

10 February 2022

Our ref: 21SUT-19365

School Infrastructure NSW co/ Jacobs
Level 5, 177 Pacific Highway
NORTH SYDNEY NSW 2060

Attention: Marcus Kraefft

Dear Marcus,

Glenwood High School SSD Works | Advice Letter of Trees 72, 73, 118 and 120

Eco Logical Australia Pty Ltd (ELA) was engaged by School Infrastructure NSW Co/ Jacobs to provide a written response to Glenn McIntosh' email regarding construction methodologies in order to retain Trees 72, 73, 118 and 120 as outlined in ELA's Arboricultural Impact Assessment (AIA) dated 10 February 2021. Details of the impact and proposed construction methodologies are as follows.

The tree protection zone (TPZ) encroachment from the proposed SSD works of the three *Eucalyptus tereticornis* (Forest Red Gum) Trees 72, 73 and 118 and the *Melaleuca decora* (White Feather Honey Myrtle) Tree 120 is outlined in the table below. TPZ encroachment is a guide to identify the potential for long-term viable tree retention as outlined in AS 4970-2009. Actual retention is subject to on the ground impacts, implementation of mitigation measures and successful post construction tree management.

Table 1: TPZ encroachment of SSD works

Tree ID	Botanical name	SSD TPZ encroachment
72	<i>Eucalyptus tereticornis</i>	10%
73	<i>Eucalyptus tereticornis</i>	8%
118	<i>Eucalyptus tereticornis</i>	0%
120	<i>Melaleuca decora</i>	0%

As outlined in ELA's AIA (dated 10 February 2022), ELA understands that trees will also be subject to TPZ encroachments from the DA and REF works therefore, construction methodologies to support viable retention could include;

- Root mapping investigation through hand/air spading is to be completed under the supervision of an AQF Level 5 consulting arborist to determine if roots are present.
- The position of pier footings for pathway arrangement are to be strategically placed around the existing tree roots (if found to be present in the root mapping exercise).
- AQF Level 5 Consulting Arborist is to be present during all works when working with the TPZ of Tree 72.

Many thanks



Kirsten McLaren
Project Manager

A stylized topographic map with green contour lines is positioned on the left side of the page, extending from the top left towards the bottom left.

Glenwood High School Arboricultural Impact Assessment

School Infrastructure NSW

DOCUMENT TRACKING

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This document has been prepared by Eco Logical Australia Pty Ltd with support from PTW Architects.

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Template 2.8.1

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Abbreviations

Abbreviation	Description
AQF	Australian Qualifications Framework
AS	Australian Standards
DA	Development Application
DBH	Diameter at Breast Height
ELA	Eco Logical Australia
GIS	Geographic Information Systems
m	Metre
mm	Millimetre
NDE	Non-Destructive Excavation
NO	Number
NSW	New South Wales
QTRA	Quantified Tree Risk Assessment
REF	Review of Environmental Factors
SP	Species
SRZ	Structural Root Zone
SSD	State Significant Development
TPZ	Tree Protection Zone
VTA	Visual Tree Assessment

1. Background

This Arboricultural Impact Assessment (AIA) assesses proposed works at Glenwood High School and has been prepared for School Infrastructure NSW (SINSW), the infrastructure body for the Department of Education (DoE). The address of the subject site is in Table 1 and mapped in Figure 1.

Table 1: Development site

Criteria	Description
Street address	Glenwood Park Dr &, Forman Ave, Glenwood NSW 2768
Lot and DP	Lot 5227 DP868693
Local Government Area	Blacktown City Council

1.1 Purpose of the report

The purpose of this report is to provide a consolidated assessment of all proposed works 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
- identify trees to be removed, retained or transplanted
- determine the likely impacts on trees to be retained
- recommend tree protection measures to minimise adverse impacts
- undertake a Quantified Tree Risk Assessment (QTRA).

1.2 Proposed works and planning pathways

The proposed works and corresponding planning pathways are outlined in Table 3 and Figure 2 based on the information available at the time of preparing this report. This report addresses the Secretary's Environmental Assessment Requirements (SEARs), notably as follows in Table 2:

Table 2: SEARs

SEARs requirements	Response
3. Trees and Landscaping where relevant, an arboricultural impact assessment prepared by a Level 5 (Australian Qualifications Framework) Arborist, which details the number, location and condition of trees to be removed and retained, includes detailed justification for each tree to be removed and details the existing canopy coverage on-site.	An AQF Level 5 Consulting Arborist has prepared this AIA for trees within the subject site. Existing canopy coverage of the site is currently 17.6% (10,693 sqm/60,790 sqm).



Figure 1: Site location

Table 3: Proposed works and corresponding planning pathway

Planning Pathway	Activities that can impact trees	Description of proposed works
Review of Environmental Factors (REF)	Clearing vegetation	No trees will require removal in relation to the REF sewer diversion works.
	Mitigation measures required to ensure retention	Two trees (Trees 129 and 323) will be subject to high impact from the proposed REF demountable demolition. In order to ensure retention is viable the Project Arborist will need to be consulted during the construction method stage to formulate tree sensitive measures to be implemented. All demolition works within the TPZ of trees 129 and 323 will require to be under the supervision of the Project Arborist to provide on ground advice. These trees are proposed to be removed under DA works
	Pruning vegetation	No
	Earthworks including regrading, excavation and trenching	The existing portable classrooms on site are proposed to be removed and associated utility services infrastructure demolished. The sewer reticulation systems are proposed to be diverted within a 1,350 mm trench (Appendix G).
	Compaction	No, storage of materials, installation of structures (i.e., scaffolding), stockpiling fill or materials, parking and vehicle/machinery access are all to be placed outside the TPZ of trees to be retained.
	Refuelling and chemical use (e.g. herbicides)	No
	Erection of scaffolding	No
	Vehicle movements	No, all vehicle access is to be positioned outside of the TPZ of trees to be retained.
	Changes to stormwater management	No
Development Application (DA)	Landscaping	No
	Clearing vegetation	Yes, three trees (Trees 87, 129 & 323) are proposed to be removed under the DA. These trees are also subject to impact from the proposed SSD/EIS works.
	Mitigation measures required to ensure retention	Two trees (Trees 118 & 120) will be subject to medium impact from the proposed DA works. These trees have the potential to be retained subject to consultation with the Project Arborist regarding the construction methodology of the earthworks along with further investigation i.e., root mapping.
	Pruning vegetation	No
	Earthworks including regrading, excavation and trenching	Early bulk works including cut and fill (mound up to 1 m in depth) for future landscaping. The extent of the proposed works is illustrated in Appendix H.

Planning Pathway	Activities that can impact trees	Description of proposed works
	Compaction	No, storage of materials, installation of structures (i.e., scaffolding), stockpiling fill or materials, parking and vehicle/machinery access are all to be placed outside the TPZ of trees to be retained.
	Refuelling and chemical use (e.g. herbicides)	No
	Erection of scaffolding	No
	Vehicle movements	No, all vehicle access is to be positioned outside of the TPZ of trees to be retained.
	Changes to stormwater management	No
	Landscaping	No
	Clearing vegetation	No trees are proposed to be removed under the SSD.
	Mitigation measures required to ensure retention	Two Trees 72 and 73 are subject to an accumulative medium impact from all proposed works (REF, DA and SSD). These trees have the potential to be retained subject to consultation with the Project Arborist regarding the construction methodology and timeframe between the DA, REF and SSD works to ensure the tree can remain viable.
	Pruning vegetation	No
	Earthworks including regrading, excavation and trenching	Concept plan of the main works (new three-storey building at the north-eastern portion of the site facing Glenwood Park Drive which will accommodate new learning spaces, construction of performance arts pavilion & stormwater) are illustrated in Appendix I. Refurbishment of Block A (ground floor only), D (ground floor only), E & J are positioned within existing buildings.
State Significant Development (SSD) / Environmental Impact Statement (EIS)	Compaction	No, storage of materials, installation of structures (i.e., scaffolding), stockpiling fill or materials, parking and vehicle/machinery access are all to be placed outside the TPZ of trees to be retained.
	Refuelling and chemical use (e.g. herbicides)	No
	Erection of scaffolding	No
	Vehicle movements	No, all vehicle access is to be positioned outside of the TPZ of trees to be retained.
	Changes to stormwater management	Yes, existing stormwater system to be diverted (Figure 21)
	Landscaping	No



Figure 2: Proposed works and corresponding planning pathways (PTW Architects 2021)

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.

Blacktown City Council defines a tree as:

‘having a height of more than 3 m; or a trunk diameter of more than 200 mm; or more measured 1 m above ground level’ (Blacktown City Council 2015).

2.2 Visual tree assessment

The health and condition of 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 **321** trees were tagged and inspected on 29th and 30th of July and 27th of August 2020 by AQF Level 5 Consulting Arborist, David Bidwell. Following the issue of this AIA (version 6) a Quantified Tree Risk Assessment (QTRA) was completed on Thursday 9 December 2021 by QTRA certified arborist David Bidwell. Therefore, this report (version 7) also includes the outcome of the completed tree risk assessment.

The following limitations apply to this methodology:

- Tree height was measured using a laser clinometer.
- Diameter at breast height (DBH) was measured using DBH tape.
- 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.
- No aerial inspections or root mapping was undertaken.
- Tree canopy was measured by stepping out the distance between the driplines.
- Tree identification was based on broad taxonomical features present and visible from ground level at the time of inspection.
- Trees 78 & 86 have been removed since the arboricultural site investigation due to safety risks and are therefore excluded from this assessment.
- No tree was assigned ID 203, as this was skipped in the tagging process.
- Tree locations were recorded using hand-held GPS units and moved to the C.M.S. Surveyors survey plan (2020.)

2.3 Retention value & landscape significance

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 radius 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. The TPZ radius is determined by multiplying its DBH by 12.

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.

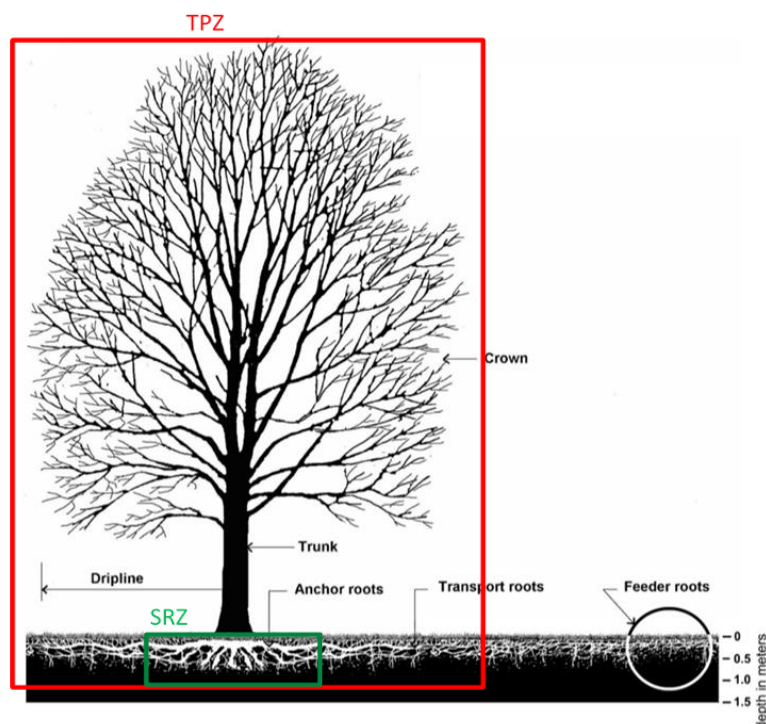


Figure 3: Representative tree structure and indicative TPZ and SRZ

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 are calculated using GIS techniques and are 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.

2.6 Quantified Tree Risk Assessment (QTRA)

Tree risk assessment was undertaken on all trees on site using the Quantified Tree Risk Assessment (QTRA) system.

Tree risk management is a matter of balancing the risk of harm from falling trees with the benefits of trees. Although it may seem counter intuitive, the condition of the trees should not be the first consideration. The first consideration should be to the usage of land on which the trees are located. The risk from falling trees and branches only exists if there is potential for tree failure, and potential for harm to result.

The risks from falling trees are usually very low and high risks will only be encountered in areas with high human occupancy or with valuable property/assets. The QTRA method enables a range of approaches from broad assessment of large collections of trees to, where necessary, the detailed assessment of an individual tree.

2.7 Components of risk

There are three components to assessing the risk associated with a tree:

- **Target:** The persons, property or asset at risk, and the likelihood of that target being present/impacted in the event of partial or whole tree failure.
- **Size:** The size of the tree or branch most likely to impact the target. The size of the failure determines the likely force exerted upon impact.
- **Probability:** The likelihood of a failure occurring within the assessment period (one year) based on the structure and condition of the tree.

The risk assessor will select a range of value for each component of risk. These ranges are entered on either the QTRA manual calculator or the software application to determine a risk of harm. Once a calculated risk of harm has been determined it is compared with criteria of risk acceptability (Hartley, O'Callaghan, Stewart 2013). The criteria of risk acceptability are presented within QTRA risk advisory thresholds.

2.8 QTRA risk advisory thresholds

There are three components that comprise the QTRA risk advisory thresholds:

- **Risk of harm:** A measure of the likelihood x consequence of tree failure.
- **Risk rating:** A value determined by comparing the risk of harm against a criteria of risk acceptability.
- **Action:** A recommended course of action based upon the risk rating.

Table 4: QTRA advisory risk thresholds

Risk of harm	Risk rating (acceptability)	Action
<1/1000	Unacceptable	Control the risk
1/1000 - 1/10,000	Unacceptable (when imposed on others)	Control the risk
	Risks will not ordinarily be tolerated	Review the risk
1/1000 - 1/10,000	Tolerable (by agreement)	Control the risk unless there is a broad stakeholder agreement to tolerate it, or the tree has exceptional value
		Review the risk
1/10,000 - 1/1,000,000	Tolerable	Assess the costs and benefits of the risk control
	(when imposed on others)	

Risk of harm	Risk rating (acceptability)	Action
		Control the risk only where a significant benefit might be achieved at a reasonable cost Review the risk
> 1/1,000,000	Broadly acceptable	No action currently required Review the risk

3. Results and discussion

3.1 Arboricultural Impact Assessment (AIA)

Results of the overall arboricultural assessment are summarised in Table 5. Results of the specific planning pathways (REF, DA & SSD/EIS) are summarised in Tables 6, 7 and 8. Detailed results are included in Appendices C and D. Site photos are provided in Appendix F and site plans for the REF, DA and SSD are included in Appendices G, H and I.

Table 5: Summary of tree retention values and overall impacts

Retention value	High Impact	Medium Impact	Low Impact	No impact	Total
Priority for retention (High)	3	4	5	25	37
Consider for retention (Medium)	-	-	2	120	122
Consider for removal (Low)	-	-	-	161	161
Priority for removal	-	-	-	1	1
Total	3	4	7	307	321

This assessment assumes that the works will be completed in the following sequence: REF, DA and then SSD; as some trees would be subject to high impact from all works.

Table 6: Summary of tree retention values and REF impacts

Retention value	Trees proposed to be retained			
	High Impact	Low Impact	No impact	Total
Priority for retention (High)	2	3	32	37
Consider for retention (Medium)	-	-	122	122
Consider for removal (Low)	-	-	161	161
Priority for removal	-	-	1	1
Total	2	3	316	321

Table 7: Summary of tree retention values and DA impacts

Retention value	Trees proposed to be removed	Trees with potential to be retained	Trees proposed to be retained		
	High Impact	Medium Impact	Low impact	No Impact	Total
Priority for retention (High)	3	3	3	28	37
Consider for retention (Medium)	-	-	-	122	122
Consider for removal (Low)	-	-	-	161	161
Priority for removal	-	-	-	1	1
Total	3	3	3	28	321

** table includes two trees (Trees 129 and 323) subject to high impact in Table 6*

Table 8: Summary of tree retention values and SSD/EIS impacts

Trees proposed to be retained				
Retention value	Medium impact	Low impact	No Impact	Total
Priority for retention (High)	1	6	27	34
Consider for retention (Medium)	-	2	120	122
Consider for removal (Low)	-	-	161	161
Priority for removal	-	-	1	1
Total	1	8	309	318

**table assumes that three trees (Trees 87, 129 and 323) would have already been removed under DA works making tree count 318 not 321.*

TREES PROPOSED TO BE REMOVED (HIGH IMPACT)

A total of **three trees** are proposed to be removed as they will be subject to high impact (>20% TPZ or SRZ encroachment) from the proposed REF, DA and SSD works. Of these, no trees are proposed to be removed under the REF works, three trees are proposed to be removed under the DA works and one tree is proposed to be removed under the SSD works. A breakdown of the impacts and retention values are outlined below.

- **REF works** No trees will require removal in relation to the REF sewer diversion works however two trees will be subject to high impact from the proposed REF demountable demolition. These two trees are proposed to be retained during the REF, subject to mitigation measures, but will be removed within the DA works. In order to ensure retention of these two trees is viable during the REF stage the Project Arborist will need to be consulted during the construction method stage to formulate tree sensitive measures to be implemented. All demolition works within the TPZ of trees 129 and 323 is required to occur under the supervision and direction of the Project Arborist.
- **DA works: three high retention value trees** (Tree 87, 129 and 323) will be subject to high impact from DA works.
- **SSD works:** No trees require removal under the SSD/EIS main works.
- In addition, one small dead tree (Tree 581) is recommended for removal (Figure 15, Appendix F).

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

TREES WITH THE POTENTIAL TO BE RETAINED (MEDIUM IMPACT)

A total of **four high retention value trees** (Trees 72, 73, 118 & 120) have potential to be retained as they are subject to medium impact (>10% TPZ encroachment and <20% TPZ encroachment) from the proposed REF and SSD works (but no SRZ encroachment).

- **Tree 72 & 73** are subject to an accumulative medium impact from all proposed works (REF, DA and SSD). These trees have potential to be retained subject to consultation with the Project Arborist regarding the construction methodology and timeframe between the REF and SSD works to ensure the tree can remain viable.
- **Trees 118 & 120** are subject to medium impact from the proposed DA works. These trees have potential to be retained subject to consultation with the Project Arborist regarding the construction methodology of the earthworks along with further investigation i.e., root mapping. The tree protection plan and guidelines for this tree are provided in section 4 and Appendix E.

TREES PROPOSED TO BE RETAINED (LOW & NO IMPACT)

A total of **314 trees** are proposed to be retained. Of these, seven trees will be subject to low impact (<10% TPZ encroachment) and 307 will be subject to no impact (0% TPZ encroachment) from the proposed REF, DA and SSD works. Tree retention values and IDs are outlined below.

- **Low impact (<10% TPZ encroachment)**
 - High retention value: **five** trees (Trees 71, 79, 88, 130 and 140)
 - Medium retention value: **two** trees (trees 74 and 77)
- **No Impact (0% TPZ encroachment)**
 - High retention value: 25
 - Medium retention value: 120
 - Low retention value: 161

The tree protection plan and guidelines for trees to be retained are provided in section 4 and Appendix E.

3.2 Quantified Tree Risk Assessment (QTRA)

The results of the Tree Risk Assessment are tabulated and mapped in Appendix J.

All trees on school grounds were inspected. It is also noted that Tree 37 appears to have been removed since the last inspection (July/August 2020). It was also noted that many number tags have been removed since the previous visit, especially in areas where many students congregate.

Of the 321 trees inspected, a total of **five trees** were assessed in high use and medium use areas within the assessment site. Results are as follows:

- **Broadly Acceptable:** a total of three trees (Dead tree 122 and Trees 179 and 232) were assessed as imposing a 'Broadly Acceptable' risk.
- **Tolerable (when imposed on others):** a total of two trees (Trees 22 and 140) were assessed as imposing a 'Tolerable (where imposed on others)'.

Recommendations for monitoring and/or action are outlined below.

TREE MANAGEMENT

Using risk as the only criteria for action, none of the subject trees identified would require any action as they were all assessed as 'tolerable' or 'broadly acceptable'. However, it is recommended that the school consider having the following work completed in the interests of good tree management.

- **Tree 22:** The risk of harm from a large limb failure was assessed tolerable. A large upright limb has been removed and wound is unlikely to occlude. The tree has an asymmetric shape and leans over covered walkway (see Figures 4 and 5).

Action: Monitor annually.

- **Tree 122:** Tree stands in woodland area. The risk of harm from whole tree or branch failure is broadly acceptable (see Figure 6). The area is fenced, and restricted and the target is low.

Action: Monitor annually.

- **Tree 140:** Tree stands in woodland area. The risk has of harm from failure of large upright stem on to building has been assessed as tolerable. The tree overhangs demountable classrooms. It has two large hollows in the stem, one at approximately 3m above the ground and one at approximately 10m above ground (see Figures 7, 8 and 9).

Action: An aerial inspection by an arborist qualified to AQF level 5, is recommended to be undertaken on the 2 hollow areas, for a more detailed risk assessment on the 2 hollows, and any further action recommended to mitigate risk of harm from stem failure. This should take place within 3 months.

- **Tree 179:** The risk of harm from tree failure has been assessed as a broadly acceptable, due to the small size of the tree. However, the tree is in very poor condition with decay and borers at base (see Figures 10 and 11).

Action: Removal

- **Tree 232.** The risk of harm has been assessed as broadly acceptable, due to low target.

Action: Monitored annually.

If any noticeable decline in tree condition is observed, then we recommend that the school contact an AQF Level 5 consulting arborist for advice.

ADDITIONAL TREES

No risk assessments on the following trees but the following was observed.

- **Tree 79** is noted as having a hollow in the trunk 3m above ground, and wounds around the lower forks. However, the probability of failure and the target are both low, so no risk assessment was carried out.
- **Tree 84** is noted as having wounds around the lower forks. However, the probability of failure and the target are both low, so no risk assessment was carried out.
- **Tree 87** is noted as having wounds around the base and lower forks. However, the probability of failure and the target are low, so no risk assessment was carried out.

CORYMBIA MACULATA TREES

All trees within the site were assessed for risk including all *Corymbia maculata* trees on site of which only Tree 22 requires action as indicated above.

The following statement was included in the brief for the QTRA.

'Corymbia maculata is listed in the EFSG, clause DG92 Landscape Softworks, 92.08 Hazardous Trees / Plants as a tree that may shed large branches. The EFSG states: If a specimen of a species prone to limb drop exists as a mature tree on site, carefully consider its location relative to the proposed future use of the surrounding area. Review the design and species and assess the suitability for retention, with a view to minimising the potential risk'.

While it is possible for branch failures to occur on any species of tree, there is no known arboricultural research that has established that this species is more susceptible to failures than other species. The above statement is likely to be based on anecdotal evidence.



Figure 4: Tree 22 large limb previously removed



Figure 5: Tree 22 wound



Figure 6: Tree 122



Figure 7: Tree 140 overhanging classroom demountable



Figure 8: Tree 140 hollow at 3 m



Figure 9: Tree 140 hollow at 10 m



Figure 10: Tree 179



Figure 11: Tree 179 decay at base



Figure 12: Tree 232

4. Tree protection plan

- All tree removal is to be carried out by an arborist with a minimum AQF Level 3 qualification in Arboriculture.
- Permission must be granted from the relevant consent authority prior to removing or pruning any of the subject trees. Approved tree works should not be carried out before the installation of tree protection measures. 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).
- 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*.

Tree protection measures are summarised in Table 5 and further information is in Appendix E

Table 9: 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 excavation (NDE) methods such as hydro-vacuum, Air Spade or manually excavated trenches.

5. Hold points, inspection and certifications

An AQF Level 5 Consulting Arborist needs to be engaged to supervise work within the TPZ, provide advice regarding tree protection and monitor compliance. 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.

In order to ensure retention of two trees (129 and 323) is viable during the REF stage, the Project Arborist will need to be consulted during the construction method stage to formulate tree sensitive measures to be implemented.

To ensure the viable retention of Tree 72, 73, 118 & 120 construction methods of all works (REF, DA and SSD) will need to be in consultation with the Project Arborist (AQF Level 5) prior to construction. In addition to consulting with the Project Arborist, root mapping is also required to be undertaken on Trees 118 and 120 to ensure retention is viable.

During construction

All REF demolition works within the TPZ of trees 129 and 323 will require to be under the supervision of the Project Arborist to provide on ground advice.

Monthly inspection of trees by the project arborist (or other timing as agreed with the project arborist). Notification to be given prior to the commencement of work within the TPZ, with supervision by the project arborist of any work undertaken in this zone.

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

- Barrell, J. 2001. 'SULE: Its use and status into the new millennium', in *Management of mature trees, Proceedings of the 4th NAAA Tree Management Seminar*, NAAA, Sydney.
- Brooker M.I.H, Kleinig D.A. 2006. *Field Guide to Eucalypts*. Volume 1, South-eastern Australia, 3rd ed Bloomings Books, Melbourne
- Draper, B. and Richards, P., 2009. *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.
- Harris, R.W., Matheny, N.P., and Clark, J.R., 1999. *Arboriculture: integrated management of landscape trees, shrubs, and vines*, Prentice Hall, Upper Saddle River, New Jersey.
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- Standards Australia 2007. *Australian Standard: Pruning of amenity trees, AS 4373 (2007)*, Standards Australia, Sydney.
- Standards Australia 2009. *Australian Standard: Protection of trees on development sites, AS 4970 (2009)*. Standards Australia, Sydney.

6.2 Project specific references

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- Blacktown City Council 2015. *4.3 Tree preservation, Part A introduction and General Guidelines, Blacktown Development Control Plan*, page 21 of 59
- C.M.S. Surveyors Pty Ltd. *Survey Plan Showing Detail, levels & underground services over Lot 5227 in DP868693 Glenwood High School Glenwood Park Drive & Forman Avenue Glenwood, NSW, 2768*. Issue 1, dwg name 17713Adetail, dated 14 July 2020.
- Enstruct 2021. *Siteworks Plan Sheet 1, Glenwood High School*. Proj. no 6393, dwg no. CV-0201, revision A, dated 23 July 2021
- PTW Architects 2021. *Stage 2 – DA Stage Plan, Glenwood High School*. Dwg no. AR-1002, revision 2, dated 21 September 2021.
- PTW Architects 2021. *Staging Plan – Consolidated Boundaries, Glenwood High School*. Dwg no. AR-1004, revision 2, dated 21 September 2021
- PTW Architects 2021. *Detail Landscape Plan SWINW Developed Drawing, Glenwood High School*. Dwg no. DA-LA-0003a, revision A, dated 22 January 2021

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
<p>The tree is in fair-poor condition and good or low vigour.</p> <p>The tree has form atypical of the species</p> <p>The tree is not visible or is partly visible from the surrounding properties or obstructed by other vegetation or buildings</p> <p>The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area</p> <p>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</p> <p>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</p> <p>The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms</p> <p>The tree has a wound or defect that has the potential to become structurally unsound.</p> <p>Environmental Pest / Noxious Weed</p> <p>The tree is an environmental pest species due to its invasiveness or poisonous/allergenic properties. The tree is a declared noxious weed by legislation.</p> <p>Hazardous /Irreversible Decline</p> <p>The tree is structurally unsound and / or unstable and is considered potentially dangerous.</p> <p>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.</p>	<p>The tree is in fair to good condition and good or low vigour</p> <p>The tree has form typical or atypical of the species</p> <p>The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area</p> <p>The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street</p> <p>The tree provides a fair contribution to the visual character and amenity of the local area</p> <p>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</p>	<p>The tree is in good condition and good vigour</p> <p>The tree has a form typical for the species</p> <p>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.</p> <p>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</p> <p>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.</p> <p>The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values.</p> <p>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.</p>

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 <i>Australian Standard AS4970 Protection of trees on development sites</i> . 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

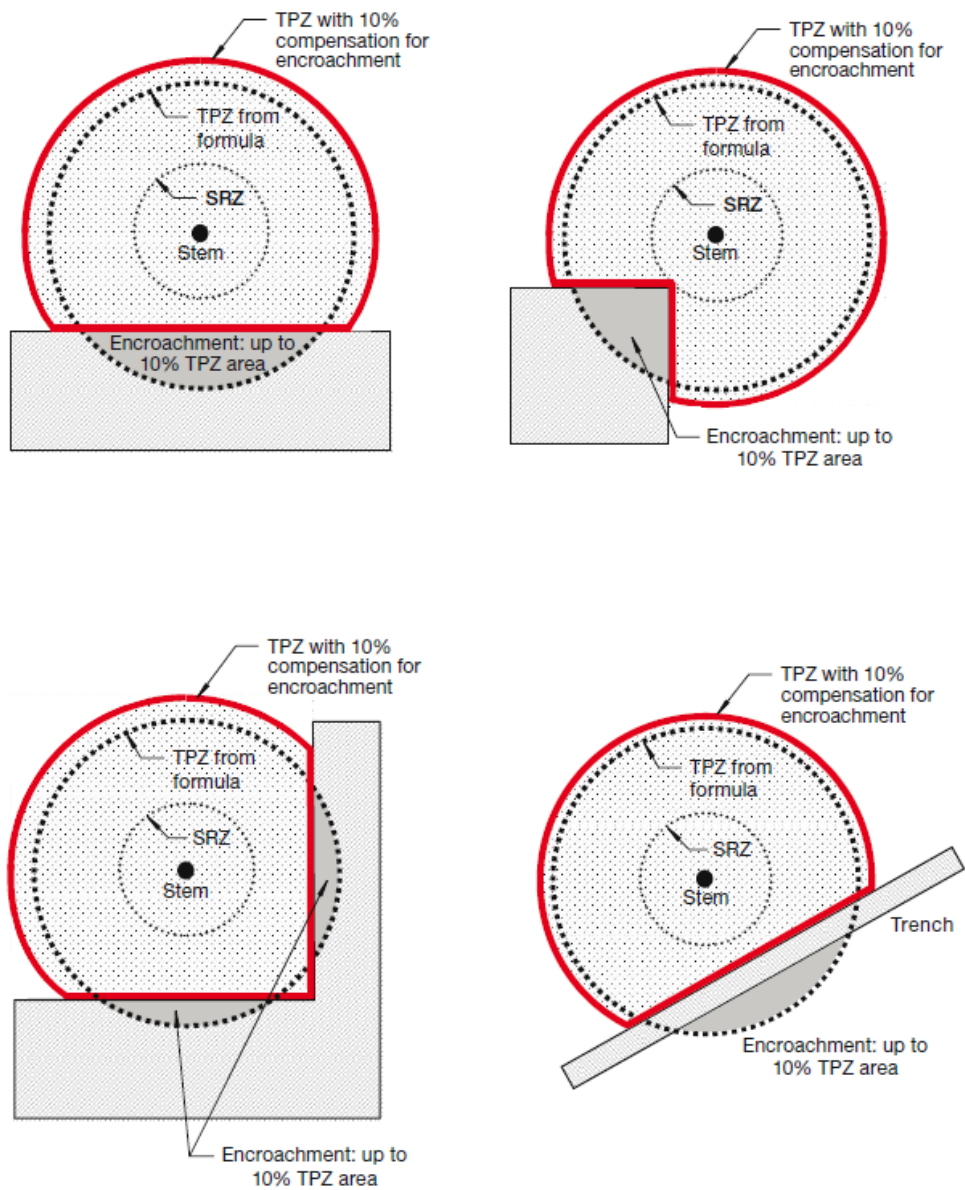


Figure 13: Encroachment into TPZs

Appendix C Maps



Figure 14: Tree locations, page 1

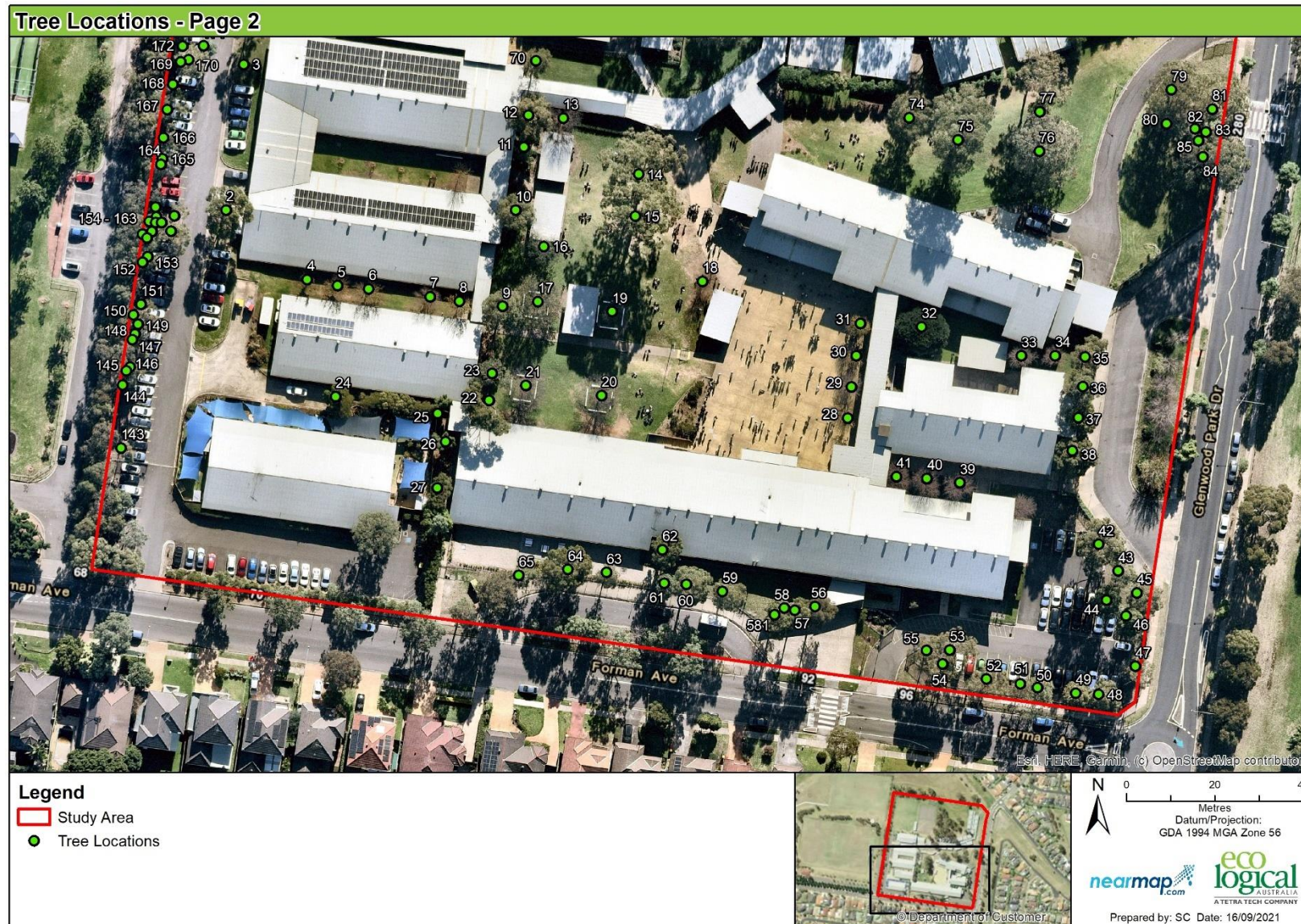


Figure 15: Tree locations, page 2



Figure 16: Retention value, page 1



Figure 17: Retention value, page 2



nly

Figure 18: Arboricultural impact assessment, page 1



Figure 19: Arboricultural impact assessment, page 2

Appendix D Tabulated results of arboricultural assessment

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
1	<i>Eucalyptus crebra</i>	11	9	Good	Good	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged
2	<i>Corymbia maculata</i>	14	10	Good	Good	500	6.0	2.5	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged
3	<i>Eucalyptus sp.</i>	6	5	Good	Fair	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	probably E.globoidea
4	<i>Pyrus 'Chanticleer'</i>	7	4	Fair	Fair	170	2.0	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 51
5	<i>Pyrus 'Chanticleer'</i>	8	4	Good	Good	200	2.4	1.7	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 50
6	<i>Pyrus 'Chanticleer'</i>	8	5	Good	Good	220	2.6	1.8	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 49
7	<i>Pyrus 'Chanticleer'</i>	8	5	Good	Fair	250	3.0	1.8	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Multi stemmed. Previously tagged 48
8	<i>Pyrus 'Chanticleer'</i>	9	5	Good	Fair	240	2.9	1.8	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously
9	<i>Corymbia maculata</i>	12	10	Good	Good	390	4.7	2.2	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged number obscured
10	<i>Corymbia maculata</i>	15	12	Good	Fair	380	4.6	2.2	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 33. Bifurcated stem
11	<i>Corymbia maculata</i>	8	4	Good	Fair	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem
12	<i>Corymbia maculata</i>	17	12	Good	Good	490	5.9	2.5	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged tag has fallen off
13	<i>Ulmus parvifolia</i>	10	8	Good	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	previously tagged 38. Bifurcated stem
14	<i>Eucalyptus tereticornis</i>	27	20	Good	Good	710	8.5	2.9	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 58.
15	<i>Eucalyptus tereticornis</i>	25	24	Good	Good	770	9.2	3.0	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 57
16	<i>Ulmus parvifolia</i>	9	9	Good	Good	280	3.4	1.9	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 39
17	<i>Ulmus parvifolia</i>	10	12	Good	Good	30	2.0	1.5	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 40
18	<i>Ulmus parvifolia</i>	7	8	Fair	Fair	260	3.1	1.9	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 59. Twin stemmed
19	<i>Ulmus parvifolia</i>	8	8	Good	Good	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 55
20	<i>Ulmus parvifolia</i>	9	12	Good	Good	380	4.6	2.2	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 54
21	<i>Ulmus parvifolia</i>	9	10	Good	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	previously tagged 41. Bifurcated stem
22	<i>Corymbia maculata</i>	15	12	Fair	Poor	510	6.1	2.5	Short (5-15 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Asymmetric shape due to removal of

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
																large limb. Possible decay in fork
23	<i>Corymbia maculata</i>	13	14	Fair	Fair	320	3.8	2.1	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 36. Tear out. Deadwood
24	<i>Elaeocarpus reticulatus</i>	12	8	Good	Good	200	2.4	1.7	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
25	<i>Elaeocarpus reticulatus</i>	11	5	Good	Good	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 52
26	<i>Elaeocarpus reticulatus</i>	12	9	Good	Good	240	2.9	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 53
27	<i>Callistemon viminalis</i>	8	8	Fair	Fair	400	4.8	2.3	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Multi trunked
28	<i>Pyrus 'Chanticleer'</i>	6	4	Good	Good	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
29	<i>Pyrus 'Chanticleer'</i>	7	8	Good	Fair	220	2.6	1.8	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
30	<i>Pyrus 'Chanticleer'</i>	8	5	Good	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
31	<i>Pyrus 'Chanticleer'</i>	8	5	Good	Fair	270	3.2	1.9	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
32	<i>Ficus rubiginosa</i>	10	12	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 61
33	<i>Pyrus calleryana</i>	12	8	Good	Good	390	4.7	2.2	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 62
34	<i>Pyrus calleryana</i>	9	5	Good	Good	290	3.5	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 63
35	<i>Corymbia maculata</i>	18	10	Good	Good	34	2.0	1.5	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged number not visible
36	<i>Corymbia maculata</i>	25	10	Good	Good	500	6.0	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 65
37	<i>Corymbia maculata</i>	18	10	Good	Good	360	4.3	2.2	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 66
38	<i>Corymbia maculata</i>	20	11	Good	Good	470	5.6	2.4	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 67
39	<i>Pyrus calleryana</i>	8	10	Good	Good	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
40	<i>Pyrus calleryana</i>	8	12	Good	Good	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
41	<i>Pyrus calleryana</i>	9	9	Good	Fair	300	3.6	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
42	<i>Corymbia maculata</i>	20	12	Good	Good	540	6.5	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
43	<i>Corymbia maculata</i>	18	6	Fair	Fair	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 69
44	<i>Corymbia maculata</i>	16	8	Good	Good	350	4.2	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 71

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
45	<i>Corymbia maculata</i>	18	8	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 70
46	<i>Corymbia maculata</i>	17	8	Good	Fair	480	5.8	2.4	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 72. Bifurcated stem
47	<i>Eucalyptus moluccana</i>	16	8	Good	Good	310	3.7	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 73
48	<i>Corymbia maculata</i>	18	8	Good	Good	390	4.7	2.2	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 74
49	<i>Corymbia maculata</i>	14	7	Fair	Fair	340	4.1	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem
50	<i>Corymbia maculata</i>	14	7	Good	Good	290	3.5	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 76
51	<i>Corymbia maculata</i>	10	5	Good	Good	200	2.4	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 77
52	<i>Eucalyptus crebra</i>	10	12	Good	Fair	260	3.1	1.9	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 79. Bifurcation with included bark
53	<i>Eucalyptus moluccana</i>	12	10	Good	Good	350	4.2	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 81
54	<i>Eucalyptus crebra</i>	12	9	Good	Fair	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 80
55	<i>Eucalyptus crebra</i>	12	9	Good	Good	280	3.4	1.9	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 82
56	<i>Corymbia maculata</i>	18	8	Good	Fair	450	5.4	2.4	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 83. Possible Basal decay
57	<i>Corymbia maculata</i>	18	6	Good	Good	340	4.1	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 85
58	<i>Corymbia maculata</i>	20	9	Good	Fair	470	5.6	2.4	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 86
59	<i>Corymbia maculata</i>	18	8	Good	Good	410	4.9	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 88
60	<i>Corymbia maculata</i>	22	12	Good	Good	510	6.1	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 89
61	<i>Angophora floribunda</i>	14	9	Good	Good	310	3.7	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 90
62	<i>Angophora floribunda</i>	16	12	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 91
63	<i>Corymbia maculata</i>	14	6	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 92
64	<i>Corymbia maculata</i>	18	12	Good	Good	460	5.5	2.4	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 93
65	<i>Corymbia maculata</i>	14	3	Good	Good	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Second stem has been removed
66	<i>Eucalyptus moluccana</i>	14	12	Good	Fair	310	3.7	2.0	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Possible basal decay
67	<i>Eucalyptus microcorys</i>	10	9	Good	Good	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 29

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
68	<i>Eucalyptus crebra</i>	15	7	Good	Good	240	2.9	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 28
69	<i>Eucalyptus microcorys</i>	7	6	Good	Good	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 27
70	<i>Corymbia maculata</i>	20	10	Poor	Fair	450	5.4	2.4	Short (5-15 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 31. Basal decay, sparse canopy
71	<i>Eucalyptus tereticornis</i>	30	20	Good	Fair	880	10.6	3.1	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	Low Impact: <10%	Low Impact: <10%	Previously tagged 26. Decay in trunk
72	<i>Eucalyptus tereticornis</i>	26	14	Good	Good	620	7.4	2.7	Long (>40 years)	High	High	Low Impact: <10%	Low Impact: <10%	Low Impact: <10%	Medium Impact: <20%	
73	<i>Eucalyptus tereticornis</i>	26	18	Good	Good	750	9.0	2.9	Long (>40 years)	High	High	No Impact: 0%	Medium Impact: <20%	Medium Impact: <20%	Medium Impact: <20%	Previously tagged tag not visible
74	<i>Eucalyptus tereticornis</i>	18	12	Good	Good	450	5.4	2.4	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	Low Impact: <10%	Low Impact: <10%	Previously tagged 20
75	<i>Eucalyptus tereticornis</i>	30	22	Good	Good	1100	13.2	3.4	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 75. Hollows in trunk
76	<i>Eucalyptus crebra</i>	25	15	Good	Good	650	7.8	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 17
77	<i>Melaleuca decora</i>	8	7	Good	Good	400	4.8	2.3	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	Low Impact: <10%	Low Impact: <10%	Previously tagged 22
79	<i>Eucalyptus tereticornis</i>	22	15	Fair	Fair	680	8.2	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	Low Impact: <10%	Low Impact: <10%	Previously tagged 11. Wound close to fork 7m above ground
80	<i>Angophora floribunda</i>	14	6	Good	Good	330	4.0	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	previously tagged 12
81	<i>Eucalyptus crebra</i>	22	20	Good	Good	650	7.8	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 10
82	<i>Angophora floribunda</i>	14	5	Fair	Fair	250	3.0	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 13
83	<i>Eucalyptus tereticornis</i>	20	8	Fair	Fair	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 14
84	<i>Eucalyptus tereticornis</i>	30	15	Good	Fair	800	9.6	3.0	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 15. Wounds in some forks
85	<i>Olea africana</i>	5	5	Fair	Fair	180	2.2	1.6	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	self sown
87	<i>Eucalyptus tereticornis</i>	20	10	Good	Fair	550	6.6	2.6	Long (>40 years)	High	High	No Impact: 0%	High Impact: >20%	Low Impact: <10%	High Impact: >20%	Previously tagged number not visible. Tree has lost large limbs and has basal decay
88	<i>Eucalyptus tereticornis</i>	18	9	Good	Good	500	6.0	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	Low Impact: <10%	Low Impact: <10%	Previously tagged 5
89	<i>Eucalyptus crebra</i>	28	12	Good	Good	540	6.5	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
90	<i>Eucalyptus tereticornis</i>	28	12	Good	Good	790	9.5	3.0	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area, twin trunks fused. appears stable
91	<i>Eucalyptus tereticornis</i>	24	5	Fair	Good	320	3.8	2.1	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
92	<i>Eucalyptus tereticornis</i>	25	8	Fair	Good	380	4.6	2.2	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
93	<i>Eucalyptus tereticornis</i>	26	12	Good	Good	650	7.8	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
94	<i>Olea africana</i>	5	5	Good	Good	100	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Weed
95	<i>Eucalyptus tereticornis</i>	23	12	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
96	<i>Melaleuca decora</i>	10	5	Good	Fair	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
97	<i>Eucalyptus tereticornis</i>	18	7	Good	Good	350	4.2	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
98	<i>Melaleuca decora</i>	10	5	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
99	<i>Eucalyptus moluccana</i>	20	8	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
100	<i>Eucalyptus tereticornis</i>	10	6	Good	Fair	280	3.4	1.9	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
101	<i>Eucalyptus tereticornis</i>	25	10	Good	Fair	520	6.2	2.5	Medium (15-40 years)	High	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Wound on trunk
102	<i>Eucalyptus moluccana</i>	14	5	Good	Good	240	2.9	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
103	<i>Eucalyptus tereticornis</i>	18	10	Good	Fair	510	6.1	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Cavity in trunk
104	<i>Eucalyptus tereticornis</i>	15	15	Good	Good	570	6.8	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
105	<i>Eucalyptus tereticornis</i>	10	4	Good	Good	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
106	<i>Eucalyptus tereticornis</i>	25	15	Good	Good	580	7.0	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
107	<i>Melaleuca decora</i>	10	6	Good	Good	280	3.4	1.9	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
108	<i>Eucalyptus tereticornis</i>	20	9	Good	Good	520	6.2	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
109	<i>Eucalyptus tereticornis</i>	20	10	Good	Good	500	6.0	2.5	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Decay in upper trunk
110	<i>Eucalyptus tereticornis</i>	18	11	Fair	Fair	650	7.8	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Wound on trunk
111	<i>Eucalyptus tereticornis</i>	30	15	Good	Fair	850	10.2	3.1	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Wound at base. Cavities in limbs

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
112	Melaleuca decora	6	3	Fair	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
113	Olea africana	4	4	Good	Fair	100	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Weed
114	Eucalyptus tereticornis	14	5	Good	Fair	350	4.2	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
115	Melaleuca decora	10	7	Good	Fair	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
116	Melaleuca decora	10	6	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area
117	Eucalyptus tereticornis	18	10	Fair	Good	480	5.8	2.4	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Twin stems. Crown dieback
118	Eucalyptus tereticornis	25	15	Good	Good	690	8.3	2.8	Long (>40 years)	High	High	No Impact: 0%	Medium Impact: <20%	No Impact: 0%	Medium Impact: <20%	In woodland area
119	Dead tree	10	2	Poor	Fair	600	7.2	2.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Retain dead stump
120	Melaleuca decora	10	12	Good	Good	700	8.4	2.8	Long (>40 years)	High	High	No Impact: 0%	Medium Impact: <20%	No Impact: 0%	Medium Impact: <20%	In woodland area. 3 stems
121	Eucalyptus tereticornis	12	7	Good	Fair	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Wound in fork
122	Dead tree	16	5	Poor	Poor	400	4.8	2.3	Medium (15-40 years)	Low	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Retain dead tree. Recommend reducing height
123	Eucalyptus tereticornis	14	9	Good	Fair	340	4.1	2.1	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Decay in trunk
124	Melaleuca decora	10	5	Good	Good	280	3.4	1.9	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Twin stems
125	Eucalyptus tereticornis	15	8	Good	Good	400	4.8	2.3	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. 3 stems
126	Olea africana	4	5	Good	Fair	100	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Weed
127	Eucalyptus tereticornis	25	14	Good	Good	660	7.9	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
128	Eucalyptus tereticornis	25	12	Good	Good	650	7.8	2.8	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
129	Eucalyptus tereticornis	25	10	Good	Fair	510	6.1	2.5	Long (>40 years)	High	High	High Impact: >20%	High Impact: >20%	Medium Impact: <20%	High Impact: >20%	In woodland area. Wound on scaffold limb
130	Eucalyptus tereticornis	28	10	Good	Fair	730	8.8	2.9	Long (>40 years)	High	High	Low Impact: <10%	Low Impact: <10%	Low Impact: <10%	Low Impact: <10%	In woodland area. Wound on trunk
131	Eucalyptus tereticornis	28	15	Good	Good	770	9.2	3.0	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
132	Eucalyptus tereticornis	12	5	Good	Good	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
133	Eucalyptus tereticornis	28	12	Good	Good	550	6.6	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
134	<i>Eucalyptus tereticornis</i>	15	10	Good	Good	330	4.0	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
135	<i>Eucalyptus tereticornis</i>	10	5	Good	Fair	200	2.4	1.7	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
136	<i>Eucalyptus tereticornis</i>	27	15	Good	Good	620	7.4	2.7	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
137	<i>Eucalyptus tereticornis</i>	6	3	Fair	Fair	260	3.1	1.9	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Decay, stump
138	<i>Melaleuca decora</i>	10	4	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area. Twin stems
139	<i>Acacia parramattensis</i>	4	2	Good	Good	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
140	<i>Eucalyptus tereticornis</i>	25	15	Good	Fair	850	10.2	3.1	Medium (15-40 years)	High	High	Low Impact: <10%	Low Impact: <10%	Low Impact: <10%	Low Impact: <10%	In woodland area. Large cavity in trunk
141	<i>Eucalyptus tereticornis</i>	26	14	Good	Good	560	6.7	2.6	Long (>40 years)	High	High	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
142	<i>Acacia parramattensis</i>	5	2	Good	Good	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	In woodland area.
143	<i>Eucalyptus paniculata</i>	11	4	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Previously tagged 3
144	<i>Melaleuca decora</i>	5	4	Good	Fair	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
145	<i>Eucalyptus sideroxylon</i>	10	5	Good	Good	210	2.5	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
146	<i>Eucalyptus tereticornis</i>	11	5	Good	Fair	220	2.6	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk
147	<i>Eucalyptus sideroxylon</i>	10	5	Good	Good	190	2.3	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
148	<i>Melaleuca decora</i>	5	3	Good	Good	120	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
149	<i>Eucalyptus sideroxylon</i>	12	8	Poor	Fair	320	3.8	2.1	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Sparse canopy, dead wood
150	<i>Eucalyptus sideroxylon</i>	6	4	Good	Good	120	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
151	<i>Eucalyptus tereticornis</i>	10	5	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
152	<i>Eucalyptus paniculata</i>	7	4	Good	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk
153	<i>Eucalyptus tereticornis</i>	10	5	Fair	Fair	220	2.6	1.8	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk
154	<i>Eucalyptus tereticornis</i>	6	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
155	<i>Eucalyptus tereticornis</i>	9	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
156	<i>Eucalyptus tereticornis</i>	8	3	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borer in trunk

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157	<i>Eucalyptus sideroxylon</i>	15	8	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
158	<i>Eucalyptus moluccana</i>	14	5	Fair	Fair	180	2.2	1.6	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
159	<i>Eucalyptus globoidea</i>	7	4	Good	Good	100	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
160	<i>Eucalyptus tereticornis</i>	9	3	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borer in trunk
161	<i>Eucalyptus tereticornis</i>	10	4	Fair	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
162	<i>Eucalyptus moluccana</i>	4	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
163	<i>Eucalyptus tereticornis</i>	10	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
164	<i>Eucalyptus paniculata</i>	10	5	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
165	<i>Eucalyptus sideroxylon</i>	12	8	Good	Good	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
166	<i>Eucalyptus moluccana</i>	15	10	Good	Good	260	3.1	1.9	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem
167	<i>Eucalyptus paniculata</i>	12	10	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
168	<i>Eucalyptus eugenioides</i>	5	5	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
169	<i>Eucalyptus tereticornis</i>	15	6	Good	Fair	280	3.4	1.9	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
170	<i>Eucalyptus sideroxylon</i>	12	5	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
171	<i>Angophora floribunda</i>	10	4	Good	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk
172	<i>Eucalyptus tereticornis</i>	7	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk
173	<i>Eucalyptus eugenioides</i>	6	4	Good	Good	140	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
174	<i>Eucalyptus tereticornis</i>	15	4	Good	Good	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
175	<i>Melaleuca decora</i>	5	3	Good	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
176	<i>Eucalyptus sideroxylon</i>	10	5	Fair	Fair	250	3.0	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
177	<i>Eucalyptus eugenioides</i>	8	5	Good	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
178	<i>Eucalyptus sideroxylon</i>	12	4	Fair	Good	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
179	<i>Eucalyptus moluccana</i>	5	3	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk
180	<i>Eucalyptus tereticornis</i>	7	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
181	<i>Eucalyptus sideroxylon</i>	8	4	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
182	<i>Eucalyptus sideroxylon</i>	8	5	Good	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
183	<i>Melaleuca decora</i>	7	3	Fair	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
184	<i>Eucalyptus tereticornis</i>	15	4	Fair	Fair	240	2.9	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk
185	<i>Eucalyptus sideroxylon</i>	7	3	Poor	Fair	120	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dead tree
186	<i>Eucalyptus moluccana</i>	4	1	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
187	<i>Eucalyptus fibrosa</i>	12	6	Good	Fair	240	2.9	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
188	<i>Melaleuca decora</i>	6	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
189	<i>Eucalyptus sideroxylon</i>	4	2	Poor	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk, basal movement
190	<i>Eucalyptus sideroxylon</i>	5	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
191	<i>Eucalyptus sideroxylon</i>	5	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
192	<i>Eucalyptus sideroxylon</i>	8	2	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
193	<i>Eucalyptus sp.</i>	5	3	Poor	Poor	100	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dead tree
194	<i>Eucalyptus sideroxylon</i>	8	3	Fair	Good	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
195	<i>Eucalyptus sideroxylon</i>	6	3	Good	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
196	<i>Melaleuca decora</i>	6	3	Good	Fair	130	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	3 bifurcated stems
197	<i>Eucalyptus tereticornis</i>	12	4	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borers in trunk
198	<i>Eucalyptus sideroxylon</i>	9	3	Good	Good	300	3.6	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
199	<i>Eucalyptus sideroxylon</i>	8	4	Good	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
200	<i>Eucalyptus sideroxylon</i>	6	4	Good	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borer in trunk
201	<i>Eucalyptus sideroxylon</i>	7	3	Fair	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
202	<i>Eucalyptus tereticornis</i>	15	4	Good	Fair	320	3.8	2.1	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk, bifurcation
204	<i>Eucalyptus sp.</i>	8	3	Fair	Poor	160	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wounds on trunk
205	<i>Melaleuca decora</i>	5	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	3 bifurcated stems

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
206	<i>Eucalyptus tereticornis</i>	10	1	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
207	<i>Eucalyptus sideroxylon</i>	9	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
208	<i>Eucalyptus sideroxylon</i>	9	3	Good	Fair	190	2.3	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
209	<i>Eucalyptus sideroxylon</i>	10	5	Good	Fair	250	3.0	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
210	<i>Eucalyptus sideroxylon</i>	9	3	Good	Fair	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
211	<i>Eucalyptus tereticornis</i>	10	2	Fair	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
212	<i>Eucalyptus sideroxylon</i>	10	3	Fair	Poor	140	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Poor anchorage
213	<i>Eucalyptus sp.</i>	6	5	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Hole in trunk, bifurcation
214	<i>Eucalyptus tereticornis</i>	9	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
215	<i>Eucalyptus tereticornis</i>	10	3	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
216	<i>Eucalyptus sideroxylon</i>	6	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
217	<i>Eucalyptus sideroxylon</i>	12	3	Fair	Fair	210	2.5	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
218	<i>Eucalyptus sideroxylon</i>	5	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
219	<i>Eucalyptus sideroxylon</i>	8	2	Fair	Fair	130	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
220	<i>Eucalyptus sideroxylon</i>	5	2	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
221	<i>Eucalyptus sideroxylon</i>	12	3	Fair	Good	190	2.3	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
222	<i>Melaleuca decora</i>	5	3	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
223	<i>Eucalyptus tereticornis</i>	12	4	Good	Fair	200	2.4	1.7	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
224	<i>Eucalyptus sideroxylon</i>	5	4	Fair	Fair	140	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk
225	<i>Eucalyptus sideroxylon</i>	10	4	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
226	<i>Eucalyptus tereticornis</i>	15	4	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
227	<i>Eucalyptus sideroxylon</i>	10	3	Good	Good	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
229	<i>Eucalyptus sideroxylon</i>	12	5	Good	Fair	200	2.4	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
229	<i>Eucalyptus sideroxylon</i>	8	4	Fair	Fair	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
230	<i>Eucalyptus tereticornis</i>	16	3	Good	Fair	200	2.4	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
231	<i>Eucalyptus sideroxylon</i>	10	3	Good	Good	160	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
232	<i>Eucalyptus sideroxylon</i>	8	6	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Leaning
233	<i>Melaleuca decora</i>	8	3	Good	Good	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
234	<i>Eucalyptus sideroxylon</i>	4	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
235	<i>Eucalyptus sideroxylon</i>	14	4	Good	Good	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
236	<i>Melaleuca decora</i>	8	4	Good	Fair	290	3.5	2.0	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Multiple trunks
237	<i>Eucalyptus tereticornis</i>	10	4	Good	Good	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
238	<i>Eucalyptus sideroxylon</i>	7	3	Fair	Poor	110	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Basal wound
239	<i>Eucalyptus tereticornis</i>	12	5	Good	Fair	220	2.6	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk, bifurcation
240	<i>Eucalyptus sideroxylon</i>	10	4	Fair	Fair	170	2.0	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
241	<i>Eucalyptus sideroxylon</i>	13	5	Fair	Good	260	3.1	1.9	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
242	<i>Eucalyptus sideroxylon</i>	7	4	Good	Poor	120	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
243	<i>Melaleuca decora</i>	6	3	Good	Good	100	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
244	<i>Eucalyptus tereticornis</i>	8	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Regrown stump
245	<i>Eucalyptus sideroxylon</i>	10	4	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
246	<i>Eucalyptus sideroxylon</i>	5	3	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
247	<i>Eucalyptus sideroxylon</i>	6	4	Fair	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
248	<i>Eucalyptus tereticornis</i>	12	3	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
249	<i>Eucalyptus sideroxylon</i>	5	2	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
250	<i>Eucalyptus sideroxylon</i>	14	5	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
251	<i>Eucalyptus sideroxylon</i>	5	4	Fair	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
252	<i>Melaleuca decora</i>	4	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems bifurcated
253	<i>Eucalyptus sideroxylon</i>	7	4	Fair	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
254	<i>Eucalyptus sideroxylon</i>	4	2	Poor	Fair	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
255	<i>Eucalyptus sideroxylon</i>	9	4	Fair	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
256	<i>Eucalyptus sideroxylon</i>	10	5	Good	Good	250	3.0	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
257	<i>Eucalyptus sideroxylon</i>	8	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
258	<i>Eucalyptus sideroxylon</i>	7	3	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Leaning
259	<i>Eucalyptus tereticornis</i>	6	2	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borer
260	<i>Eucalyptus sideroxylon</i>	7	3	Fair	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
261	<i>Eucalyptus sp.</i>	8	5	Fair	Fair	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
262	<i>Eucalyptus sideroxylon</i>	9	3	Fair	Fair	170	2.0	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
263	<i>Dead tree</i>	8	3	Poor	Poor	100	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dead tree
264	<i>Melaleuca decora</i>	5	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
265	<i>Eucalyptus sideroxylon</i>	10	2	Fair	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
266	<i>Eucalyptus sideroxylon</i>	10	4	Fair	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
267	<i>Eucalyptus sideroxylon</i>	7	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
268	<i>Melaleuca decora</i>	8	4	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
269	<i>Eucalyptus sideroxylon</i>	10	3	Fair	Fair	130	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
270	<i>Eucalyptus sideroxylon</i>	10	5	Fair	Fair	240	2.9	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Leaning
271	<i>Eucalyptus tereticornis</i>	14	4	Good	Fair	230	2.8	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
272	<i>Eucalyptus eugenioides</i>	10	5	Fair	Fair	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
273	<i>Eucalyptus tereticornis</i>	10	5	Good	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
274	<i>Melaleuca decora</i>	7	3	Good	Good	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
275	<i>Melaleuca decora</i>	9	5	Good	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
276	<i>Eucalyptus sp.</i>	5	2	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
277	<i>Eucalyptus tereticornis</i>	14	4	Good	Fair	210	2.5	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
278	Melaleuca decora	8	4	Good	Fair	220	2.6	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
279	Eucalyptus tereticornis	6	3	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems, borers
280	Dead tree	8	3	Poor	Poor	150	2.0	1.5	Remove (<5 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dead tree, previously tagged 4
281	Eucalyptus eugenioides	10	5	Good	Good	190	2.3	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
282	Melaleuca decora	6	3	Fair	Fair	160	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
283	Melaleuca decora	8	3	Good	Good	160	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
284	Eucalyptus tereticornis	14	5	Good	Fair	170	2.0	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem, wound on trunk
285	Melaleuca decora	7	3	Fair	Fair	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
286	Melaleuca decora	8	3	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
287	Melaleuca decora	6	2	Good	Good	120	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
288	Eucalyptus tereticornis	16	6	Good	Good	290	3.5	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Wound on trunk
289	Melaleuca decora	5	2	Good	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
290	Eucalyptus tereticornis	13	3	Good	Good	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
291	Eucalyptus tereticornis	5	2	Fair	Poor	100	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Borer in trunk
292	Eucalyptus sideroxylon	4	1	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
293	Eucalyptus tereticornis	15	4	Good	Good	250	3.0	1.8	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
294	Eucalyptus sideroxylon	7	2	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
295	Melaleuca decora	4	2	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
296	Eucalyptus tereticornis	13	5	Fair	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
297	Eucalyptus tereticornis	17	5	Good	Good	240	2.9	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
298	Eucalyptus tereticornis	11	4	Good	Fair	140	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem
299	Eucalyptus eugenioides	8	4	Good	Good	140	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
300	Melaleuca decora	5	4	Good	Fair	130	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Twin stems
301	Eucalyptus tereticornis	8	2	Good	Good	100	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
302	<i>Eucalyptus sideroxylon</i>	8	3	Good	Fair	140	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcated stem
303	<i>Eucalyptus sideroxylon</i>	6	4	Good	Fair	120	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
304	<i>Eucalyptus sideroxylon</i>	5	3	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
305	<i>Eucalyptus tereticornis</i>	12	4	Good	Good	180	2.2	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
306	<i>Eucalyptus tereticornis</i>	16	4	Good	Good	220	2.6	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
307	<i>Eucalyptus eugenioides</i>	10	5	Good	Good	200	2.4	1.7	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
308	<i>Eucalyptus eugenioides</i>	9	3	Good	Good	160	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
309	<i>Eucalyptus tereticornis</i>	6	3	Poor	Fair	120	2.0	1.5	Short (5-15 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dying back
310	<i>Eucalyptus tereticornis</i>	10	4	Good	Good	140	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
311	<i>Eucalyptus sideroxylon</i>	5	2	Good	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
312	<i>Eucalyptus sideroxylon</i>	9	5	Good	Good	170	2.0	1.6	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
313	<i>Melaleuca sp.</i>	8	5	Good	Fair	150	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Multi trunked
314	<i>Eucalyptus tereticornis</i>	18	5	Good	Good	290	3.5	2.0	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Bifurcation
315	<i>Eucalyptus tereticornis</i>	12	5	Good	Fair	230	2.8	1.8	Long (>40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
316	<i>Eucalyptus sp.</i>	6	1	Good	Good	100	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
317	<i>Eucalyptus moluccana</i>	8	5	Good	Fair	200	2.4	1.7	Medium (15-40 years)	Medium	Medium	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Leaning
318	<i>Eucalyptus tereticornis</i>	10	5	Good	Good	150	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
319	<i>Eucalyptus tereticornis</i>	12	6	Good	Fair	180	2.2	1.6	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Leaning
320	<i>Eucalyptus tereticornis</i>	6	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
321	<i>Eucalyptus tereticornis</i>	5	2	Fair	Fair	100	2.0	1.5	Medium (15-40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
322	<i>Eucalyptus tereticornis</i>	10	4	Good	Good	160	2.0	1.5	Long (>40 years)	Low	Low	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	
323	<i>Eucalyptus tereticornis</i>	25	16	Good	Fair	790	9.5	3.0	Medium (15-40 years)	High	High	High Impact: >20%	High Impact: >20%	High Impact: >20%	High Impact: >20%	Wound in main forks from cockatoo damage. Previously tagged 23

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	TPZ (m)	SRZ (m)	ULE	Landscape significance	Retention value	REF Impact	DA Impact	SSD/EIS Impact	Overall Impact	Notes
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581	Dead tree	6	1	Poor	Poor	100	2.0	1.5	Remove (<5 years)	Low	Priority for removal	No Impact: 0%	No Impact: 0%	No Impact: 0%	No Impact: 0%	Dead tree
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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.

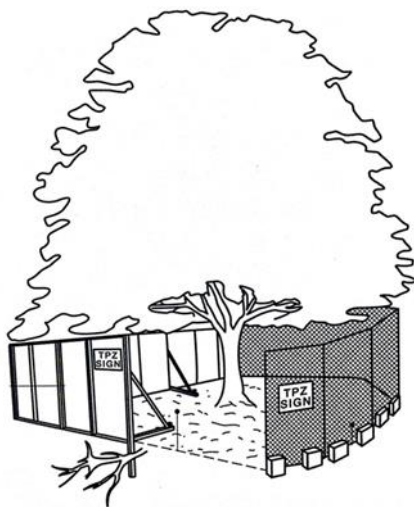
E3 Trunk protection

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.

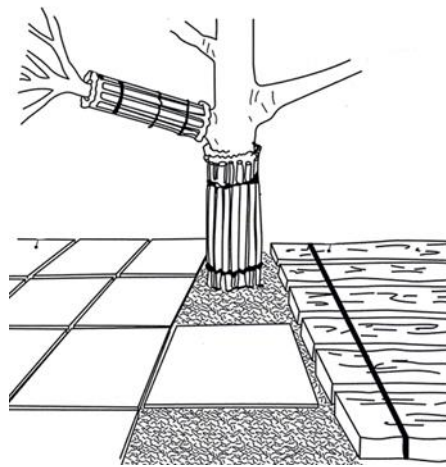
The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

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 photos



Figure 20: Tree 72



Figure 21: Tree 87



Figure 22: Tree 118



Figure 23: Tree 120



Figure 24: Tree 323



Figure 25: Tree 581 to be removed (dead tree)

Appendix G REF site plans

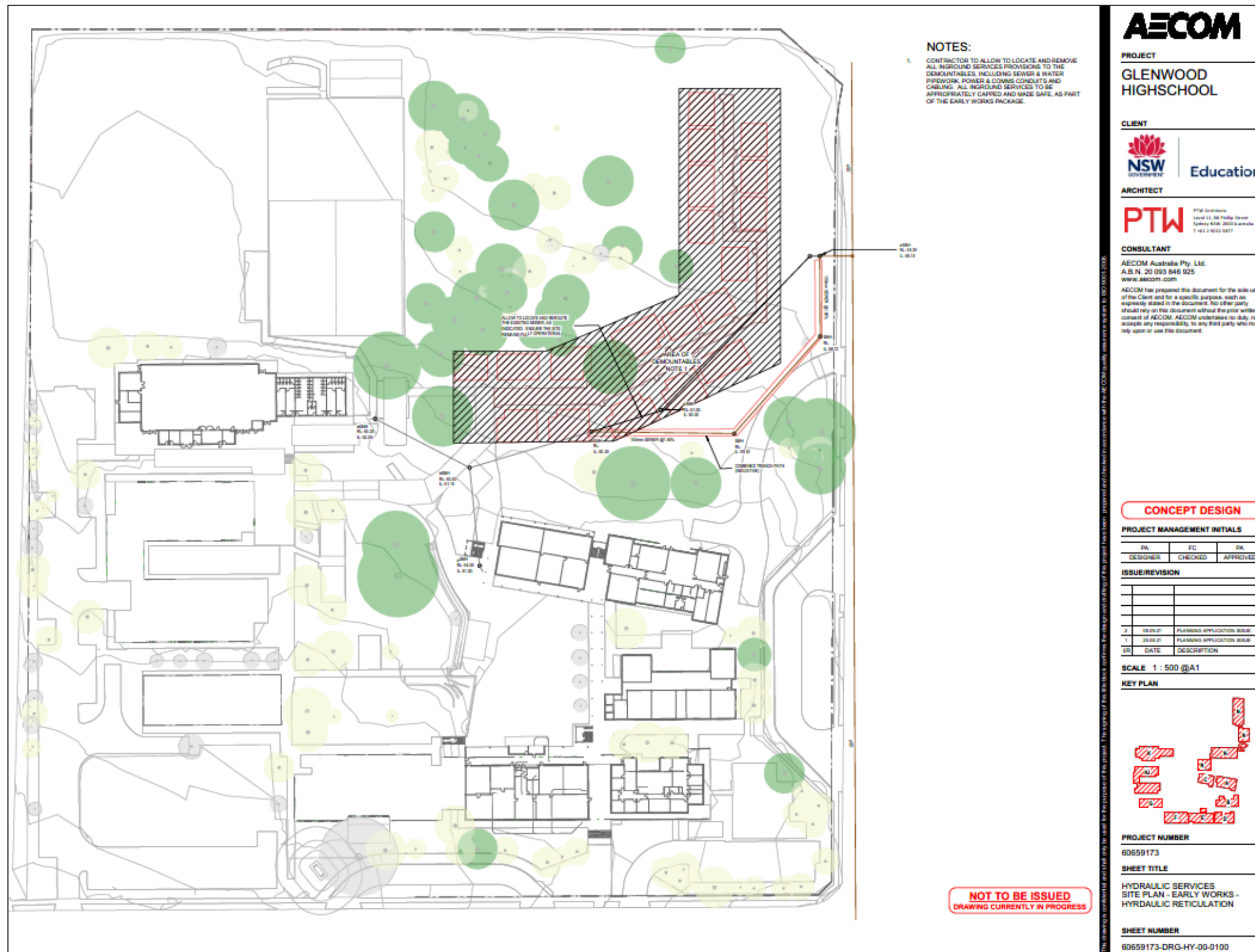


Figure 26: REF - Hydraulic services site plan (AECOM 2021)

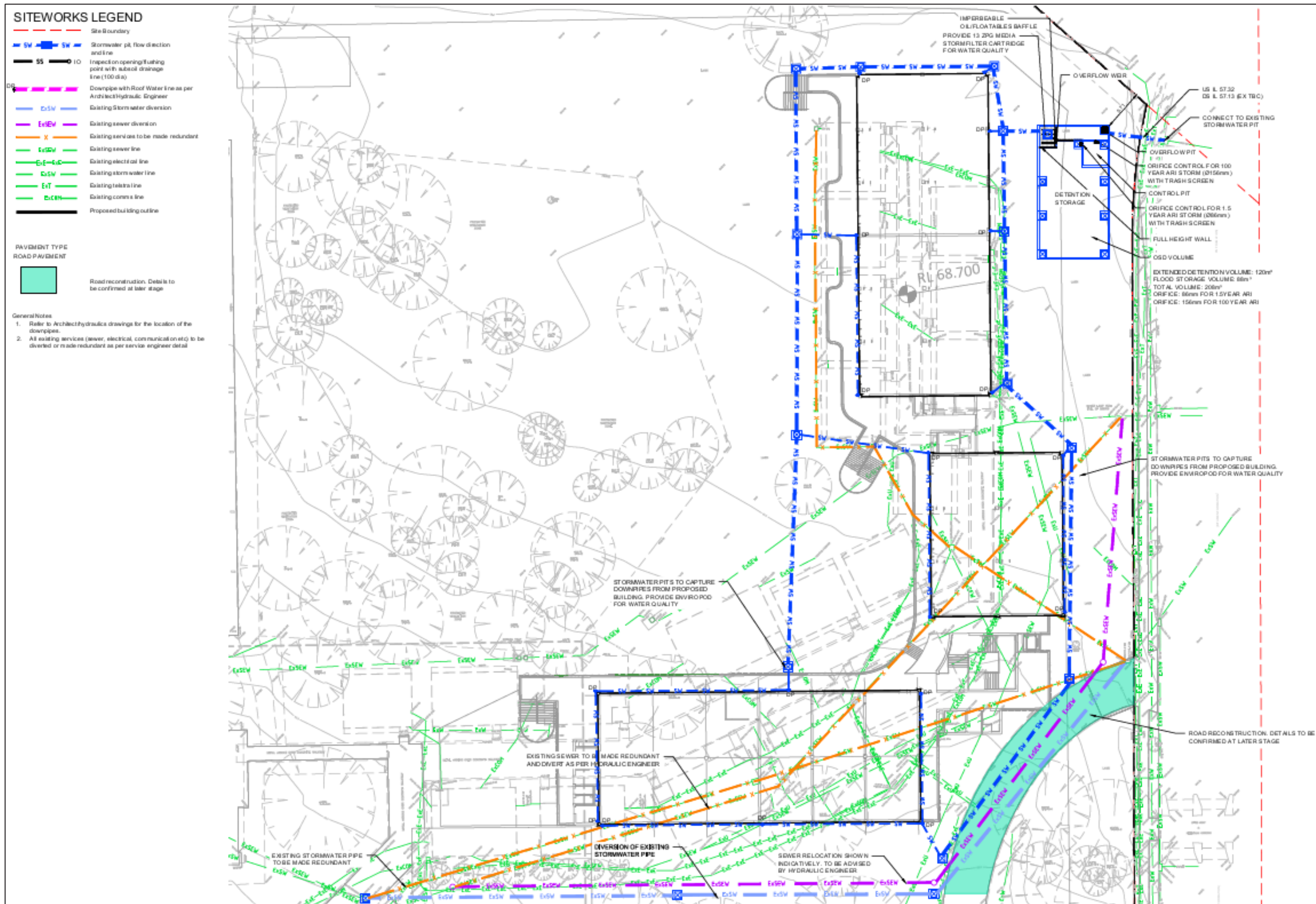


Figure 27: REF - Diversion of the existing sewer infrastructure outlined in purple (Enstruct 2021)

Appendix H DA site plans



Figure 28: DA- Boundaries of proposed earthworks (PTW Architects 2021)

Appendix I SSD/EIS site plan

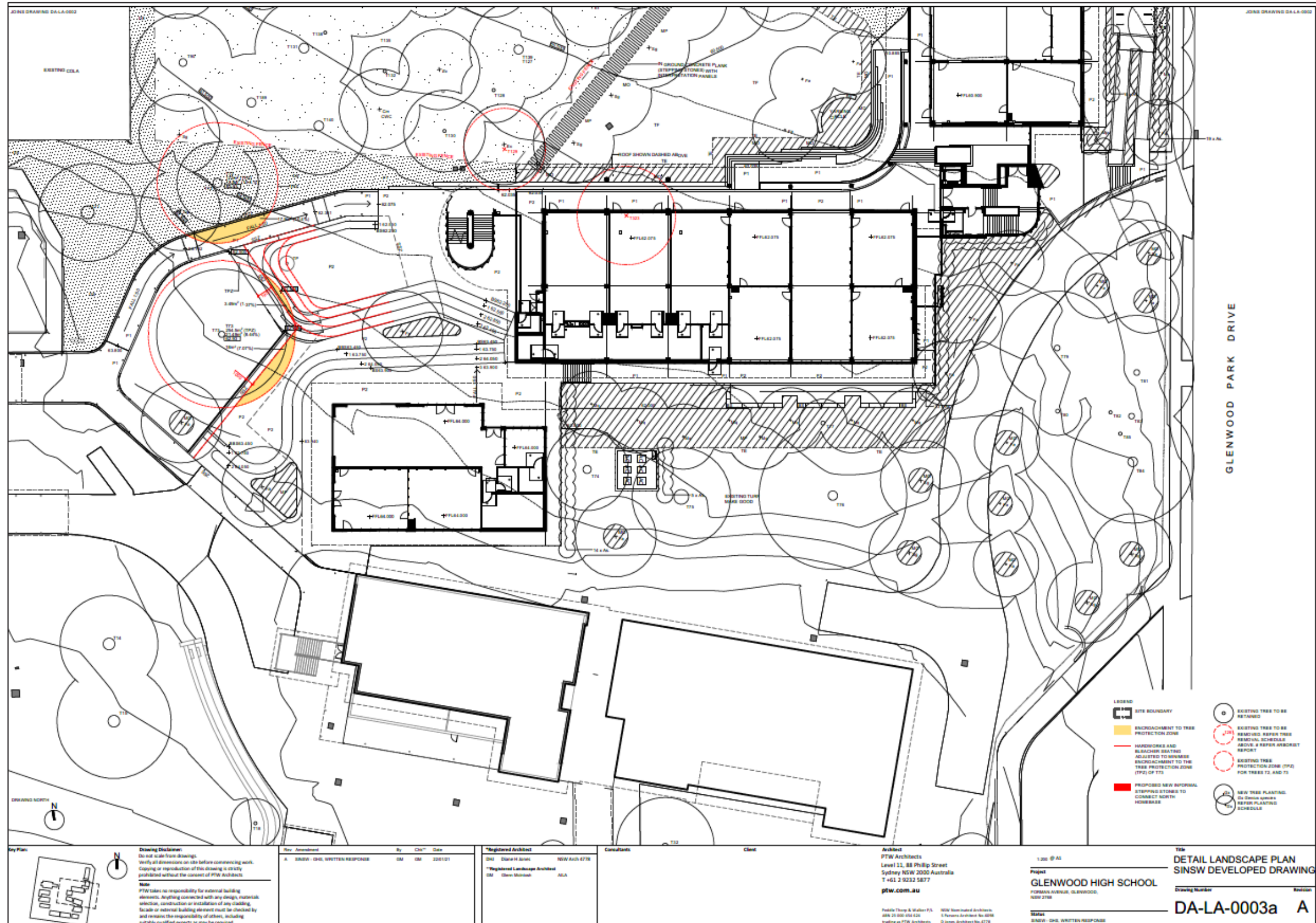


Figure 29: SSD/EIS – Landscape plan (PTW Architects 2021)

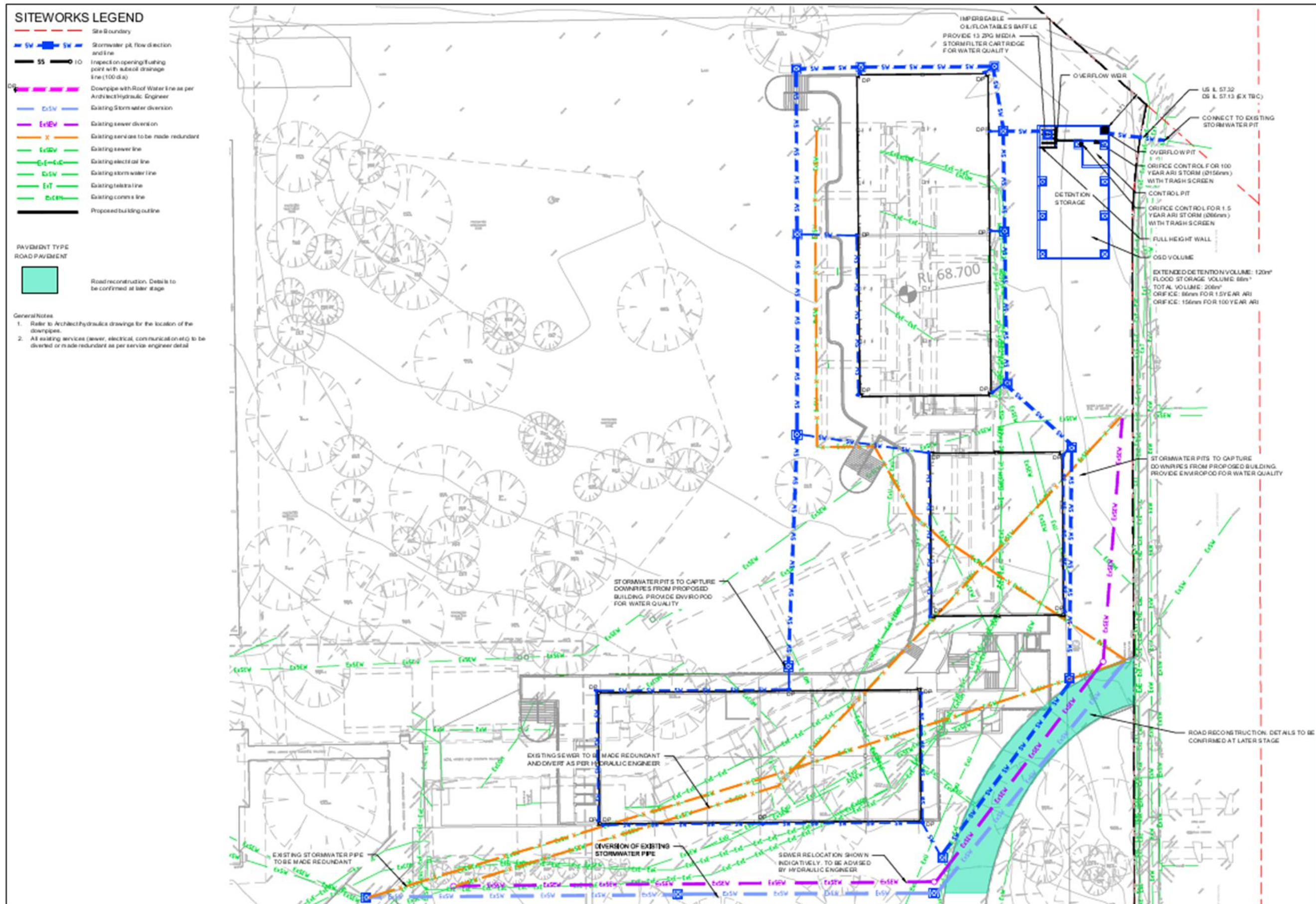


Figure 30: SSD/EIS – Proposed stormwater infrastructure and detention storage outlined in dark blue (Enstruct 2021)

Appendix J Quantified Tree Risk Assessment (QTRA)



Figure 31: Quantified Tree Risk Assessment (QTRA)

Table 10: Quantified Tree Risk Assessment (QTRA)

Tree	Botanical name	Height (m)	Spread (m)	Health	Structure	DBH (mm)	Defects	Risk Rating	Action
22	<i>Corymbia maculata</i>	15	12	Fair	Poor	510	Asymmetric, possible decay	Tolerable (where imposed on others)	Monitored annually
122	<i>Dead tree</i>	16	5	Poor	Poor	400	Dead tree	Broadly Acceptable	Monitored annually
140	<i>Eucalyptus tereticornis</i>	28	15	Good	Fair	850	2 Large cavities in trunk	Tolerable (where imposed on others)	Aerial inspection as outlined in section 3.2
179	<i>Eucalyptus moluccana</i>	5	3	Fair	Poor	100	Borers, decay, leaning	Broadly Acceptable	Remove
232	<i>Eucalyptus sideroxylon</i>	8	6	Fair	Fair	200	Leaning	Broadly Acceptable	Monitored annually

