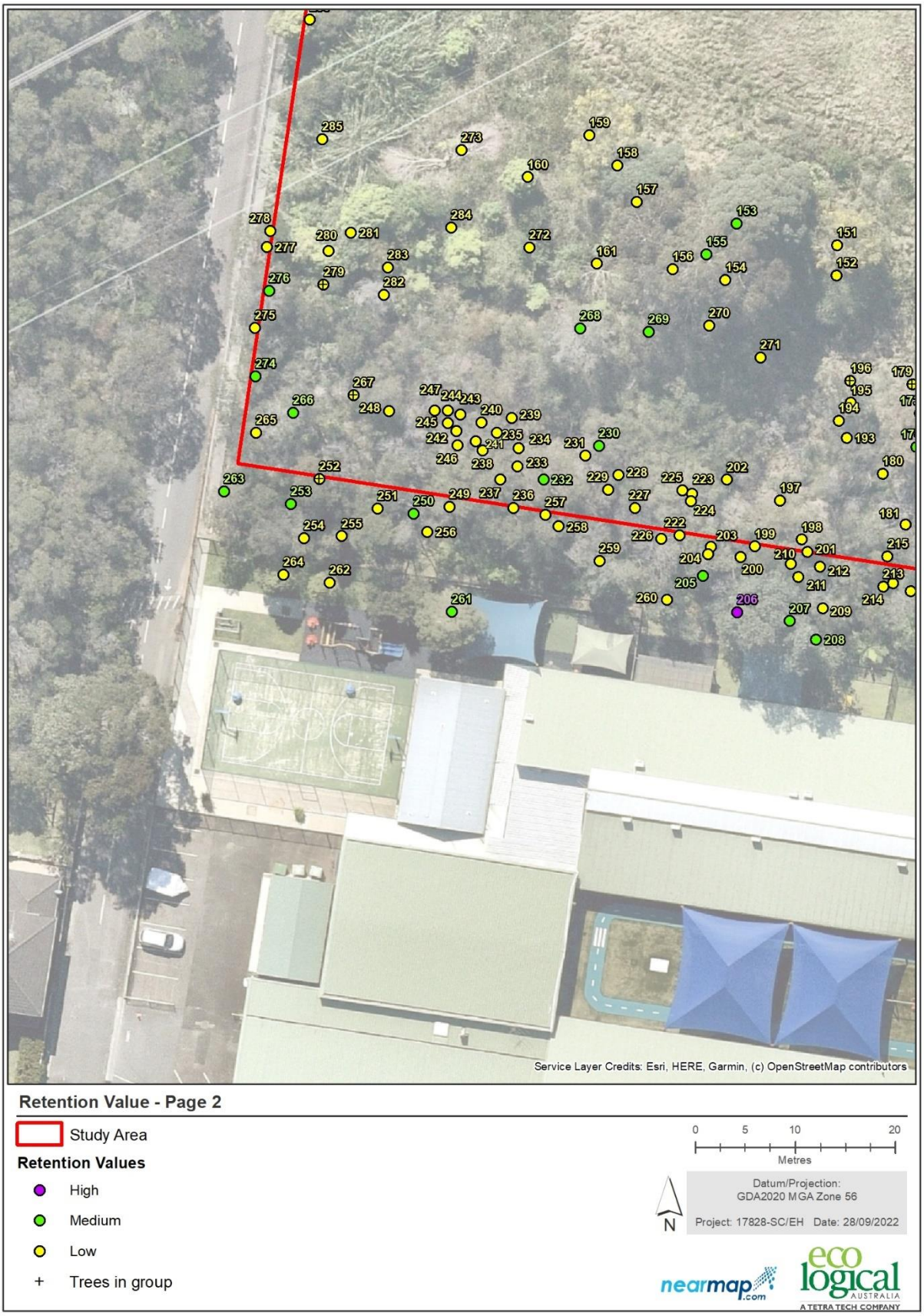


Figure 10: Tree retention values in accessible areas, page 2

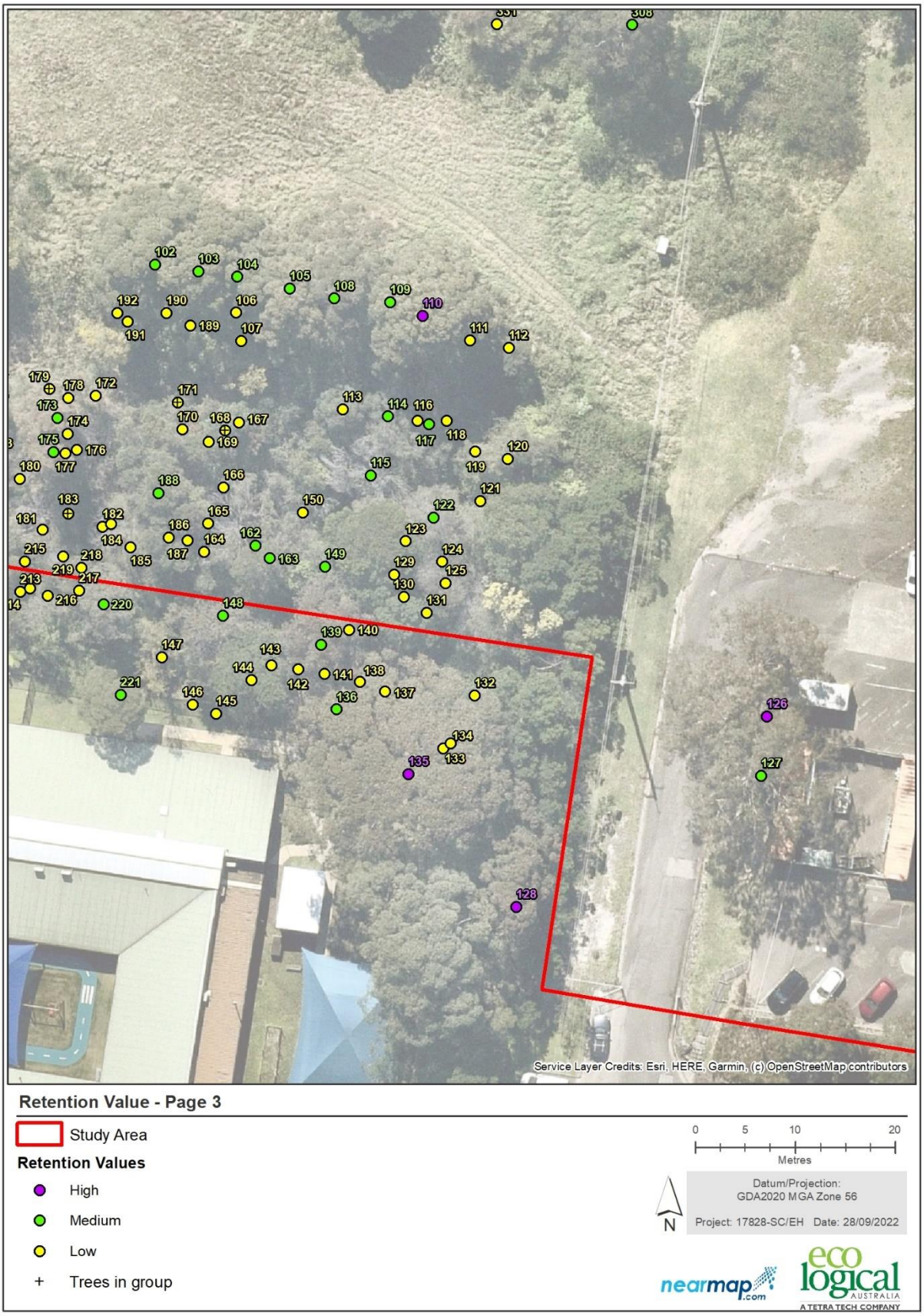


Figure 11: Tree retention values in accessible areas, page 3

Figure 12: Tree retention values in accessible areas, page 4

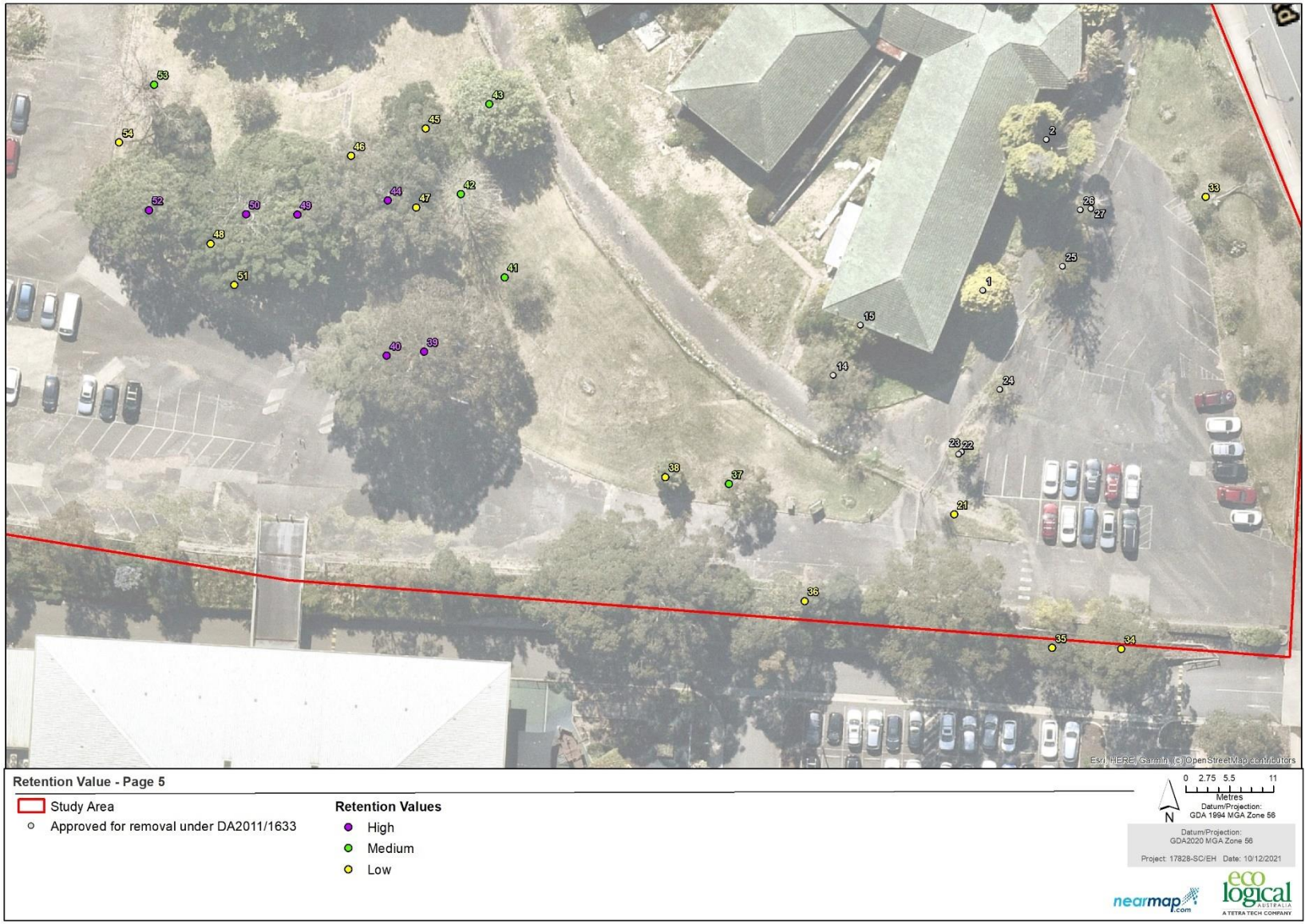


Figure 13: Tree retention values in accessible areas, page 5

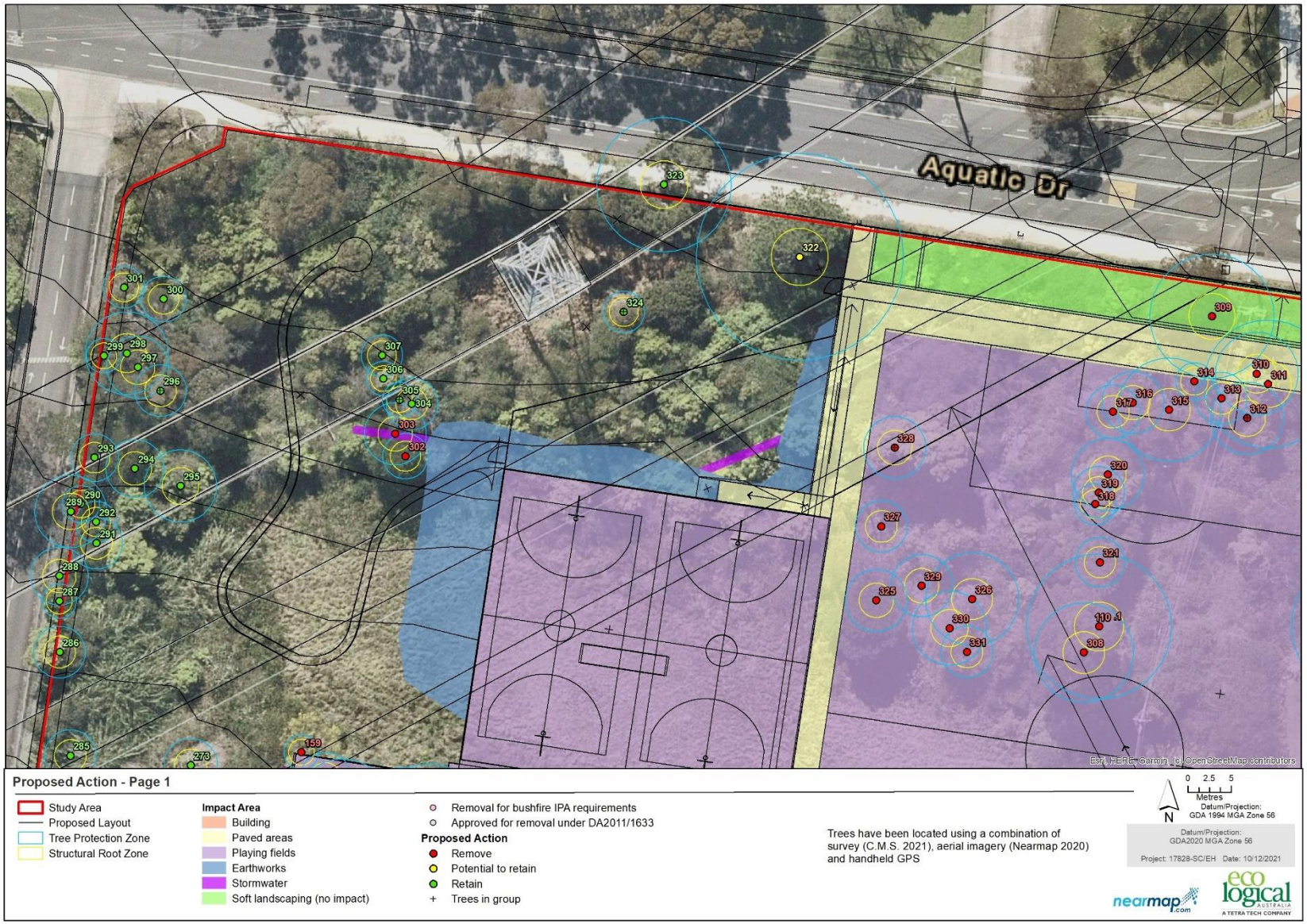


Figure 14: Proposed action, page 1

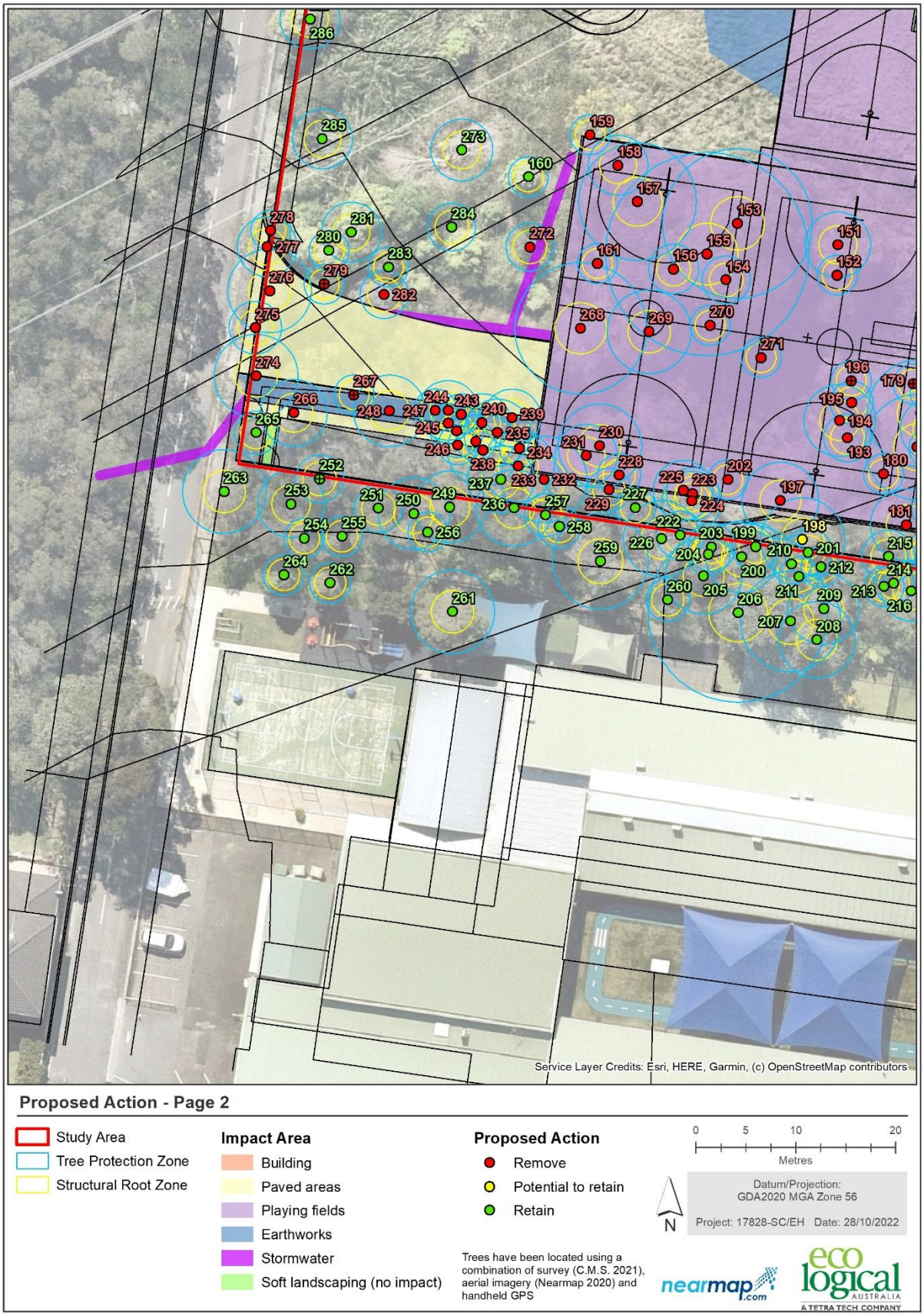


Figure 15: Proposed action, page 2

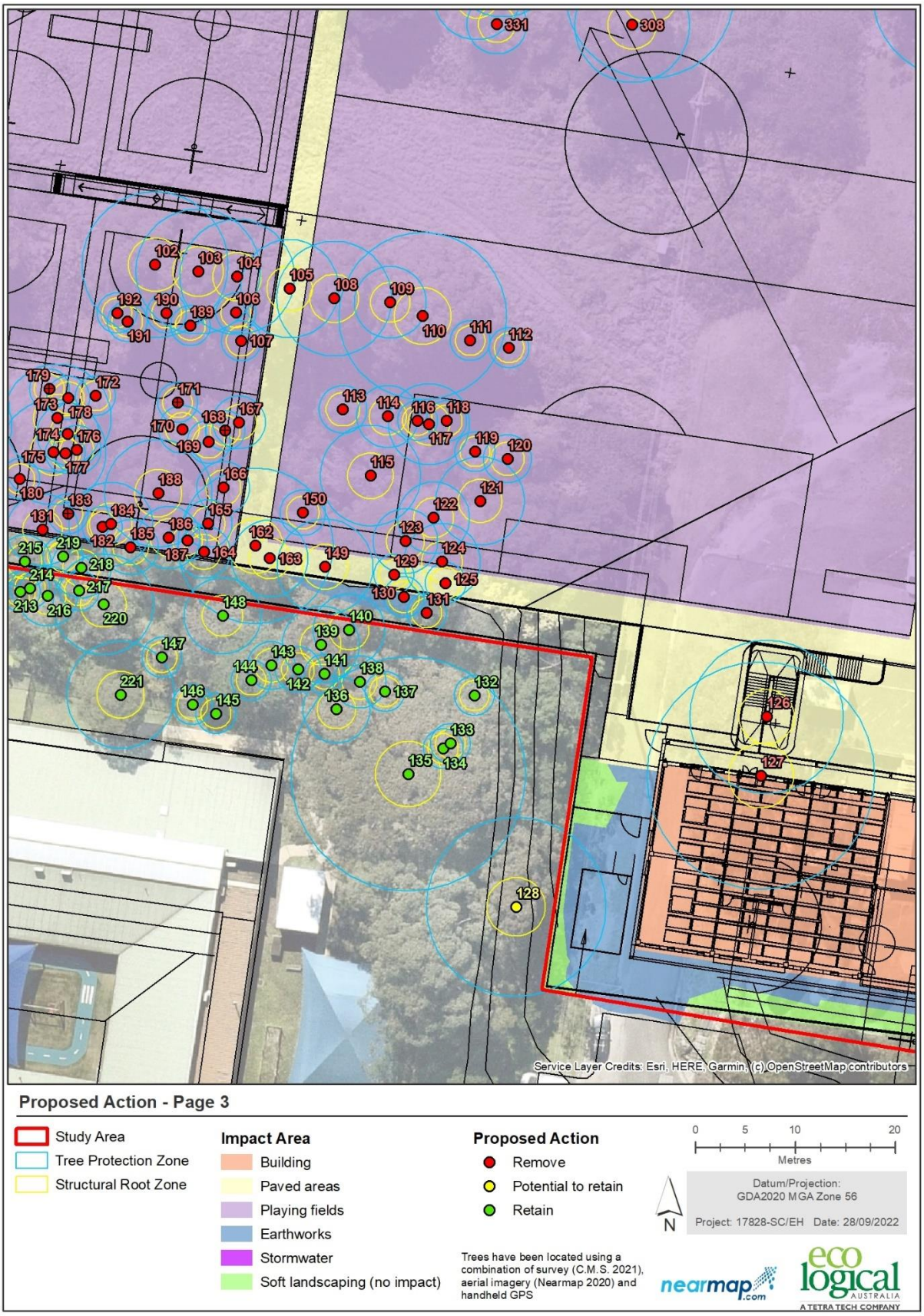


Figure 16: Proposed action, page 3

Figure 17: Proposed action, page 4

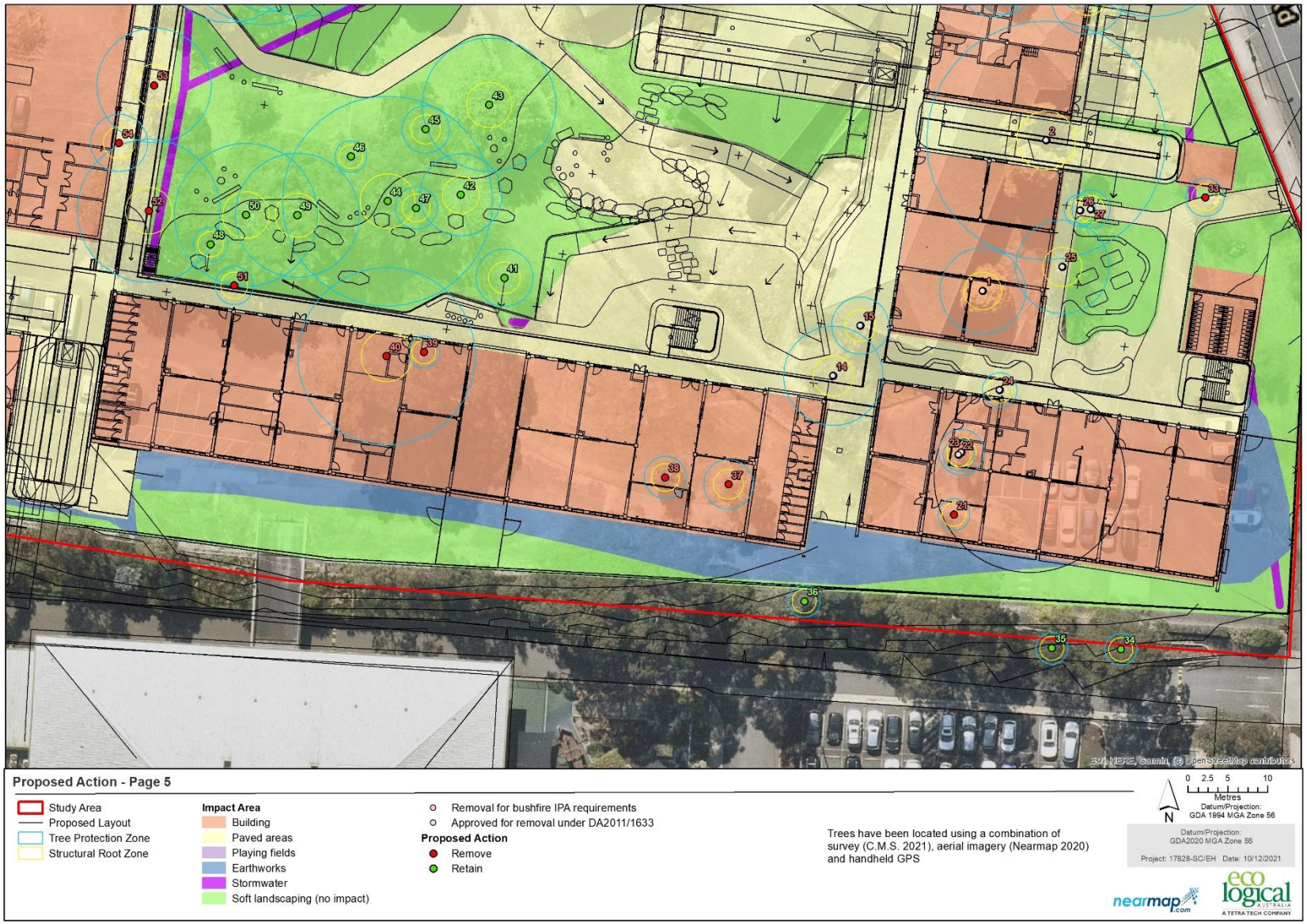


Figure 18: Proposed action, page 5

Appendix D Tabulated results of arboricultural assessment

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
18	*Corymbia gummifera*	1	Survey	12	8	Good	Fair	480	5.8	2.4	Long (>40 years)	Medium	Medium	Yes	62	High Impact: >20%	Remove	
19	*Corymbia gummifera*	1	Survey	14	10	Good	Fair	500	6.0	2.5	Long (>40 years)	Medium	Medium	Yes	56	High Impact: >20%	Remove	
21	*Populus nigra*	1	Nearmap 2022	6	3	Good	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
28	*Ficus henneana*	1	Survey	15	15	Good	Fair	930	11.2	3.2	Long (>40 years)	High	High	No	31	High Impact: >20%	Potential to retain	
29	*Schinus terebinthifolius*	1	Survey	8	15	Fair	Fair	1000	12.0	3.3	Medium (15-40 years)	Medium	Medium	Yes	43	High Impact: >20%	Remove	
32	*Thuja occidentalis*	1	Nearmap 2022	14	12	Good	Good	600	7.2	2.7	Long (>40 years)	High	High	Yes	91	High Impact: >20%	Remove	
33	*Melaleuca armillaris*	1	Survey	7	8	Poor	Poor	200	2.4	1.7	Short (5-15 years)	Low	Low	Yes	81	High Impact: >20%	Remove	Only one of multi-stems surviving
34	*Acacia saligna*	1	Survey	4	3	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
35	*Acacia saligna*	1	Nearmap 2022	4	2	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
36	*Acacia glaucescens*	1	Survey	8	4	Good	Good	120	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
37	*Angophora costata*	1	Nearmap 2022	10	10	Fair	Good	260	3.1	1.9	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
38	*Syzygium paniculatum*	1	Nearmap 2022	7	4	Good	Good	220	2.6	1.8	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
39	*Eucalyptus bicostata*	1	Survey	22	20	Good	Good	120	2.0	1.5	Long (>40 years)	High	High	Yes	100	High Impact: >20%	Remove	
40	*Casuarina glauca*	1	Survey	18	10	Good	Good	930	11.2	3.2	Long (>40 years)	High	High	Yes	84	High Impact: >20%	Remove	
41	*Agonis flexuosa*	1	Survey	8	5	Fair	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
42	*Liquidambar styraciflua*	1	Survey	15	12	Good	Good	430	5.2	2.3	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
43	*Syncarpia glomulifera*	1	Survey	15	10	Good	Good	700	8.4	2.8	Long (>40 years)	Medium	Medium	No	0	Low Impact: <10%	Retain	
44	*Eucalyptus robusta*	1	Survey	18	18	Good	Good	1100	13.2	3.4	Long (>40 years)	High	High	No	0	Low Impact: <10%	Retain	Broken limb hung up
45	*Eucalyptus robusta*	1	Survey	10	5	Fair	Fair	250	3.0	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
46	*Acacia parramattensis*	1	Nearmap 2022	6	3	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
47	*Vitex trifolia 'Purpurea'*	1	Nearmap 2022	5	6	Fair	Fair	220	2.6	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
48	*Acacia parramattensis*	1	Survey	6	6	Fair	Fair	180	2.2	1.6	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
49	*Ficus hillii*	1	Survey	15	14	Good	Good	650	7.8	2.8	Long (>40 years)	High	High	No	0	No Impact: 0%	Retain	
50	*Ficus hillii*	1	Nearmap 2022	15	16	Poor	Fair	750	9.0	2.9	Medium (15-40 years)	High	High	No	0	No Impact: 0%	Retain	Sparse canopy
51	*Triadica sebifera*	1	Survey	8	6	Good	Good	200	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	41	High Impact: >20%	Remove	
52	*Pinus canariensis*	1	Nearmap 2022	19	12	Good	Good	750	9.0	2.9	Long (>40 years)	High	High	Yes	60	High Impact: >20%	Remove	
53	*Populus deltoides*	1	Survey	18	14	Poor	Fair	600	7.2	2.7	Short (5-15 years)	Medium	Medium	Yes	77	High Impact: >20%	Remove	Canopy dieback
54	*Acacia sp.*	1	Survey	10	3	Poor	Poor	300	3.6	2.0	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Decay, previous failure
55	*Platanus × acerifolia*	1	Survey	12	10	Good	Fair	410	4.9	2.3	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Heavily asymmetric
56	*Pinus canariensis*	1	Survey	20	12	Good	Fair	939	11.3	3.2	Long (>40 years)	High	High	No	0	Low Impact: <10%	Retain	
57	*Ficus hillii*	1	Survey	15	18	Good	Good	950	11.4	3.2	Long (>40 years)	High	High	No	14	Medium Impact: <20%	Potential to retain	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
58	*Ficus hillii*	1	Nearmap 2022	15	20	Good	Good	750	9.0	2.9	Long (>40 years)	High	High	No	30	High Impact: >20%	Potential to retain	
59	*Eucalyptus haemastoma*	1	Survey	15	16	Good	Fair	600	7.2	2.7	Long (>40 years)	High	High	Yes	84	High Impact: >20%	Remove	Mechanical damage
60	*Liquidambar styraciflua*	1	Survey	15	9	Good	Good	310	3.7	2.0	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
61	*Schefflera actinophylla*	1	Nearmap 2022	12	6	Fair	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Low	Yes	26	High Impact: >20%	Remove	
62	*Cryptomeria japonica*	1	Survey	15	6	Good	Good	290	3.5	2.0	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
63	*Cupressus sempervirens*	1	Survey	15	5	Poor	Fair	400	4.8	2.3	Short (5-15 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Overcrowded
64	*Cupressus sempervirens*	1	Survey	20	6	Fair	Poor	450	5.4	2.4	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Overcrowded, branch failures, hangers
65	*Cupressus sempervirens*	1	Survey	23	6	Fair	Fair	500	6.0	2.5	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Overcrowded, hanging branches
66	*Pinus canariensis*	1	Survey	25	18	Good	Fair	910	10.9	3.2	Long (>40 years)	High	High	No	13	Medium Impact: <20%	Potential to retain	Bifurcation high in trunk
67	*Araucaria heterophylla*	1	Survey	17	6	Fair	Fair	350	4.2	2.1	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
68	*Dead tree*	1	Survey	5	4	Poor	Poor	300	3.6	2.0	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Dead tree
69	*Fraxinus griffithii*	1	Survey	5	7	Good	Good	260	3.1	1.9	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
71	*Ceratopetalum apetalum*	1	Survey	15	12	Good	Good	400	4.8	2.3	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Multi trunked
72	*Lophostemon confertus*	1	Survey	18	12	Good	Good	750	9.0	2.9	Long (>40 years)	High	High	No	11	Medium Impact: <20%	Potential to retain	
73	*Cupressus sempervirens*	1	Nearmap 2022	10	8	Poor	Fair	350	4.2	2.1	Medium (15-40 years)	Medium	Low	No	0	No Impact: 0%	Retain	Outcompeted
74	*Acacia sp.*	1	Nearmap 2022	5	7	Poor	Fair	380	4.6	2.2	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
75	*Eucalyptus robusta*	1	Survey	18	20	Fair	Good	830	10.0	3.1	Long (>40 years)	High	High	No	19	Medium Impact: <20%	Potential to retain	
76	*Acacia sp.*	1	Nearmap 2022	5	4	Poor	Fair	350	4.2	2.1	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
77	*Acacia sp.*	1	Nearmap 2022	5	5	Poor	Fair	320	3.8	2.1	Short (5-15 years)	Low	Low	No	10	Medium Impact: <20%	Potential to retain	
78	*Acacia sp.*	1	Nearmap 2022	4	6	Poor	Poor	380	4.6	2.2	Short (5-15 years)	Low	Low	Yes	34	High Impact: >20%	Remove	
79	*Citharexylum spinosum*	1	Nearmap 2022	7	5	Good	Good	280	3.4	1.9	Medium (15-40 years)	Low	Low	Yes	28	High Impact: >20%	Remove	
80	*Acacia saligna*	1	Nearmap 2022	5	6	Poor	Poor	180	2.2	1.6	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
81	*Toona ciliata*	1	Nearmap 2022	9	6	Fair	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
82	*Ficus hillii*	1	Survey	18	20	Good	Good	1200	14.4	3.6	Long (>40 years)	High	High	No	20	Medium Impact: <20%	Potential to retain	
83	*Lagerstroemia indica*	1	Survey	5	4	Poor	Fair	180	2.2	1.6	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Remove	Overcrowded
84	*Cotoneaster sp.*	1	Nearmap 2022	5	8	Fair	Fair	350	4.2	2.1	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Multi trunked
85	*Agonis flexuosa*	1	Survey	10	15	Fair	Poor	900	10.8	3.2	Short (5-15 years)	Medium	Medium	No	12	Medium Impact: <20%	Potential to retain	Multi stemmed, decay, split
86	*Platanus × acerifolia*	1	Survey	15	16	Fair	Good	650	7.8	2.8	Long (>40 years)	Medium	Medium	No	2	Low Impact: <10%	Retain	
87	*Cotoneaster sp.*	5	Survey	5	7	Fair	Fair	200	2.4	1.7	Short (5-15 years)	Low	Low	No	0	Low Impact: <10%	Remove	Five shrubs planted as a group
88	*Pittosporum undulatum*	1	Survey	10	8	Fair	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Remove	Free not tags due to inaccessibility
89	*Cotoneaster sp.*	1	Survey	8	10	Good	Fair	350	4.2	2.1	Medium (15-40 years)	Medium	Low	Yes	41	High Impact: >20%	Remove	Multi trunked
90	*Eucalyptus botryoides*	1	Nearmap 2022	18	15	Fair	Fair	590	7.1	2.7	Medium (15-40 years)	Medium	Medium	Yes	99	High Impact: >20%	Remove	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
91	*Liquidambar styraciflua*	1	Survey	14	8	Good	Good	310	3.7	2.0	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
92	*Eucalyptus saligna*	1	Survey	19	13	Good	Good	530	6.4	2.5	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
93	*Liquidambar styraciflua*	1	Survey	12	9	Good	Good	410	4.9	2.3	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
94	*Acacia sp.*	1	Nearmap 2022	5	5	Poor	Fair	180	2.2	1.6	Short (5-15 years)	Low	Low	Yes	99	High Impact: >20%	Remove	
95	*Tristaniopsis laurina*	1	Survey	9	10	Good	Good	500	6.0	2.5	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
96	*Acacia sp.*	1	Survey	6	5	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	98	High Impact: >20%	Remove	
97	*Tristaniopsis laurina*	1	Survey	8	10	Good	Good	450	5.4	2.4	Long (>40 years)	Medium	Medium	Yes	99	High Impact: >20%	Remove	
98	*Agonis flexuosa*	1	Survey	9	9	Fair	Fair	600	7.2	2.7	Medium (15-40 years)	Medium	Medium	Yes	99	High Impact: >20%	Remove	
99	*Tristaniopsis laurina*	1	Survey	9	7	Good	Good	320	3.8	2.1	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
100	*Tristaniopsis laurina*	1	Survey	15	16	Fair	Good	700	8.4	2.8	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
101	*Dead tree*	1	Survey	5	5	Poor	Poor	220	2.6	1.8	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Dead tree
102	*Eucalyptus microcorys*	1	Survey	18	12	Good	Fair	610	7.3	2.7	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 120. Basal movement
103	*Eucalyptus microcorys*	1	Survey	20	10	Good	Good	520	6.2	2.5	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 118
104	*Eucalyptus microcorys*	1	Survey	19	12	Fair	Poor	480	5.8	2.4	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 117. Tear out
105	*Corymbia citriodora*	1	Survey	18	15	Good	Good	410	4.9	2.3	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
106	*Eucalyptus microcorys*	1	Survey	8	2	Fair	Fair	110	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 116
107	*Acacia saligna*	1	Survey	10	4	Fair	Fair	120	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 115
108	*Eucalyptus microcorys*	1	GPS unit	19	14	Fair	Fair	480	5.8	2.4	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 113. Leaning, self corrected
109	*Eucalyptus microcorys*	1	Survey	15	8	Good	Good	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 112
110	*Angophora costata*	1	Survey	20	14	Good	Good	0	8.4	2.8	Long (>40 years)	High	High	Yes	100	High Impact: >20%	Remove	Resurveyed. Previously tagged 139. Twin stemmed
110	*Eucalyptus microcorys*	1	Survey	22	15	Good	Good	700	8.4	2.8	Long (>40 years)	High	High	Yes	100	High Impact: >20%	Remove	Previously tagged 111
111	*Eucalyptus microcorys*	1	Survey	10	4	Fair	Fair	150	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
112	*Allocasuarina torulosa*	1	Survey	8	4	Good	Good	140	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 109
113	*Eucalyptus microcorys*	1	Survey	10	5	Good	Good	200	2.4	1.7	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 85
114	*Allocasuarina torulosa*	1	Survey	12	9	Fair	Good	260	3.1	1.9	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 86
115	*Allocasuarina torulosa*	1	Survey	12	10	Poor	Fair	420	5.0	2.3	Short (5-15 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 87. Sparse canopy
116	*Allocasuarina torulosa*	1	Survey	11	4	Fair	Fair	110	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 108
117	*Allocasuarina torulosa*	1	Survey	10	8	Fair	Good	340	4.1	2.1	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 107
118	*Acacia parramattensis*	1	Survey	12	5	Fair	Fair	170	2.0	1.6	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 106. Leaning
119	*Casuarina glauca*	1	Survey	12	2	Good	Good	120	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 105

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
120	*Allocasuarina torulosa*	1	Survey	14	8	Good	Good	200	2.4	1.7	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 104
121	*Allocasuarina torulosa*	1	Survey	12	8	Poor	Fair	370	4.4	2.2	Short (5-15 years)	Medium	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 101. Decay, dieback
122	*Allocasuarina torulosa*	1	Survey	14	8	Fair	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
123	*Acacia parramattensis*	1	Survey	15	8	Good	Fair	270	3.2	1.9	Short (5-15 years)	Medium	Low	Yes	100	High Impact: >20%	Remove	
124	*Allocasuarina torulosa*	1	Survey	14	8	Fair	Fair	320	3.8	2.1	Short (5-15 years)	Medium	Low	Yes	100	High Impact: >20%	Remove	Sparse canopy
125	*Allocasuarina torulosa*	1	Survey	10	5	Poor	Poor	170	2.0	1.6	Short (5-15 years)	Low	Low	Yes	95	High Impact: >20%	Remove	Fungal bracket, decay
126	*Corymbia citriodora*	1	Nearmap 2022	22	20	Fair	Fair	640	7.7	2.7	Long (>40 years)	High	High	Yes	100	High Impact: >20%	Remove	
127	*Eucalyptus scoparia*	1	Nearmap 2022	20	20	Poor	Fair	950	11.4	3.2	Short (5-15 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Crown dieback
128	*Eucalyptus globoidea*	1	Survey	18	15	Good	Fair	750	9.0	2.9	Medium (15-40 years)	High	High	No	16	Medium Impact: <20%	Potential to retain	
129	*Acacia parramattensis*	1	Survey	12	4	Good	Good	140	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 90
130	*Acacia parramattensis*	1	Survey	14	5	Good	Good	170	2.0	1.6	Short (5-15 years)	Low	Low	Yes	99	High Impact: >20%	Remove	Previously tagged 89
131	*Acacia parramattensis*	1	Survey	12	2	Good	Good	100	2.0	1.5	Short (5-15 years)	Low	Low	Yes	39	High Impact: >20%	Remove	
132	*Homalanthus populifolius*	1	GPS unit	5	4	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
133	*Acacia parramattensis*	1	GPS unit	10	4	Fair	Fair	120	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
134	*Pittosporum undulatum*	1	GPS unit	5	3	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
135	*Eucalyptus botryoidesxsaligna*	1	GPS unit	28	25	Good	Fair	980	11.8	3.3	Long (>40 years)	High	High	No	0	No Impact: 0%	Retain	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
136	*Glochidion ferdinandi*	1	Survey	12	8	Good	Good	280	3.4	1.9	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
137	*Acacia parramattensis*	1	GPS unit	12	4	Poor	Poor	160	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	decay, borers
138	*Acacia parramattensis*	1	Survey	14	3	Poor	Poor	220	2.6	1.8	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	decay, borers
139	*Eucalyptus botryoidesxsaligna*	1	Survey	16	6	Good	Good	320	3.8	2.1	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
140	*Allocasuarina torulosa*	1	Survey	13	6	Poor	Good	300	3.6	2.0	Short (5-15 years)	Medium	Low	No	8	Low Impact: <10%	Retain	Sparse canopy
141	*Acacia parramattensis*	1	Survey	11	3	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
142	*Acacia parramattensis*	1	Survey	12	4	Good	Good	190	2.3	1.6	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
143	*Acacia parramattensis*	1	Survey	12	5	Good	Good	200	2.4	1.7	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
144	*Pittosporum undulatum*	1	Survey	6	4	Fair	Fair	140	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
145	*Dead tree*	1	Survey	10	2	Poor	Poor	100	2.0	1.5	Remove (<5 years)	Low	Low	No	0	No Impact: 0%	Retain	Dead tree
146	*Acacia sp.*	1	Survey	8	4	Poor	Fair	140	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
147	*Acacia sp.*	1	Survey	12	5	Poor	Fair	160	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
148	*Allocasuarina torulosa*	1	Survey	10	12	Fair	Fair	320	3.8	2.1	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Previously tagged 42, partial failure
149	*Allocasuarina torulosa*	1	Survey	10	10	Fair	Fair	400	4.8	2.3	Medium (15-40 years)	Medium	Medium	Yes	82	High Impact: >20%	Remove	Previously tagged 88,
150	*Allocasuarina torulosa*	1	Survey	10	3	Poor	Fair	190	2.3	1.6	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Sparse canopy
151	*Acacia saligna*	1	Survey	8	0	Poor	Poor	0	3.3	1.9	short 5-15 yrs	Low	Low	Yes	100	High Impact: >20%	Remove	limb failures, major deadwood throughout,in decline, top of embankment
152	*contoneaster*	1	Survey	6.5	0	Poor	Poor	0	2.0	1.5	short 5-15 yrs	Low	Low	Yes	100	High Impact: >20%	Remove	deadwood throughout, decay pockets in stems
153	*Eucalyptus microcorys*	1	Survey	16	0	Fair	fair	0	7.5	2.7	med 15-40 yrs	Medium	Medium	Yes	97	High Impact: >20%	Remove	occluded seam at 1.5 termite tracking evident within and close to seam, rubbing and crossing branches...123 rnd tag

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
154	*Grevilla robusta*	1	Survey	10	0	Fair	good	0	2.4	1.7	short 5-15 yrs	Low	Low	Yes	100	High Impact: >20%	Remove	straight tall tree withone main trunk, suppressed by 155, minor deadwood
155	*Eucalyptus scoparia*	1	Survey	14	0	Fair	fair	0	10.2	3.1	med 15-40 yrs	Medium	Medium	Yes	99	High Impact: >20%	Remove	codominant trunk from 2m, major deadwood, dieback to several major limbs, evidenced frass in several wounds.....125 rnd tag.
156	*Melaleuca armillaris*	1	Survey	8	0	Poor	Poor	0	2.5	1.7	short 5-15 yrs	Low	Low	Yes	100	High Impact: >20%	Remove	multistemmed small tree, less than 80 live canopy remaining, suppressed by 155....rnd tag 126...2m from gully ck
157	*Eucalyptus microcorys*	1	Survey	9	0	Fair	fair	0	5.9	2.5	short 5-15 yrs	Low	Low	Yes	99	High Impact: >20%	Remove	single trunk to 1.3, suppressed by 155, minor deadwood, outer canopy only, top of embankment, termite tracking evidenced
158	*Acacia saligna*	1	Survey	9	0	Poor	Poor	0	3.0	1.9	short 5-15 yrs	Low	Low	Yes	93	High Impact: >20%	Remove	heavily suppressed tree,total biased to north by tree 157, upper canopy only....rnd tag 129
159	*Pittosporum undulatum*	1	Survey	5	0	Fair	fair	0	2.0	1.5	short 5-15 yrs	Low	Low	Yes	30	High Impact: >20%	Remove	small symmetrical tree with middle to upper canopy only, codominant stem forming canopyawe
160	*Ligustrum lucidum*	1	Survey	5	0	Fair	fair	0	2.0	1.5	short 5-15 yrs	Low	Low	No	0	No Impact: 0%	Retain	small weed spp, 2m from edge of powerlines, couldnt tag
161	*Acer negundo*	1	GPS unit	7	0	Fair	fair	0	2.0	1.5	short 5-15 yrs	Low	Low	Yes	100	High Impact: >20%	Remove	small tree at edge of creek, couldnt tag
162	*Allocasuarina torulosa*	1	Survey	12	10	Fair	Fair	0	7.8	2.8	Medium (15-40 years)	Medium	Medium	Yes	70	High Impact: >20%	Remove	Multi trunked
163	*Allocasuarina torulosa*	1	Survey	14	5	Good	Good	0	3.8	2.1	Medium (15-40 years)	Medium	Medium	Yes	74	High Impact: >20%	Remove	
164	*Allocasuarina torulosa*	1	Survey	14	5	Good	Fair	0	2.6	1.8	Medium (15-40 years)	Low	Low	Yes	70	High Impact: >20%	Remove	Wound on trunk. Dead tree nearby not recorded
165	*Allocasuarina torulosa*	1	Survey	12	4	Good	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
166	*Allocasuarina torulosa*	1	Survey	10	5	Fair	Fair	0	2.6	1.8	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Another dead fallen tree lodged up in this one. Not recorded
167	*Corymbia gummifera*	1	Survey	10	4	Good	Good	0	2.6	1.8	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 84
168	*Allocasuarina torulosa*	10	Survey	8	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Group of 10 small trees surrounding tree 167

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
169	*Allocasuarina torulosa*	1	Survey	9	3	Good	Good	0	2.2	1.6	Medium (15-40 years)	Medium	Low	Yes	100	High Impact: >20%	Remove	
170	*Allocasuarina torulosa*	1	Survey	9	3	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
171	*Casuarina glauca*	10	Survey	8	2	Good	Good	0	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Group of 10 small trees located around tree 170
172	*Casuarina glauca*	1	Survey	9	2	Good	Good	0	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
173	*Casuarina glauca*	1	Survey	14	6	Good	Good	0	5.4	2.4	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 83
174	*Allocasuarina torulosa*	1	Survey	6	4	Good	Good	0	3.1	1.9	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
175	*Casuarina glauca*	1	Survey	12	5	Good	Good	0	5.3	2.3	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 82
176	*Allocasuarina torulosa*	1	Survey	7	4	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Dead tree nearby not recorded
177	*Casuarina glauca*	1	Survey	5	4	Fair	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
178	*Casuarina glauca*	1	Survey	8	3	Good	Good	0	2.2	1.6	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Twin stemmed
179	*Casuarina glauca*	10	GPS unit	8	2	Good	Good	0	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Group of 10 small trees close to tree 178
180	*Allocasuarina torulosa*	1	GPS unit	4	3	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Several dead trees nearby, not recorded
181	*Allocasuarina torulosa*	1	GPS unit	8	8	Poor	Fair	0	3.6	2.0	Short (5-15 years)	Low	Low	Yes	61	High Impact: >20%	Remove	Triplestemmed. One stem has completely died.
182	*Allocasuarina torulosa*	1	GPS unit	9	2	Poor	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	98	High Impact: >20%	Remove	
183	*Casuarina glauca*	5	GPS unit	7	1	Good	Good	0	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Group of 5 small trees.

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
184	*Allocasuarina torulosa*	1	GPS unit	10	8	Poor	Poor	0	4.2	2.1	Short (5-15 years)	Low	Low	Yes	82	High Impact: >20%	Remove	Fungal fruiting bodies on trunk
185	*Allocasuarina torulosa*	1	Survey	9	3	Fair	Fair	0	2.8	1.8	Medium (15-40 years)	Low	Low	Yes	55	High Impact: >20%	Remove	
186	*Allocasuarina torulosa*	1	Survey	10	3	Good	Good	0	3.1	1.9	Medium (15-40 years)	Low	Low	Yes	84	High Impact: >20%	Remove	
187	*Allocasuarina torulosa*	1	Survey	6	3	Fair	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	97	High Impact: >20%	Remove	
188	*Allocasuarina torulosa*	1	Survey	10	8	Good	Fair	0	5.4	2.4	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
189	*Acacia sp.*	1	Survey	8	2	Fair	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 119
190	*Acacia sp.*	1	Survey	8	2	Fair	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
191	*Acacia sp.*	1	Survey	10	3	Fair	Good	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 121
192	*Acacia sp.*	1	Survey	5	4	Good	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
193	*Allocasuarina torulosa*	1	Survey	6	3	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
194	*Allocasuarina torulosa*	1	Survey	6	5	Poor	Fair	0	3.6	2.0	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
195	*Allocasuarina torulosa*	1	Survey	7	2	Fair	Fair	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
196	*Casuarina glauca*	10	Survey	8	3	Good	Good	0	2.0	1.5	Long (>40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Group of 10 small trees close to tree 195
197	*Allocasuarina torulosa*	1	GPS unit	6	5	Poor	Fair	0	3.8	2.1	Short (5-15 years)	Low	Low	Yes	68	High Impact: >20%	Remove	
198	*Allocasuarina torulosa*	1	Survey	7	6	Fair	Fair	0	4.2	2.1	Medium (15-40 years)	Low	Low	No	16	Medium Impact: <20%	Potential to retain	Multi stemmed. Previously tagged 38

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
199	*Allocasuarina torulosa*	1	Survey	7	3	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 37
200	*Allocasuarina torulosa*	1	Survey	6	5	Poor	Poor	0	3.6	2.0	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 36. Almost dead
201	*Allocasuarina torulosa*	1	GPS unit	8	2	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
202	*Allocasuarina torulosa*	1	Survey	7	3	Fair	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 35. Dead tree nearby not recorded but previously tagged 34
203	*Allocasuarina torulosa*	1	Survey	9	4	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
204	*Allocasuarina torulosa*	1	Survey	8	2	Fair	Fair	0	2.2	1.6	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
205	*Allocasuarina torulosa*	1	Survey	10	4	Fair	Fair	0	3.8	2.1	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
206	*Banksia integrifolia*	1	Survey	14	8	Good	Good	0	9.0	2.9	Medium (15-40 years)	High	High	No	0	No Impact: 0%	Retain	Leaning
207	*Banksia integrifolia*	1	Survey	12	6	Good	Good	0	5.0	2.3	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
208	*Banksia integrifolia*	1	Survey	9	4	Good	Good	0	3.8	2.1	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
209	*Allocasuarina torulosa*	1	Survey	8	5	Poor	Fair	0	3.6	2.0	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Twin stemmed
210	*Allocasuarina torulosa*	1	Survey	8	1	Poor	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
211	*Allocasuarina torulosa*	1	Survey	7	2	Fair	Fair	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
212	*Allocasuarina torulosa*	1	Survey	7	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
213	*Allocasuarina torulosa*	1	Survey	8	4	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
214	*Allocasuarina torulosa*	1	Survey	7	4	Fair	Poor	0	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Decay in trunk

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215	*Allocasuarina torulosa*	1	Survey	8	4	Fair	Fair	0	2.6	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Multi stemmed, previously tagged 40
216	*Allocasuarina torulosa*	1	Survey	8	4	Fair	Fair	0	3.0	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
217	*Allocasuarina torulosa*	1	Survey	6	1	Fair	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Dead tree nearby not recorded
218	*Allocasuarina torulosa*	1	Survey	7	4	Good	Fair	0	3.0	1.8	Medium (15-40 years)	Low	Low	No	3	Low Impact: <10%	Retain	
219	*Allocasuarina torulosa*	1	Survey	6	2	Fair	Fair	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	3	Low Impact: <10%	Retain	
220	*Allocasuarina torulosa*	1	Survey	10	8	Fair	Fair	0	5.0	2.3	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
221	*Melaleuca bracteata*	1	Survey	11	8	Good	Good	0	5.4	2.4	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Not tagged, located within school school
222	*Allocasuarina torulosa*	1	Survey	6	2	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 33
223	*Allocasuarina torulosa*	1	Survey	7	3	Fair	Good	0	2.6	1.8	Medium (15-40 years)	Low	Low	Yes	61	High Impact: >20%	Remove	
224	*Allocasuarina torulosa*	1	Survey	8	3	Poor	Good	0	3.0	1.8	Short (5-15 years)	Low	Low	Yes	44	High Impact: >20%	Remove	
225	*Allocasuarina torulosa*	1	Survey	8	3	Good	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	64	High Impact: >20%	Remove	
226	*Allocasuarina torulosa*	1	Survey	8	4	Poor	Good	0	3.8	2.1	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 32
227	*Allocasuarina torulosa*	1	Survey	6	2	Fair	Fair	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	2	Low Impact: <10%	Retain	Larger dead tree nearby
228	*Allocasuarina torulosa*	1	Survey	8	2	Fair	Good	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	83	High Impact: >20%	Remove	
229	*Allocasuarina torulosa*	1	Survey	8	2	Good	Good	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	38	High Impact: >20%	Remove	
230	*Allocasuarina torulosa*	1	Survey	8	5	Fair	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	Yes	98	High Impact: >20%	Remove	

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231	*Allocasuarina torulosa*	1	Survey	8	3	Fair	Good	0	3.1	1.9	Short (5-15 years)	Low	Low	Yes	96	High Impact: >20%	Remove	
232	*Allocasuarina torulosa*	1	Survey	8	5	Good	Good	0	4.3	2.2	Medium (15-40 years)	Medium	Medium	Yes	36	High Impact: >20%	Remove	
233	*Allocasuarina torulosa*	1	Survey	8	3	Good	Good	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	30	High Impact: >20%	Remove	
234	*Allocasuarina torulosa*	1	Survey	7	1	Fair	Good	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	40	High Impact: >20%	Remove	
235	*Allocasuarina torulosa*	1	Survey	9	3	Fair	Fair	0	3.4	1.9	Medium (15-40 years)	Low	Low	Yes	53	High Impact: >20%	Remove	
236	*Allocasuarina torulosa*	1	Survey	9	3	Good	Good	0	3.8	2.1	Medium (15-40 years)	Low	Low	No	0	Low Impact: <10%	Retain	Previously tagged 30
237	*Allocasuarina torulosa*	1	Survey	8	2	Good	Good	0	3.4	1.9	Medium (15-40 years)	Low	Low	No	4	Low Impact: <10%	Retain	
238	*Allocasuarina torulosa*	1	Survey	9	3	Good	Good	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	27	High Impact: >20%	Remove	
239	*Allocasuarina torulosa*	1	Survey	8	5	Good	Poor	0	2.9	1.8	Short (5-15 years)	Low	Low	Yes	68	High Impact: >20%	Remove	Basal heaving, leaning
240	*Allocasuarina torulosa*	1	Survey	8	3	Good	Poor	0	2.9	1.8	Short (5-15 years)	Low	Low	Yes	69	High Impact: >20%	Remove	Basal heaving, leaning
241	*Allocasuarina torulosa*	1	Survey	9	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	39	High Impact: >20%	Remove	
242	*Allocasuarina torulosa*	1	Survey	9	3	Poor	Good	0	2.6	1.8	Short (5-15 years)	Low	Low	Yes	56	High Impact: >20%	Remove	
243	*Allocasuarina torulosa*	1	Survey	9	3	Good	Good	0	2.0	1.6	Medium (15-40 years)	Low	Low	Yes	74	High Impact: >20%	Remove	
244	*Allocasuarina torulosa*	1	GPS unit	9	4	Fair	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	84	High Impact: >20%	Remove	
245	*Allocasuarina torulosa*	1	Survey	7	1	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	71	High Impact: >20%	Remove	

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
246	*Allocasuarina torulosa*	1	Survey	8	1	Fair	Fair	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	36	High Impact: >20%	Remove	Leaning
247	*Allocasuarina torulosa*	1	Survey	7	4	Good	Good	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	84	High Impact: >20%	Remove	
248	*Allocasuarina torulosa*	1	Survey	10	4	Good	Good	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	85	High Impact: >20%	Remove	Several other dead trees nearby, not recorded
249	*Allocasuarina torulosa*	1	Survey	12	5	Poor	Good	0	3.6	2.0	Short (5-15 years)	Medium	Low	No	0	No Impact: 0%	Retain	Previously tagged 29, several other dead trees nearby not recorded
250	*Allocasuarina torulosa*	1	Survey	12	4	Good	Good	0	3.6	2.0	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Several other dead trees nearby, not recorded
251	*Allocasuarina torulosa*	1	Survey	8	3	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
252	*Allocasuarina torulosa*	5	Survey	9	4	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Group of five small trees growing close together. Several other dead trees nearby, not recorded
253	*Allocasuarina torulosa*	1	Survey	9	4	Good	Good	0	3.4	1.9	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Leaning
254	*Allocasuarina torulosa*	1	Survey	7	3	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
255	*Allocasuarina torulosa*	1	Survey	10	4	Good	Good	0	2.0	1.6	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
256	*Allocasuarina torulosa*	1	Survey	8	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Dead trees nearby not recorded
257	*Allocasuarina torulosa*	1	Survey	6	1	Fair	Good	0	2.2	1.6	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
258	*Allocasuarina torulosa*	1	Survey	7	4	Fair	Fair	0	2.2	1.6	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
259	*Allocasuarina torulosa*	1	Survey	12	6	Poor	Fair	0	4.8	2.3	Short (5-15 years)	Medium	Low	No	0	No Impact: 0%	Retain	Tree is dying back
260	*Banksia integrifolia*	1	Survey	8	3	Good	Good	0	2.2	1.6	Long (>40 years)	Low	Low	No	0	No Impact: 0%	Retain	
261	*Melaleuca styphelioides*	1	Nearmap 2022	12	8	Good	Good	0	4.2	2.1	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Recorded and assessed from subject site. Tree in school grounds, not tagged
262	*Backhousia citriodora*	1	Survey	7	4	Good	Good	0	2.0	1.6	Long (>40 years)	Low	Low	No	0	No Impact: 0%	Retain	Tree in school grounds, recorded and assessed from subject site. Not tagged

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
263	*Allocasuarina torulosa*	1	Survey	7	4	Good	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	No	1	Low Impact: <10%	Retain	Multi trunked
264	*Backhousia citriodora*	1	Survey	7	3	Good	Good	0	2.0	1.6	Long (>40 years)	Low	Low	No	0	No Impact: 0%	Retain	Tree in school grounds, assessed from subject site, not tagged
265	*Allocasuarina torulosa*	1	Survey	6	3	Fair	Good	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	3	Low Impact: <10%	Retain	
266	*Allocasuarina torulosa*	1	Survey	8	4	Fair	Good	0	3.4	1.9	Medium (15-40 years)	Medium	Medium	Yes	63	High Impact: >20%	Remove	Several dead trees nearby, not recorded or tagged
267	*Allocasuarina torulosa*	2	Survey	8	3	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Two trees growing close together
268	*Allocasuarina torulosa*	1	Survey	9	7	Fair	Good	0	6.6	2.6	Medium (15-40 years)	Medium	Medium	Yes	87	High Impact: >20%	Remove	Previously tagged 80
269	*Allocasuarina torulosa*	1	Survey	6	8	Good	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 80. Twin stemmed
270	*Allocasuarina torulosa*	1	Survey	8	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
271	*Allocasuarina torulosa*	1	Survey	8	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	
272	*Pittosporum undulatum*	1	Survey	8	3	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	24	High Impact: >20%	Remove	Assessed from a distance. Difficult access. Not tagged
273	*Ligustrum lucidum*	1	Survey	8	6	Good	Good	0	3.1	1.9	Remove (<5 years)	Low	Low	No	0	No Impact: 0%	Retain	Assessed from a distance. Access too difflcult. Not tagged. Weed
274	*Allocasuarina torulosa*	1	Survey	8	5	Good	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	Yes	71	High Impact: >20%	Remove	Previously tagged 25. Twin stemmed
275	*Allocasuarina torulosa*	1	Survey	7	3	Fair	Good	0	2.6	1.8	Medium (15-40 years)	Low	Low	Yes	73	High Impact: >20%	Remove	Previously tagged 23. Dead tree nearby
276	*Allocasuarina torulosa*	1	Survey	8	6	Fair	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	Yes	69	High Impact: >20%	Remove	
277	*Allocasuarina torulosa*	1	Survey	8	4	Good	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	32	High Impact: >20%	Remove	Previously tagged 21
278	*Acacia parramattensis*	1	Survey	7	4	Good	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	Yes	18	High Impact: >20%	Remove	previously tagged 20

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
279	*Allocasuarina torulosa*	3	Survey	7	1	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	Yes	29	High Impact: >20%	Remove	Three trees growing close together
280	*Pittosporum undulatum*	1	Survey	7	4	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
281	*Olea africana*	1	Survey	7	6	Good	Good	0	3.0	1.8	Remove (<5 years)	Low	Low	No	0	No Impact: 0%	Retain	Weed
282	*Allocasuarina torulosa*	1	Survey	9	3	Fair	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	Yes	15	High Impact: >20%	Remove	
283	*Acacia sp.*	1	Survey	10	3	Poor	Poor	0	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	
284	*Acacia sp.*	1	Survey	7	3	Fair	Fair	0	2.4	1.7	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Not directly accessed or tagged
285	*Cotoneaster sp.*	1	Survey	6	4	Good	Good	0	3.0	1.8	Remove (<5 years)	Low	Low	No	0	No Impact: 0%	Retain	Weed
286	*Pittosporum undulatum*	1	survey	8	5	Good	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 19
287	*Pittosporum undulatum*	1	Survey	6	3	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Medium	No	0	No Impact: 0%	Retain	
288	*Allocasuarina torulosa*	1	Survey	10	4	Good	Good	0	3.4	1.9	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Previously tagged 17
289	*Allocasuarina torulosa*	1	Survey	12	5	Good	Good	0	4.2	2.1	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Previously tagged 16
290	*Allocasuarina torulosa*	1	Survey	7	3	Fair	Fair	0	2.2	1.6	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 15
291	*Acacia sp.*	1	Survey	10	5	Fair	Fair	0	3.0	1.8	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	probably A. dealbata
292	*Allocasuarina torulosa*	1	Survey	7	3	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
293	*Acacia sp.*	1	Survey	10	4	Fair	Fair	0	2.8	1.8	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Probably A.dealbata. Previously tagged 14
294	*Acacia sp.*	1	Survey	10	5	Fair	Fair	0	3.4	1.9	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Not accessed directly or tagged
295	*Acacia sp.*	1	Survey	10	5	Fair	Fair	0	4.2	2.1	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Probably A. dealbata. Not access directly or tagged
296	*Casuarina glauca*	2	Survey	12	4	Good	Good	0	3.0	1.8	Long (>40 years)	Low	Low	No	0	No Impact: 0%	Retain	Two trees growing closer together

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
297	*Allocasuarina torulosa*	1	Survey	9	5	Fair	Poor	0	3.6	2.0	Remove (<5 years)	Low	Low	No	0	No Impact: 0%	Retain	Main fork split
298	*Allocasuarina torulosa*	1	Survey	10	6	Fair	Fair	0	4.8	2.3	Medium (15-40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	
299	*Pittosporum undulatum*	1	Survey	6	4	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 13
300	*Allocasuarina torulosa*	1	Survey	6	3	Fair	Fair	0	2.6	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Several dead trees nearby, Not recorded or tagged
301	*Casuarina glauca*	1	Survey	7	4	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
302	*Acacia parramattensis*	1	Survey	10	5	Good	Good	0	2.6	1.8	Short (5-15 years)	Low	Low	Yes	12	High Impact: >20%	Remove	Previously tagged 65
303	*Allocasuarina torulosa*	1	Survey	10	4	Good	Fair	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	18	High Impact: >20%	Remove	Previously tagged 66
304	*Allocasuarina torulosa*	1	Survey	10	4	Good	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	
305	*Allocasuarina torulosa*	3	Survey	12	5	Poor	Fair	0	2.0	1.5	Short (5-15 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 67, 3 trees growing close together
306	*Pittosporum undulatum*	1	Survey	6	2	Good	Good	0	2.0	1.5	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 69
307	*Allocasuarina torulosa*	1	Survey	10	4	Fair	Fair	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	Previously tagged 70. Leaning
308	*Angophora costata*	1	Survey	18	10	Good	Good	0	5.8	2.4	Long (>40 years)	High	Medium	Yes	100	High Impact: >20%	Remove	Next to tree 110
309	*Angophora costata*	1	Survey	25	12	Good	Fair	0	7.2	2.7	Long (>40 years)	High	High	Yes	32	High Impact: >20%	Remove	Lopped away from cables
310	*Pittosporum undulatum*	1	Survey	10	15	Good	Good	0	4.8	2.3	Medium (15-40 years)	Low	Low	Yes	93	High Impact: >20%	Remove	Multi stemmed three trees growing close together around tree 311
311	*Angophora costata*	1	Survey	18	10	Good	Fair	0	7.4	2.7	Long (>40 years)	High	High	Yes	87	High Impact: >20%	Remove	Lopped away from cables
312	*Pittosporum undulatum*	2	Survey	9	10	Good	Good	0	4.2	2.1	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Two trees growing close together, multi stemmed

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
313	*Olea africana*	1	Survey	6	5	Good	Good	0	3.0	1.8	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Weed
314	*Pittosporum undulatum*	1	Survey	7	4	Good	Good	0	2.2	1.6	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 46
315	*Angophora costata*	1	Survey	15	8	Good	Good	0	6.0	2.5	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
316	*Olea africana*	1	Survey	8	10	Good	Good	0	3.6	2.0	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Weed
317	*Allocasuarina torulosa*	1	Survey	10	4	Poor	Poor	0	3.1	1.9	Short (5-15 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Split on trunk, other dead trees nearby. Previously tagged 48
318	*Olea africana*	1	Survey	8	5	Good	Good	0	2.4	1.7	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Weed. Previously tagged 51
319	*Pittosporum undulatum*	1	Survey	9	6	Good	Good	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 50
320	*Cotoneaster sp.*	1	Survey	7	10	Good	Good	0	4.2	2.1	Remove (<5 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Weed. Multi stemmed
321	*Hakea salicifolia*	1	Survey	9	5	Good	Good	0	2.9	1.8	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	
322	*Pinus canariensis*	1	survey	20	15	Good	Good	0	12.0	3.3	Long (>40 years)	High	High	No	15	Medium Impact: <20%	Potential to retain	
323	*Angophora costata*	1	Survey	14	18	Good	Fair	0	7.8	2.8	Long (>40 years)	Medium	Medium	No	0	No Impact: 0%	Retain	Not tagged probably not owned by site. Lopped around cables
324	*Glochidion ferdinandi*	10	Survey	7	4	Good	Good	0	2.4	1.7	Medium (15-40 years)	Low	Low	No	0	No Impact: 0%	Retain	10 small trees planted as a row
325	*Acacia sp.*	1	survey	10	6	Good	Good	0	3.6	2.0	Short (5-15 years)	Medium	Low	Yes	100	High Impact: >20%	Remove	Previously tagged, 133. Probably A. dealbata
326	*Allocasuarina torulosa*	1	survey	12	8	Fair	Fair	0	5.4	2.4	Medium (15-40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 132
327	*Allocasuarina torulosa*	1	Survey	8	3	Fair	Fair	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 131. Go to trees nearby, not tagged

Tree ID	Botanical name	Trees in group	Location	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	SRZ encroached	TPZ% encroachment	Impact	Proposed action	Notes
328	*Pittosporum undulatum*	4	Survey	10	5	Good	Good	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	4 trees together, previously tagged 54-57
329	*Pittosporum undulatum*	1	Survey	10	5	Fair	Good	0	3.6	2.0	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 134
330	*Glochidion ferdinandi*	1	survey	10	5	Good	Good	0	4.3	2.2	Long (>40 years)	Medium	Medium	Yes	100	High Impact: >20%	Remove	Previously tagged 135
331	*Pittosporum undulatum*	1	Survey	7	4	Fair	Fair	0	3.0	1.8	Medium (15-40 years)	Low	Low	Yes	100	High Impact: >20%	Remove	Previously tagged 136. covered in climber

Appendix E Tree protection guidelines

The following tree protection guidelines must be implemented during the construction period if no tree-specific recommendations are detailed.

E1 Tree protection fencing

The TPZ is a restricted area delineated by protective fencing or the use of an existing structure (such as a wall or fence).

Trees that are to be retained must have protective fencing erected around the TPZ (or as specified in the body of the report) to protect and isolate it from the construction works. Fencing must comply with the Australian Standard, AS 4687-2007, Temporary fencing and hoardings.

Tree protection fencing must be installed prior to site establishment and remain intact until completion of works. Once erected, protective fencing must not be removed or altered without the approval of the project arborist.

If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with *AS 4970-2009, Protection of Trees on Development Sites.*

Tree protection fencing shall be:

- Enclosed to the full extent of the TPZ (or as specified in the Recommendations and Tree Protection Plan).
- Cyclone chain wire link fence or similar, with lockable access gates.
- Certified and Inspected by the Project Arborist.
- Installed prior to any machinery or material are brought to site and before the commencement of works.
- Prominently sign posted with 300 mm x 450 mm boards stating, “NO ACCESS - TREE PROTECTION ZONE”.

E2 Crown protection

Tree crowns/canopy may be injured or damaged by machinery such as; excavators, drilling rigs, trucks, cranes, plant and vehicles. Where crown protection is required, it will usually be located at least one meter outside the perimeter of the crown.

Crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.

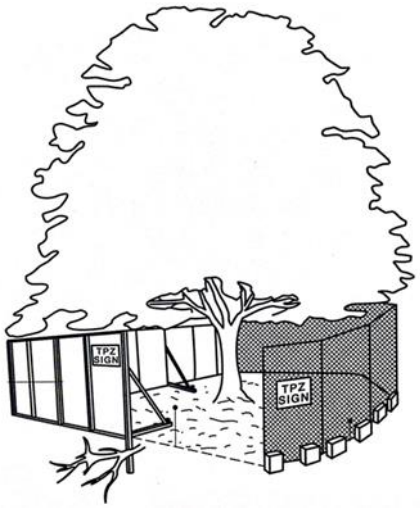
E3 Trunk protection

Where provision of tree protection fencing is impractical or must be temporarily removed, trunk protection shall be installed for the nominated trees to avoid accidental mechanical damage.

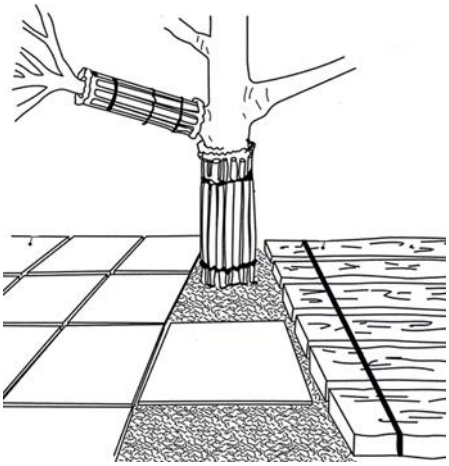
The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

Trunk protection shall consist of a layer of either carpet underfelt, geotextile fabric or similar wrapped around the trunk, followed by 1.8 m lengths of softwood timbers aligned vertically and spaced evenly around the trunk (with an approx. 50 mm gap between the timbers).

The timbers must be secured using galvanised hoop strap (aluminium strapping). The timbers shall be wrapped around the trunk but not fixed to the tree, as this will cause injury/damage to the tree.



Tree protection fencing



Trunk protection fencing

E4 Ground protection

Tree roots are essential for the uptake/absorption of water, oxygen and mineral ions (solutes). It is essential to prevent the disturbance of the soil beneath the dripline and within the TPZ of trees that are to be retained. Soil compaction within the TPZ will adversely affect the ability of roots to function correctly.

If temporary access for machinery is required within the TPZ ground protection measures will be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Maintain a thick layer of mulch around all retained trees to a depth of 100 mm using coarse pine bark or wood chip material that complies with AS 4454. Where the existing landscape within the TPZ is to remain unaltered (e.g. garden beds or turf) mulch may not be required.

For heavy vehicle access within TPZ, ground protection may include a permeable membrane such as geotextile fabric beneath a layer of crushed rock or rumble boards.

If the grade is to be raised within the TPZ, the material should be coarser or more porous than the underlying material.

E5 Root protection and investigation

If incursions/excavation within the TPZ are unavoidable, root investigation may be needed to determine the extent and location of roots within the area of construction activity. The location and distribution of roots are found through non-destructive excavation (NDE) methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation. Root investigation does not guarantee the retention of the tree.

If the project arborist identifies conflicting roots that requiring pruning, they must be pruned with a sharp implement such as; secateurs, pruners, handsaws or a chainsaw back to undamaged tissue. The final cut must be a clean cut.

E6 Underground services

All underground services should be routed outside of the TPZ. If underground services need to be installed within the TPZ, they should be installed using horizontal directional drilling (HDD), non-destructive excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches. The horizontal drilling/boring must be at minimum depth of 600 mm below grade. Trenching for services is to be regarded as “excavation”. The project arborist should assess the likely impacts of boring and bore pits on retained trees.

Appendix F Site plan

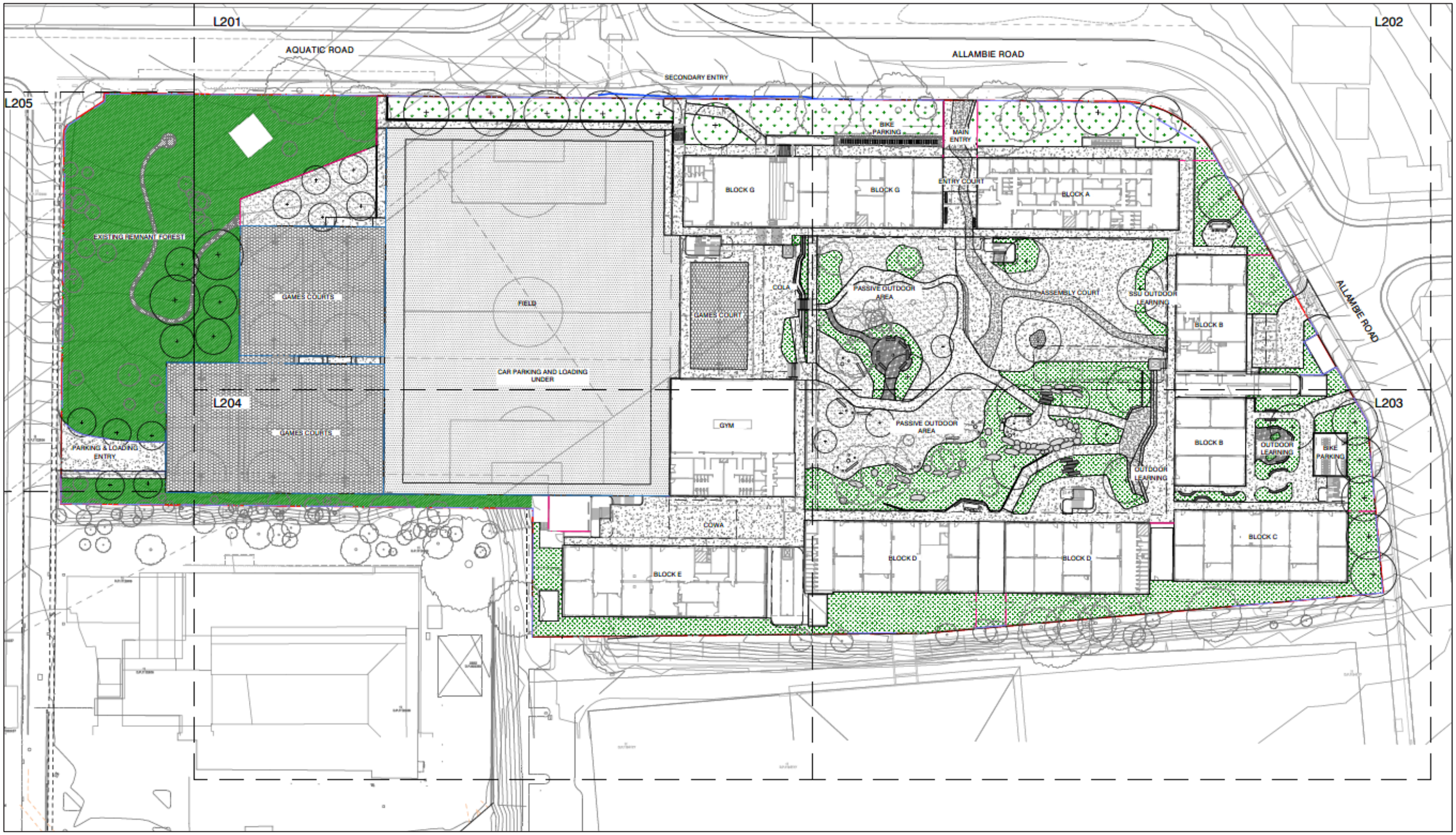


Figure 19: Schematic Design (Oculus 2022)

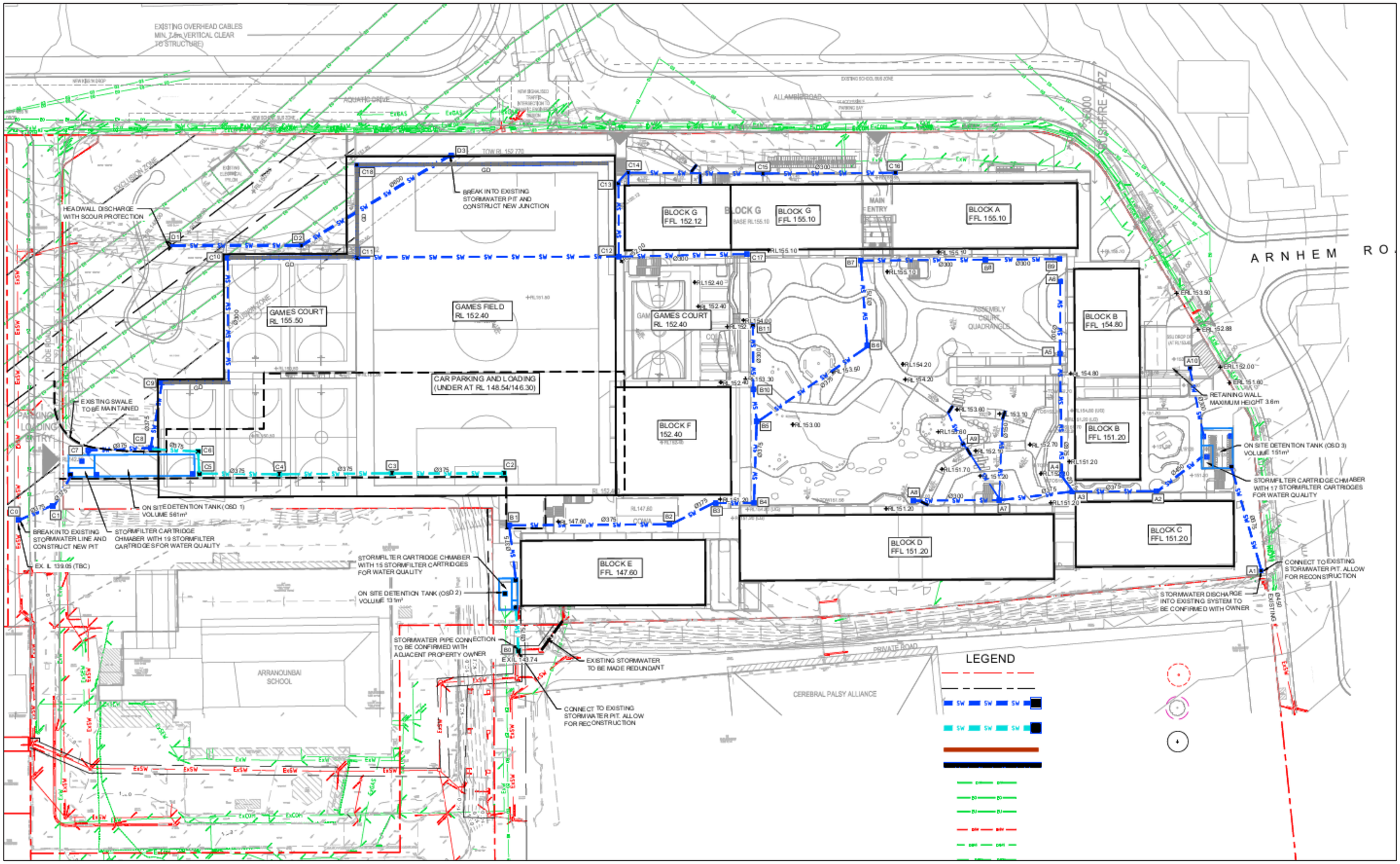


Figure 20: Civil site works and stormwater plan (Enstruct 2022)

Appendix G Photos of high retention value trees

Figure 21: High retention value Tree 28

Figure 22: High retention value Tree 32

Figure 23: High retention value Tree 39

Figure 24: High retention value Tree 40

Figure 25: High retention value Tree 44

Figure 26: High retention value Tree 49

Figure 27: High retention value Tree 50

Figure 28: High retention value Tree 52

Figure 29: High retention value Tree 56

Figure 30: High retention value Tree 57

Figure 31: High retention value Tree 58

Figure 32: High retention value Tree 59

Figure 33: High retention value Tree 66

Figure 34: High retention value Tree 72

Figure 35: High retention value Tree 75

Figure 36: High retention value Tree 82

Figure 37: High retention value Tree 110

Figure 38: High retention value Tree 110.1

Figure 39: High retention value Tree 126

Figure 40: High retention value Tree 128

Figure 41: High retention value Tree 135

Figure 42: High retention value Tree 206

Figure 43 High retention value Tree 309

Figure 44: High retention value Tree 311

Figure 45: High retention value Tree 322

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