

CPS

CREATIVE **PLANNING** SOLUTIONS

ARBORICULTURAL IMPACT ASSESSMENT

The King's School Masterplan

87-129 Pennant Hills Road, North Parramatta NSW 2151

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NORTH PARRAMATTA NSW 2151

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LGA: City of Parramatta

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Tree Risk-Benefit
Validator

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DISCLAIMER

The Client acknowledges this Report, and any opinions, advice or recommendations expressed or given in it, are based on the information supplied by the Client and on the data, inspections, measurements and analysis carried out or obtained by CPS and referred to in the Report. No guarantee is implied with respect to future tree safety. The Client should rely on the Report and its contents, only to that extent.

1 EXECUTIVE SUMMARY

This Arboricultural Impact Assessment (AIA) was commissioned by The Council of The King's School on the 8th of November 2022. The report relates to eight-hundred and eighty-three (883) trees located within and adjoining The King's School site at 87-129 Pennant Hills Road, North Parramatta within the City of Parramatta Council Local Government Area.

The report provides an evaluation of the likely impact to existing trees as a result of works associated with a State Significant Development Application (SSDA) for the staged redevelopment of The King's School. It is understood that this report is required to satisfy the NSW Planning Secretary's Environmental Assessment Requirements (SEARs) relevant to Application No. SSD-48497708, specifically SEARs Item 7 (Concept) and Item 14 (Stage 1). The proposed works are defined by an overall Masterplan which is divided into seven (7) precincts which include;

Concept Approval

- New Sports Pavilion
- New Day Boy House
- New Boarding House

Detailed Stage 1 Works

- Preparatory School Upgrades (New General Learning Unit & Performing Arts Building)
- New Science, Technologies, Engineering, Arts & Mathematics (STEAM) building
- New Staff Residences
- New Roadway and Car & Bus Parking Areas

In addition to demolition works and new building footprints, establishment of new precincts is to include civil works, stormwater infrastructure, new services infrastructure and landscaping. A summary of those trees identified has been provided in **Table 1** below along with a description of their retention values and nominated retention/removal status under the proposal.

Table 1 – Tree assessment summary

Retain / Remove	Identified Retention Values				Number of Trees
	High	Medium	Low	Priority for Removal	
Remove	106 Trees	127 Trees	211 Trees	7 Trees	451 Trees
Retain & Protect	122 Trees	130 Trees	180 Trees	-	432 Trees
				Total	883 Trees

Specific recommendations as per **Section 7** will need to be adopted to ensure root sensitive construction techniques and methodology are employed which mitigate any potential negative impacts to retained trees.

2 INTRODUCTION

2.1 Background

This Arboricultural Impact Assessment (AIA) was commissioned by The Council of The King's School on the 8th of November 2022 to evaluate the potential impacts that proposed development works will have on existing trees located on and adjacent to The King's School site at 87-129 Pennant Hills Road, North Parramatta (refer to **Figure 1**).

Accordingly, the purpose of this report is to assess the potential impact of the proposed development on the subject trees, as well as provide recommendations for further amendments to the design or construction methodology where necessary to minimise any adverse impact. The report also provides recommended tree protection measures to ensure the long-term preservation of the trees to be retained where appropriate.

2.2 Objectives

This report has been prepared to assess the level of impact development works are likely to cause to existing trees and make a determination as to whether trees will be adversely affected. The report will aim to provide guidance as to those trees requiring removal, retention or protection in accordance with the provisions of *AS4970-2009 Protection of trees on development sites*. Where necessary, it will also provide recommendations for design modifications and any replacement planting. As such, the objectives of this report are as follows:

- Assess the current site and growing conditions of trees;
- Assess the current health, condition, lifespan & significance of the trees within the site;
- Identify relative retention values of trees within the site;
- Calculate anticipated encroachment levels resulting from proposed works;
- Determine the likely impact as a result of the calculated encroachments;
- Assess potential for retention and protection of trees where possible;
- Advise any design modifications necessary to retain important trees;
- Recommend tree and root sensitive design and construction methodologies to mitigate impacts to trees to be retained;
- Inform of any tree removal necessary due to unsustainable impacts;
- Provide guidance and recommendations for any replacement planting necessary.

No aerial inspection or internal diagnostic testing has been carried out as part of this report. Additionally, no cation exchange capacity testing or plant tissue analysis has been undertaken.

2.3 Legislation & Regulating Documents

This Arboricultural Impact Assessment has considered the following regulatory documents:

- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*
- *Parramatta Local Environmental Plan 2023 (PLEP 2023)*
- *Parramatta Development Control Plan 2023 (PDCP 2023)*
- *Greater Sydney Regional Strategic Weed Management Plan 2023-2027 (GSRSWMP)*

2.4 Documentation Received

The following documents were received and have been relied upon for this Assessment:

Table 2 – Documentation received and reviewed as part of the Arboricultural Impact Assessment

Document Description	Author	Revision No. / Date
OVERALL MASTERPLAN		
Architectural Design Report	BVN Architecture	- / 27 July 2023
Landscape Design Report	Taylor Brammer	06 / 18 August 2023
Bushfire Assessment Report	Building Code & Bushfire Hazard Solutions	02 / 16 August 2023
Detail Survey	Rygate Surveyors	Q / 20 July 2023
STEAM		
Architectural Plans	BVN Architecture	04 / 21 July 2023
Landscape Plans	Taylor Brammer	02 / 10 March 2023
Bulk Earthworks Plans	TTW	P1 / 21 July 2023
Stormwater Plans	TTW	P4 / 1 September 2023
PREPARATORY SCHOOL		
Architectural Masterplan	BVN Architecture	03 / 21 July 2023
Bulk Earthworks Plans	TTW	P4 / 28 September 2023
PREPARATORY SCHOOL: GENERAL LEARNING UNIT		
Architectural Plans	BVN Architecture	05 / 27 July 2023
Landscape Plans	Taylor Brammer	A / 28 July 2023
Stormwater Plans	TTW	P3 / 18 August 2023
PREPARATORY SCHOOL: PERFORMING ARTS BUILDING		
Architectural Plans	BVN Architecture	04 / 21 July 2023
Landscape Plans	Taylor Brammer	D / 18 September 2023
Stormwater Plans	TTW	P3 / 18 August 2023
STAFF RESIDENCES		
Architectural Plans	Kennedy Associates Architects	P3 / 2 July 2023
Landscape Plans	Taylor Brammer	A / 28 July 2023
Bulk Earthworks Plans	TTW	P1 / 21 July 2023
Stormwater Plans	TTW	P4 / 1 September 2023
ROADWAY		
Landscape Plans	Taylor Brammer	A / 28 July 2023
Bulk Earthworks Plans	TTW	P2 / 1 August 2023
Stormwater Plans	TTW	P2 / 1 September 2023
SPORTS PAVILION		
Architectural Plans	Leaf Architecture	03 / 21 July 2023
Landscape Plans	Taylor Brammer	A / 28 July 2023
Stormwater Plans	TTW	P3 / 18 August 2023
DAY BOY HOUSE		
Architectural Plans	Leaf Architecture	03 / 24 July 2023
Landscape Plans	Taylor Brammer	A / 28 July 2023
Stormwater Plans	TTW	P3 / 18 August 2023

Document Description	Author	Revision No. / Date
BOARDING HOUSE		
Architectural Plans	Leaf Architecture	03 / 21 July 2023
Landscape Plans	Taylor Brammer	A / 28 July 2023
Stormwater Plans	TTW	P3 / 18 August 2023

Note: care has been taken to obtain all information from reliable sources; however, the author makes no representations, guarantees or warranties as to the accuracy of information provided by others. No other information has been reviewed, should this become available impacts may be subject to change.

2.5 The Site

The site is known as The King's School (aka. 87-129 Pennant Hills Road, North Parramatta) and is legally defined by a total of nine (9) allotments, being Lot 10 in DP812772, Lot 1 in DP57491, Lot 1 in DP59169, Lot A in DP321595, Lot 1 in DP581960, Lots A & B in DP329288, Lot 1 in DP64765 and Lot 2 in DP235857.

The site is approximately 115ha. in size and is located to the northern side of Pennant Hills Road. Existing site improvements include a series of school buildings, boarding houses, residences, roadways, outdoor sporting facilities, hard paved curtilage areas, open garden areas and modified bushland (refer to **Figure 1** below).

2.6 Proposed Development

As communicated to CPS, it is understood that the proposal will be subject to a State Significant Development Application (SSDA) which seeks consent for the staged redevelopment of The King's School, including;

- **Concept Proposal for the provision of new and upgraded facilities, including:**
 - Building envelope for a new Sports Pavilion within the western sports field precinct (subject to further detailed approval).
 - Building envelope for a new Boarding House within the northern residential precinct to the north of the Doyle Sports Fields and adjacent building envelope for Staff Quarters (subject to further detailed approval).
 - Building envelope for a new Day Boy House between Dalmas House and Burkitt House, including the associated relocation of Ryrie Road (subject to further detailed approval).
 - Earthworks and the associated demolition of existing buildings and structures, and removal of trees and landscaping.
 - Staged increase in staff and student numbers.
 - Detailed Stage 1 works (as outlined below).
- **Detailed Stage 1 works, including:**
 - Earthworks and the associated demolition and existing buildings and structures.
 - Traffic upgrade works including the construction of a new vehicular entrance into the site from Masons Drive, new drop-off pick up facilities, internal access roads and increased car parking and bus parking.

- The construction of a new Staff Residence Building comprising residences for staff and their families within the Senior School Boarding Precinct.
- The construction of a new building for Science, Technology, Engineering, Arts and Maths (the 'STEAM building') within the Senior School and associated landscaping.
- The staged construction of new buildings required to upgrade the Preparatory School, including:
 - Construction of a new Performing Arts and Music Centre comprising a dedicated performance space and music practice rooms to the northwest of Horrocks Road.
 - Construction of a new General Learning Unit building comprising additional classrooms / general learning spaces adjacent to the existing dam.
 - Upgrades to pedestrian access throughout the school.
 - Staged increase in staff and student numbers.
- The removal and replacement of trees and associated landscaping.

Specifically, those works considered likely to impact the existing trees on and adjoining the subject site include the new building footprints and all external works required as part of the demolition and construction process.

2.7 Limitations

Trees are living organisms whose health and condition can change rapidly. The conclusions and recommendations in this report are valid for one (1) year only from the date of the report, unless otherwise stated. Any changes to the site as it stands at present, for example building extensions, excavation works, importing of soils, extreme weather events etc. will invalidate this report. Any reproduction of this report must be in full colour using the report in its entirety.



Figure 1 - Aerial image indicating subject site (outlined red).

Source: Nearmap, 2023

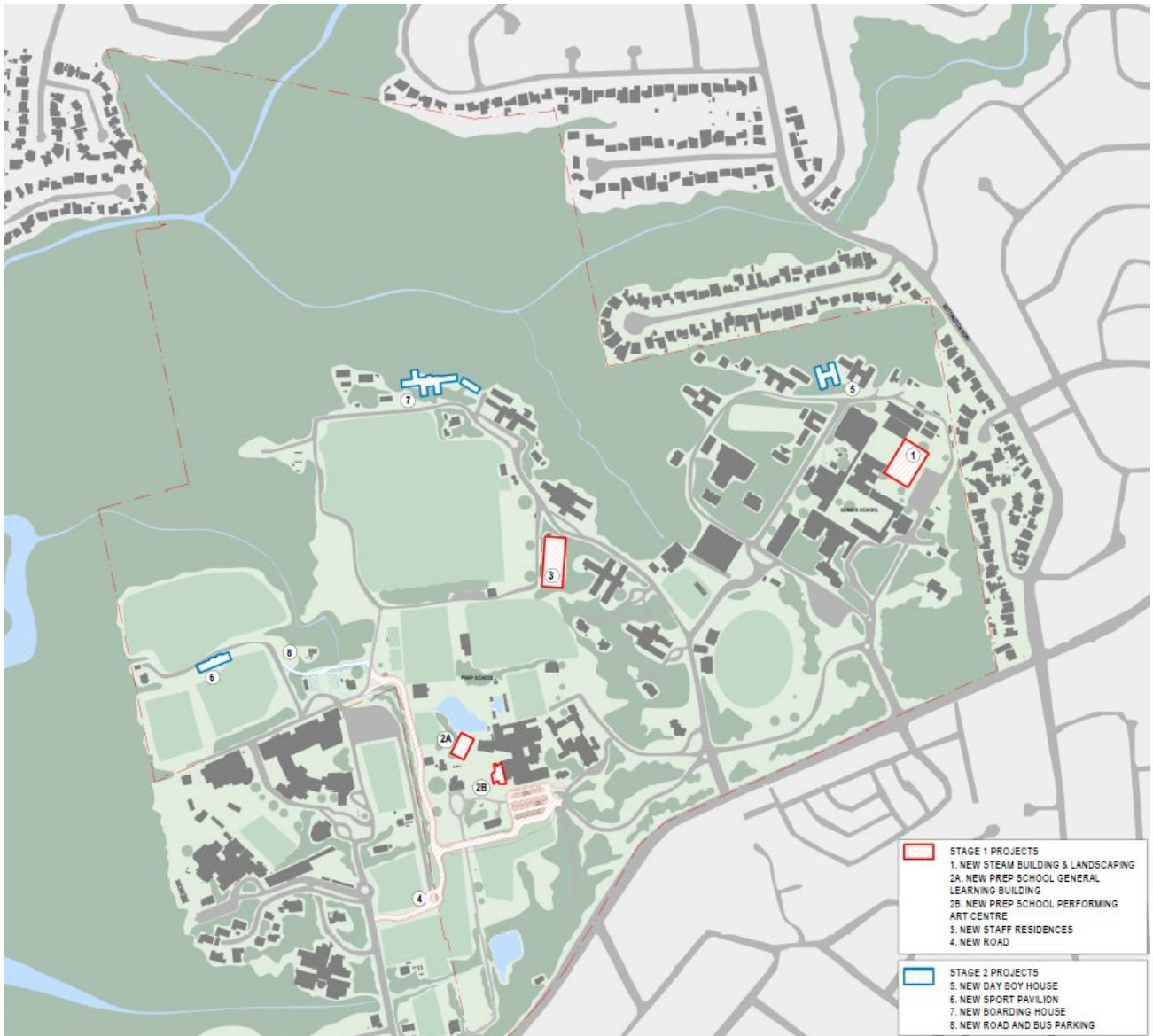


Figure 2 – Masterplan extract

Source: BVN, 2023

3 METHODOLOGY

3.1 Methodology

3.1.1 Site Inspections

Site inspections were carried out by Toby Piper, Greg Tesoriero, James Hume-Grimm, Sophie Diller & Geraldine Walsh (CPS AQF Level 5 Arborists) with the subject trees and the general growing environment evaluated on the following dates:

- 21st & 23rd of November 2022
- 15th & 30th of March 2023
- 5th of April 2023
- 17th of May 2023
- 15th June 2023
- 2nd of August 2023

The weather at the time of each inspection was generally sunny and dry with good visibility. The subject trees were inspected visually from ground level with the following information recorded and provided in tabulated form at **Appendices 1, 3, 5, 7, 9, 11 & 13**:

- Tree Species (Botanical & Common Name);
- Approximate height;
- Approximate canopy spread;
- Trunk Diameter (measured at 1.4 metres from ground level);
- Trunk Diameter at base (above root crown);
- Age class;
- Health & vigour; using foliage size, colour, extension growth, presence of disease or pest infestation, canopy density, presence of deadwood, dieback and epicormic growth as indicators;
- Condition; using visible evidence of structural defects, instability, evidence of previous pruning and physical damage as indicators;
- Suitability of the tree to the site and its existing location;
- Safe Useful Life Expectancy (SULE).

3.1.2 Visual Tree Assessment (VTA)

The modified Level 1 limited Visual Tree Assessment (VTA) was undertaken for all trees during the site inspection. The VTA consists of a detailed inspection of the subject tree from ground level to the upper canopy. This method of tree evaluation is adapted from Matheny and Clark, 1994 and is recognised by The International Society of Arboriculture (ISA), Arboriculture Australia and The Institute Australian of Consulting Arborists (IACA). No aerial inspections or major root excavations were undertaken.

3.1.3 Root Mapping

Root Mapping Investigations were carried out by James Hume-Grimm (CPS AQF Level 5 Arborist) with the assistance of David Peake (Consultant AQF Level 5 Arborist) on the 30th & 31st of March 2023. Lines of excavation were set out from existing structures on site and marked out using line marking paint. Trenches were excavated using a root sensitive pneumatic device (Air Spade) to a refusal depth of 500-600mm. Roots were then sprayed with orange marking paint for ease of visual clarity, recorded and photographed.

The roots identified were inspected visually, with root diameter, quantity, orientation and association recorded and provided in expanded form at **Section 4**. Once relevant information was recorded and photographed, trenches were backfilled with soil profiles preserved and the trench surrounds made good.

3.1.4 Safe Useful Life Expectancy (SULE)

The remaining Safe Useful Life Expectancy of a tree is an estimate of the sustainability of the tree in the landscape, calculated based on an estimate of the average age of the species in an urban area, less its estimated current age. The life expectancy of each tree has been further modified where necessary in consideration of its current health, vigour, condition and suitability to the site. The estimated SULE of each tree is shown in **Appendices 1, 3, 5, 7, 9, 11 & 13**.

The following ranges have been allocated to each tree:

- Long SULE: Trees that appear to be retainable with an acceptable level of risk for > 40 years.
- Medium SULE: Trees that appear to be retainable with an acceptable level of risk for 15 to 40 years.
- Short SULE: Trees that appear to be retainable with an acceptable level of risk for 5–15 years.
- Remove: Trees with a high level of risk that would need removing within the next 5 years.
- Small, Young or Regularly Pruned.

3.1.5 Landscape Significance

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. Several factors contribute towards the assessment of a tree's significance including but not limited to condition and vigour, form, visual prominence, heritage status, indigeneity, legislative protection, cultural sentiment and future growth potential.

For the purposes of this report the Australian Institute of Consulting Arborists (IACA) Significance of a Tree, Assessment Rating System (STARS)® has been utilised. The system uses a scale of High, Medium and Low significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined.

Appendix 15 provides a full outline of assessment criteria for each significance rating as per IACA STARS (2010).

3.1.6 Retention Value

Retention values have been determined for each tree on site to establish a hierarchy for tree retention. Retention values are based on estimated life spans and their associated landscape significance rating in accordance with the Tree Retention Value Priority Matrix. This matrix established the following retention values and can be found at **Appendix 15** with attributed retention values found within **Appendices 1, 3, 5, 7, 9, 11 & 13**:

- Priority for Retention (**High**)
- Consider for Retention (**Medium**)
- Consider for Removal (**Low**)
- Priority for Removal

3.1.7 AS4970-2009 Protection of Trees on Development Sites

The Australian Standard, AS4970-2009 - '*Protection of trees on development sites*', has been used as a guide to provide recommendations for the assessed trees. The Standard provides guidance on the principles for protecting trees on land subject to development as well as principles for determining viability of tree retention. Terminology and recommended methods are consistent with AS4970-2009.

3.1.8 Tree Protection Zones

The assessed trees have been allocated Tree Protection Zones (TPZ). The Australian Standard, AS4970-2009- '*Protection of trees on development sites*', has been used as a guide in the allocation of TPZs for the assessed trees. The TPZ is calculated based on trunk (stem) diameter at breast height (DBH), measured at 1.4 metres above ground level. The radius of the TPZ is calculated by multiplying the trees DBH by 12. The method provides a TPZ that addresses health and growing requirements of a tree as well as the trees stability. TPZ distances are measured as a radius from the centre of the trunk at (or near) ground level. The maximum TPZ should be no more than 15m radius and the minimum TPZ should be no less than 2m radius.

An extract of the AS4970-2009 for calculating TPZ has been provided at **Appendix 16** for reference.

3.1.9 Structural Root Zone

The assessed trees have been allocated Structural Root Zones (SRZ). The Australian Standard, AS4970-2009 - '*Protection of trees on development sites*', has been used as a guide in the allocation of SRZ's for the assessed trees. The SRZ is a radial area extending outwards from the centre of the trunk and is calculated as follows:

$$\text{SRZ (Radius)} = (D \times 50)^{0.42} \times 0.64$$

4 OBSERVATIONS

4.1 General

The site area subject to this assessment was observed as highly disturbed with minimal-moderate levels of understorey present. Species observed varied including exotic, Australian native and locally endemic species as well as a number of weed species. Health, vigour and condition was also highly varied across the trees forming part of the assessment. Root zones of assessed trees were generally observed as modified groundcover within deep soil areas.

4.2 Tree Preservation Order

Part 5.3.4 – *Tree and Vegetation Preservation* of the Parramatta Development Control Plan 2023 applies to all land within the City of Parramatta Local Government Area. The provisions included within the DCP generally protect any tree or vegetation that corresponds with the following criteria:

- *Any tree or palm - whether indigenous, endemic, exotic or introduced species with a height equal to or exceeding five (5) metres;*
- *Any tree, bushland, or mangrove vegetation located on public land, irrespective of size.*
- *Any tree that is or forms part of an Aboriginal object, or that is within an Aboriginal place of heritage significance, or that is located on land mapped 'high sensitivity' on the Aboriginal sensitivity map.*
- *Any tree with a height equal to or exceeding three (3) metres or any tree capable of growing to a height of 3 metres (where the tree with a height less than 3 metres has been intentionally planted; and/or is required to be planted and maintained as part of a development consent or tree permit determination notice):*
 - *that is or forms part of a heritage item, or*
 - *that is within a heritage conservation area; or*
 - *that is located within a Special Character Area as defined by this DCP.*
- *Vegetation on land identified as 'Biodiversity' on the Parramatta LEP 2023 Natural Resources Map.*

4.3 Heritage Status

It is acknowledged that The King's School site contains several areas of heritage significance which are collectively listed as Heritage Item No. I292 under the Parramatta Local Environmental Plan 2023. The listing describes the Heritage Item as follows:

"Gowan Brae Group, comprising Gowan Brae House, Kings School Chapel, gatehouse and fence, aviary, fountain, rotunda, The Cedars, grave, 19th century driveways and stables, iron palisade fence, horseshoe bridge/dam and roadway".

Whilst the heritage listing makes no specific reference to any vegetation on site, the heritage status of the site and any associated implications of vegetation removal is outside the scope of this report and may require input from a suitably qualified heritage consultant.

4.4 Critically Endangered Ecological Community

A number of those trees identified are of a species consistent with the Critically Endangered Ecological Community: *Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion*. The preservation this community is outlined under the provisions of the NSW *Biodiversity Conservation (BC) Act 2016* and the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*.

It is understood that further information regarding the ecological implications of any future works is to be reflected within a Biodiversity Development Assessment Report (BDAR) to be prepared by Ecological Australia.

4.5 Bushfire Protection – Asset Protection Zones

As part of an overall assessment of the Arboricultural implications of the proposal, CPS has undertaken a review of the Bushfire Assessment Report prepared by Building Code & Bushfire Hazard Solutions dated 16 August 2023. Included within this assessment are recommendations for the establishment of two (2) Asset Protection Zones (APZs) – one extending a distance of seventy-three (73) metres to the north, east and west of the proposed Boarding House and the other extending a distance of thirty (30) metres to the north of the proposed Day Boy House.

As per the recommendations of this report, it is understood that each of the required APZs are to be managed as Inner Protection Areas (IPAs) in accordance with the NSW RFS document '*Standards for Asset Protection Zones*' and Appendix 4 of *Planning for Bush Fire Protection 2019*. In accordance with this documentation, the following provisions apply for an IPA:

- Tree canopy cover should be less than 15% at maturity;
- Trees at maturity should not touch or overhang the building;
- Lower limbs should be removed up to a height of 2m above the ground;
- Tree canopies should be separated by 2 to 5m; and
- Preference should be given to retaining smooth barked and evergreen trees.

In order to satisfy these standards, tree removal is required and has been detailed within **Section 5**.

4.6 The Trees

A total of eight-hundred and eighty-three (883) trees were observed within and adjoining the subject site which have been surveyed as part of this assessment.

It is acknowledged that an existing Tree Inventory system is in place for the site and is maintained by ArborPlan / Civica. Tree tag identification numbers associated with these previously documented trees have been maintained for the purposes of this report – these are represented in the format of 'AP-#####'. Where trees had not been previously tagged, CPS has affixed them with small aluminium tree tags and assigned them a new identification number in formats of 'S-####' (STEAM Precinct), 'P-####' (Preparatory School), 'RE-####' (New Staff Residences), 'RO-####' (New Roadway), 'SP-####' (Sport Pavilion), 'D-####' (Day Boy House) and 'B-####' (Boarding House).

STEAM Precinct

Fifteen (15) trees were located within proximity to proposed works associated with the STEAM Precinct. All tree data recorded within this precinct has been tabulated and is contained **Appendix 1** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 2**.

Preparatory School

One-hundred and ninety-seven (197) trees were located within proximity to proposed works associated with the Preparatory School. All tree data recorded within this precinct has been tabulated and is contained **Appendix 3** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 4**.

Staff Residences

Forty-eight (48) trees were located within proximity to proposed works associated with the Staff Residences. All tree data recorded within this precinct has been tabulated and is contained **Appendix 5** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 6**.

Roadway

One-hundred and eighty-seven (187) trees were located within proximity to proposed works associated with the Roadway. All tree data recorded within this precinct has been tabulated and is contained **Appendix 7** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 8**.

For reference, is noted that several additional trees were observed within proximity to the proposed roadway which have not been formally assessed given they are generally self-seeded weed species of low landscape significance.

Sports Pavilion

Six (6) trees were located within proximity to proposed works associated with the Sports Pavilion. All tree data recorded within this precinct has been tabulated and is contained **Appendix 9** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 10**.

Day Boy House

One-hundred and eight (108) trees were located within proximity to proposed works associated with the Day Boy House. All tree data recorded within this precinct has been tabulated and is contained **Appendix 11** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 12**.

Boarding House

Three-hundred and twenty-two (322) trees were located within proximity to proposed works associated with the Boarding House. All tree data recorded within this precinct has been tabulated and is contained **Appendix 13** with relevant tree locations denoted on the attached Tree Location Plans held at **Appendix 14**.

4.6.1 Tree Assessment – Asset Protection Zones

Upon inspection of the APZs associated with both the Boarding House and Day Boy House precincts, it was noted that each contained a large number of dead trees (stags), fallen trees, saplings and a significant weed population consisting of a variety of invasive shrubs, groundcovers and vines. For the purpose of this report, CPS has assumed that all of this vegetation will be removed as part of APZ establishment and have therefore recorded only live trees which have a height of greater than five (5) metres and a stem diameter at breast height (DBH) of equal to/greater than 200mm in accordance with the definition of a protected tree under Parramatta Development Control Plan 2023.

4.7 Root Mapping Investigation

A Root Mapping Investigation was carried out within the STEAM precinct, adjacent to **Tree AP-00433** to determine the presence and location of existing tree roots where works are proposed within the Tree Protection Zone (TPZ). This location was deemed necessary in order to ascertain the impacts associated with the proposed construction works and the subsequent ongoing viability of this tree.

As part of this investigation, a single (articulated) trench was excavated to determine likely impacts to this tree where it was identified that major levels of TPZ incursion were proposed (20%).

4.7.1 Trench Excavation

The trench required as part of the Root Mapping Investigation was excavated along the alignment of the proposed STEAM building, within the TPZ of **Tree AP-00433**. The completed trench measured 14.60 metres to the east and 16.6 metres to the north, combining for a total distance of 31.2 lineal metres. Excavation depth at maximum resistance was between 500-600mm.

Eight (8) small diameter (10-15mm) oblique lateral roots (**Roots 1 – 8**) were identified within this trench, each of which have been estimated to be associated with the subject tree. Root-to-tree association has been determined via a detailed analysis of root epidermis, diameter, depth, location, alignment, and orientation. A moderate number of minor/feeder roots less than 5mm in diameter were also uncovered, however were not formally recorded for the purpose of this investigation.

The absence of any significant root mass along the alignment of the completed trench can possibly be attributed to the fact that the trench was located within the outer portion of the TPZ as well as environmental factors such as the heavily compacted and likely modified nature of the excavated soil profile.

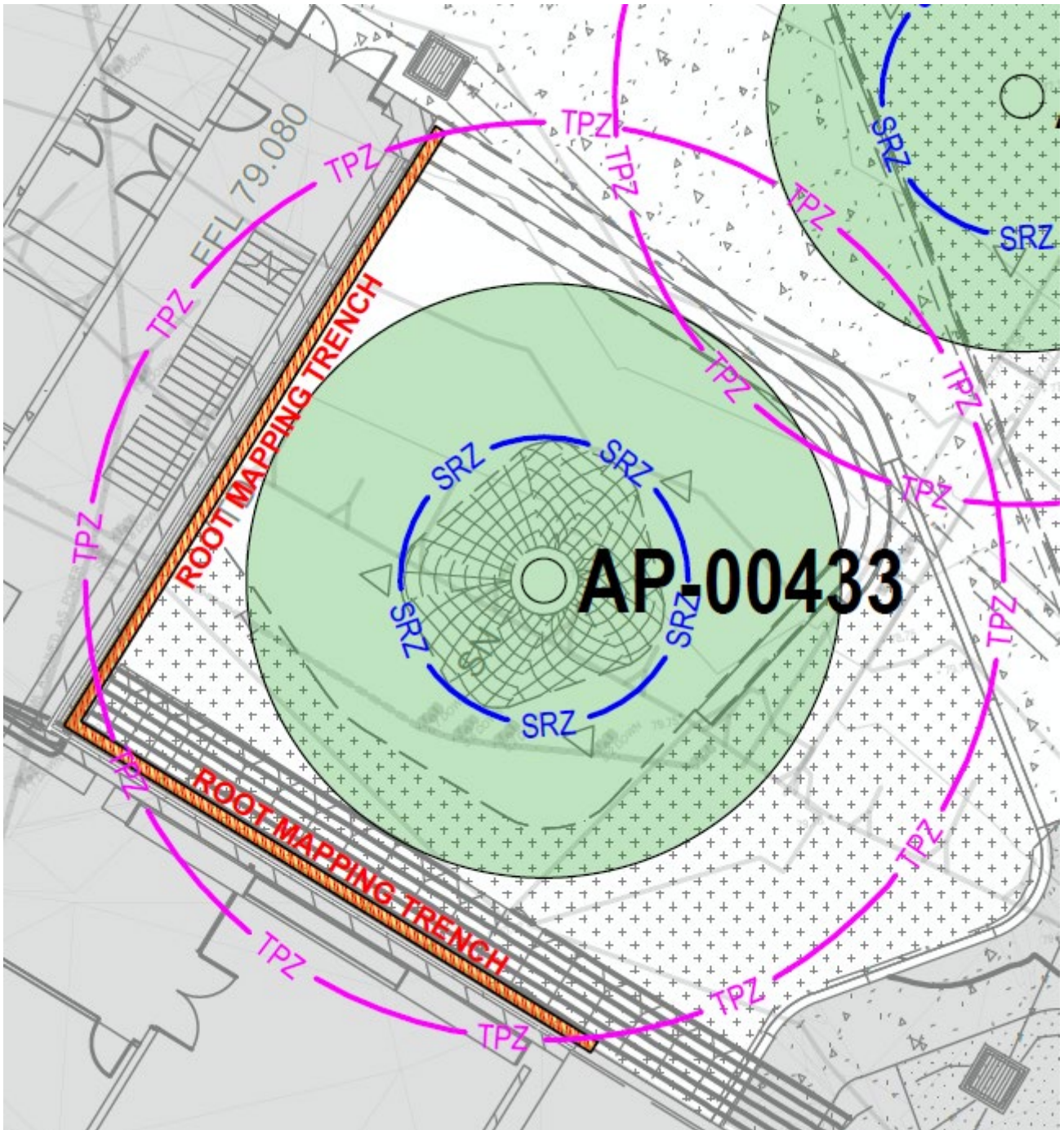


Figure 3: Tree Location Plan extract showing the extent of the excavated root mapping trench.



Figure 4: Set-out for eastern portion of trench



Figure 5: Set-out for northern portion of trench.



Figure 6: Eastern portion of trench following excavation



Figure 7: Northern portion of trench following excavation



Figure 8: Roots 1-5 within the northern portion of the trench



Figure 9: Roots 5 & 6 within the northern portion of the trench



Figure 10: Roots 7 within the eastern portion of the trench

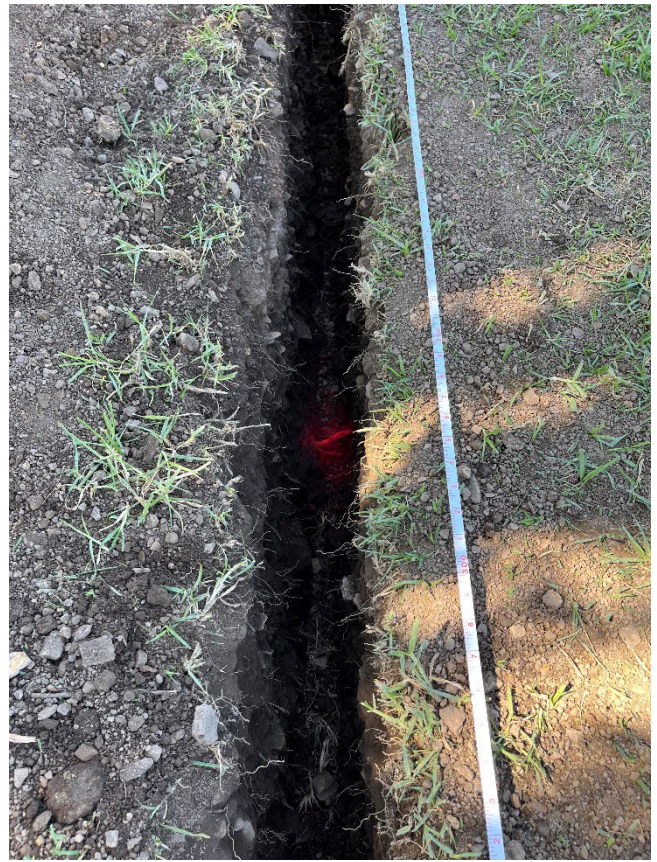


Figure 11: Root 8 within the eastern portion of the trench



Figure 12: Excavation depth achieved



Figure 13: Average root size

5 DISCUSSION

5.1 Impact Assessment

The impact assessment is to calculate the incursions to the root zones and canopies as a result of the proposed demolition and construction works and evaluate the likely impact of the proposed works on the subject trees. A summary of the impacts anticipated are contained within the Tree Schedules at **Appendices 1, 3, 5, 7, 9, 11 & 13**. Additionally, plans demonstrating the level of incursion and conflict to TPZ's and SRZ's can be found at **Appendices 2, 4, 6, 8, 10, 12 & 14**. As part of the assessment the following criteria have been considered:

- Existing Relative Levels (R.L.);
- Proposed Relative Levels;
- Tree Protection Zones (TPZ);
- Structural Root Zones (SRZ);
- Footprint of the proposed development (incl. stormwater and services) and temporary structures (scaffolding, hoardings etc.);
- Incursions to the TPZ & SRZ, including estimated cut & fill beyond the building footprint;
- Incursions to the tree canopy from the building envelope and temporary structures;
- Pruning necessary for building clearance;
- Remediation works for soil contaminants;
- Species tolerance to disturbance; and
- Assessment of the likely impact of the works on existing trees.

5.2 Trees Recommended for Removal

Should the proposed works proceed in their current form, it is recommended that four-hundred and fifty-one (451) trees be removed. Removals have been recommended based upon;

- Tree locations being in direct conflict with the proposed building footprints, roadworks, external hard paving areas, retaining walls and grading works;
- Major and unsustainable incursions to the TPZ and SRZ;
- Clearing required for the establishment of Asset Protection Zones, and;
- Trees being classified as dead or in severe decline.

It is acknowledged that the predominant reason for trees requiring removal is to facilitate the establishment of Asset Protection Zones (APZs) for the proposed Boarding House and Day Boy House. Given this requirement, it is also noted that CPS have previously provided informal advice to the project team that the proposed location of these buildings should be moved elsewhere on site in order to eliminate the requirement for, or reduce the extent of, the APZs and in-turn reduce associated impacts upon adjoining vegetation. Despite this CPS have been advised that this is not feasible and have, accordingly, proceeded with an assessment of APZ impacts with priority given (where possible) to the retention of trees which are of high landscape significance, are in good health and condition and which are likely to remain viable in the long term.

5.2.1 Trees Recommended for Removal – STEAM Precinct

Proposed works associated with the STEAM Precinct will necessitate the removal of one (1) tree (**Tree AP-00287**) A summary of impacts to be sustained as part of these works and subsequent reasoning for removal is provided within **Table 3** below.

Refer to **Appendix 2** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 3 – Trees recommended for removal (STEAM Precinct)

Reason for Removal	Trees Recommended for Removal - STEAM Precinct				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major, unsustainable incursions to the TPZ (46%) & SRZ (25%) as per AS4970-2009 as a result of a proposed external hard paving area, retaining wall, stormwater infrastructure and grading works.	-	One (1) Tree: Tree AP-00287	-	-	One (1) Tree
<u>Total</u>					One (1) Tree

5.2.2 Trees Recommended for Removal – Preparatory School

Proposed works associated with upgrades to the Preparatory School will necessitate the removal of twenty-three (23) trees, including **Trees AP-01156, AP-01161, AP-01162, AP-01170, AP-01172, AP-01173, AP-01981, AP-01983, AP-01984, AP-02013, AP-02028, AP-02566, AP-03234, AP-03236, P-007, P-010, P-084, P-086, P-087, P-089, P-090, P-091 & P-111**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 4** below.

Refer to **Appendix 4** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 4 – Trees recommended for removal (Preparatory School)

Reason for Removal	Trees Recommended for Removal - Preparatory School				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of the proposed buildings or external works including: carpark, hard paving areas, seating area and grading works.	-	Nine (9) Trees: Trees AP-01161, AP-01162, AP-01981, AP-01983, AP-01984, AP-02566, AP-03236, P-007 & P-010	Seven (7) Trees: Trees AP-01170, P-084, P-086, P-087, P-089, P-090 & P-091	-	Sixteen (16) Trees
Major, unsustainable incursions to the TPZ (12-62%) & SRZ (3-45%) as per AS4970-2009 as a result of the proposed buildings or external works including: hard paving areas, retaining walls, stormwater infrastructure and grading works.	One (1) Tree: Tree AP-01156	Three (3) Trees: Trees AP-01173, AP-02028, & AP-03234	One (1) Tree: Tree AP-01172,	-	Five (5) Trees
Poor condition and likely to become exposed from removal of adjacent vegetation	-	-	One (1) Tree: Tree P-111	-	One (1) Tree
Classified as dead	-	-	-	One (1) Tree: AP-02013	One (1) Tree
Total					Twenty-three (23) Trees

5.2.3 Trees Recommended for Removal – Staff Residences

Proposed works associated with the new Staff Residences will necessitate the removal of five (5) trees, including **Trees AP-01337, AP-01338, AP-01379, AP-01382 & RE-001**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 5** below.

Refer to **Appendix 6** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 5 – Trees recommended for removal (Staff Residences)

Reason for Removal	Trees Recommended for Removal - Staff Residences				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of a proposed OSD basin.	One (1) Tree: Tree AP-01382	-	-	-	One (1) Tree
Major, unsustainable incursions to the TPZ (14-76%) & SRZ (10-70%) as per AS4970-2009 as a result of the proposed external works including: hard paving areas, retaining walls, stormwater infrastructure and grading works.	Two (2) Trees: Trees AP-01337 & AP-01379	One (1) Tree: Tree AP-01338	One (1) Tree: Tree RE-001	-	Four (4) Trees
Total					Five (5) Trees

5.2.4 Trees Recommended for Removal – Roadway

Proposed works associated with the Roadway will necessitate the removal of thirty-seven (37) trees, including **Trees AP-01158 – AP-01160, AP-01163, AP-02083, AP-02087, AP-02456, AP-02479, AP-02503, AP-02881, RO-014, RO-016, RO-029, RO-033, RO-040 – RO-049, RO-060, RO-066, RO-097, RO-099 – RO-104, RO-116, RO-120, RO-121 & RO-133**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 6** below.

Refer to **Appendix 8** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 6 – Trees recommended for removal (Roadway)

Reason for Removal	Trees Recommended for Removal - Roadway				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of the proposed roadway, carpark, footpaths and grading works	Three (3) Trees: Trees AP-02087, RO-033 & RO-060	Four (4) Trees: Trees AP-01159, AP-01160, AP-01163, & RO-097	Seventeen (17) Trees: Trees AP-01158, RO-042 – RO-046, RO-048, RO-049, RO-099 – RO-104, RO-120, RO-121 & RO-133	-	Twenty-four (24) Trees
Major, unsustainable incursions to the TPZ (14-41%) & SRZ (2-40%) as per AS4970-2009 as a result of the proposed external works including: roadways, hard paving areas and grading works.	Two (2) Trees: Tree AP-02456 & AP-02479	Two (2) Trees: Trees RO-029 & RO-026	Four (4) Trees: Trees RO-040, RO-041, RO-047 & RO-116	-	Eight (8) Trees
Classified as dead or in severe decline	-	-	One (1) Tree: AP-02083	Four (4) Trees: AP-02013	Five (5) Trees
Total					Thirty-seven (37) Trees

5.2.5 Trees Recommended for Removal – Sports Pavilion

Proposed works associated with the Sports Pavilion will necessitate the removal of two (2) trees, including **Trees AP-02506 & AP-02956**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 7** below.

Refer to **Appendix 10** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 7 – Trees recommended for removal (Sports Pavilion)

Reason for Removal	Trees Recommended for Removal - Sports Pavilion				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of the proposed building	One (1) Tree: Tree AP-02506	One (1) Tree: Tree AP-02956	-	-	Two (2) Trees
Total					Two (2) Trees

5.2.6 Trees Recommended for Removal – Day Boy House

Proposed works associated with the Day Boy House will necessitate the removal of ninety (90) trees, including **Trees AP-01724, AP-01727 – AP-01729, AP-01731, AP-01733 – AP-01736, AP-01746 – AP-01748, AP-01753, AP-01756, D-001, D-002, D-004 – D-028, D-030 – D-039, D-047 – D-079 & D-081 – D-086**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 8** below. Refer to **Appendix 12** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 8 – Trees recommended for removal (Day Boy House)

Reason for Removal	Trees Recommended for Removal - Day Boy House				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of the proposed building or external hard paving areas	Five (5) Trees: Trees AP-01734, AP-01735, AP-01746, AP-01747 & AP-01748	Three (3) Trees: Trees AP-01727, AP-01733 & D-014	Three (3) Trees: Trees AP-01728, AP-01753 & D-015	-	Eleven (11) Trees
Major, unsustainable incursions to the TPZ (26-43%) & SRZ (11-36%) as per AS4970-2009 as a result of the proposed building or external works including: hard paving areas and retaining walls	Three (3) Trees: Trees AP-01724, AP-01736 & AP-01756	-	One (1) Tree: D-016	-	Four (4) Trees
Clearing for Asset Protection Zone	Twelve (12) Trees: Trees AP-01731, D-002, D-008, D-021, D-028, D-031, D-048, D-058, D-061, D-069, D-075 & D-086	Eleven (11) Trees: Trees D-010, D-011, D-022, D-023, D-024, D-025, D-027, D-033, D-051, D-054 & D-077	Fifty-two (52) Trees: Trees AP-01729, D-001, D-004 – D-007, D-009, D-012, D-013, D-017 – D-020, D-026, D-030, D-032, D-034 – D-039, D-047, D-049, D-050, D-052, D-053, D-055 – 057, D-059, D-060, D-062 – D-068, D-070 – D-074, D-076, D-078, D-079 & D-081 – D-085	-	Seventy-five (75) Trees
Total					Ninety (90) Trees

5.2.7 Trees Recommended for Removal – Boarding House

Proposed works associated with the Boarding House will necessitate the removal of two-hundred and ninety-three (293) trees, including **Trees AP-01518 – AP-01523, AP-01525, AP-01526, AP-01528, AP-01529, AP-01531, AP-01532, AP-02309, AP-02314 – AP-02316, AP-02318, AP-02319, AP-02321 – AP-02333, AP-02335, AP-02337 – AP-02339, AP-02343 – AP-02346, AP-02348, AP-02349, AP-02351 – AP-02353, AP-02731 – AP-02734, AP-02853, AP-03017, B-001 – B-052, B-054 – B-065, B-067 – B-099, B-101 – B-113, B-115 – B-125, B-127 – B-137, B-139 – B-142, B-144 – B-155, B-157, B-158, B-160 – B-174, B-176 – B-180, B-182 – B-215, B-217 – B-219, B-221 – B-250, B-254, B-258, B-260, B-262 & B-265**. A summary of impacts to be sustained as part of these works and subsequent reasoning for removals is provided within **Table 9** below.

Refer to **Appendix 14** for a plan indicating the location of the trees that will require removal as a result of these works (dashed red).

Table 9 – Trees recommended for removal (Boarding House)

Reason for Removal	Trees Recommended for Removal - Boarding House				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Full encroachment - within the footprint of the proposed buildings or external works including: driveway, hard paving areas, stairs and retaining walls	Six (6) Trees: Trees AP-02326, AP-02329, AP-02331, AP-02333, AP-02337 & AP-02344	Nine (9) Trees: Trees AP-01518, AP-01519, AP-01523, AP-01525, AP-01526, AP-01532, AP-02321, AP-02332 & AP-02335	Eighteen (18) Trees: Trees AP-02323 – AP-02325, AP-02327, AP-02330, AP-02343, AP-02853, AP-03017, B-001, B-005, B-007 – B-009, B-011 – B-014 & B-060	-	Thirty-three (33) Trees
Major, unsustainable incursions to the TPZ (18-63%) & SRZ (4-36%) as per AS4970-2009 as a result of the proposed building footprints or external works including: driveway, hard paving areas and retaining walls	Three (3) Trees: Trees AP-01522, AP-01531 & AP-02328	Seven (7) Trees: Trees AP-01520, AP-01521, AP-01528, AP-02315, AP-02322, AP-02338 & AP-02345	Four (4) Trees: Trees AP-01529, AP-02314, AP-02339 & B-010	-	Fourteen (14) Trees
Clearing for demolition works	-	-	One (1) Tree: B-004	-	One (1) Tree

Reason for Removal	Trees Recommended for Removal - Boarding House				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Clearing for Asset Protection Zone	Sixty-seven (67) Trees: Trees AP-02309, AP-02346, AP-02348, AP-02349, AP-02351, AP-02731, AP-02732, B-017, B-019, B-020, B-029, B-033, B-040, B-044, B-055, B-069, B-071, B-078, B-081, B-086 – B-088, B-093, B-097, B-101, B-103 – B-106, B-110, B-112, B-118, B-120, B-122, B-123, B-127A, B-128, B-135, B-136, B-141, B-147, B-149, B-152, B-153, B-157, B-158, B-160, B-163, B-166, B-172, B-186, B-189, B-192, B-197, B-202, B-205 – B-207, B-215, B-221, B-225, B-228, B-234, B-246, B-248, B-262 & B-265	Seventy-six (76) Trees: Trees AP-02316, AP-02318, B-015, B-016, B-018, B-022 – B-024, B-026, B-028, B-032, B-035 – B-037, B-041 – B-043, B-045, B-046, B-049 – B-052, B-057, B-059, B-065, B-070, B-073, B-077, B-082, B-083, B-090, B-094 – B-096, B-098, B-108, B-109, B-127, B-140, B-145, B-146, B-151, B-155, B-162, B-164, B-165, B-167, B-168, B-170, B-171, B-176, B-177, B-180, B-184, B-185, B-190, B-191, B-193, B-194, B-196, B-198, B-200, B-203, B-208, B-210 – B-214, B-226, B-232, B-242, B-254, B-258 & B-260	One-hundred (100) Trees: Trees AP-02352, AP-02353, AP-02734, B-002, B-003, B-006, B-021, B-025, B-027, B-030, B-031, B-034, B-038, B-039, B-047, B-048, B-054, B-056, B-058, B-061 – B-064, B-067, B-068, B-072, B-074 – B-076, B-079, B-080, B-084, B-085, B-089, B-091, B-092, B-099, B-102, B-107, B-111, B-113, B-115 – B-117, B-119, B-121, B-124, B-125, B-129 – B-134, B-137, B-139, B-142, B-144, B-148, B-150, B-154, B-161, B-169, B-173, B-174, B-178, B-179, B-182, B-183, B-187, B-188, B-195, B-199, B-201, B-204, B-209, B-217 – B-219, B-222 – B-224, B-227, B-229 – B-231, B-233, B-235 – B-241, B-243 – B-245, B-247, B-249 & B-250	Two (2) Trees: Trees AP-02319 & AP-02733	Two-hundred and forty-five (245) Trees
				Total	Two-hundred and ninety-three (293) Trees

5.3 Trees Recommended for Retention & Protection

Should the proposed works proceed in their current form, it is recommended that four-hundred and thirty-two (432) trees be retained and protected. Generally, the proposed works are unlikely to result in any significant negative impacts to the long-term health and viability of these trees pending implementation of required tree protection measures.

Retention of each of these trees is contingent on implementation of the tree protection measures outlined within **Section 7** below.

5.3.1 Trees Recommended for Retention & Protection – STEAM Precinct

Proposed works associated with the STEAM Precinct will allow for the retention and protection of fourteen (14) trees, including **Trees AP-00285, AP-00286, AP-00288, AP-00291, AP-00430, AP-00432, AP-00433, AP-01828, AP-01831, AP-01832, AP-03110, AP-03111, S-001 & S-002**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 10** below.

Refer to **Appendix 2** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 10 – Trees recommended for retention & protection (STEAM Precinct)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - STEAM Precinct				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major but sustainable incursions to the TPZ (14-20%) as per AS4970-2009 as a result of the proposed building footprint, stormwater infrastructure and grading works.	One (1) Tree: AP-00433	-	One (1) Tree: AP-00285	-	Two (2) Trees
Minor, sustainable incursions to the TPZ (1-9%) as per AS4970-2009 as a result of the proposed building footprint or external works including: hard paving areas, retaining walls stormwater infrastructure and grading works.	Four (4) Trees: Trees AP-00288, AP-00291, AP-01832 & AP-03110	One (1) Tree: AP-03111	Two (2) Trees: Trees AP-01831 & S-002	-	Seven (7) Trees
Works proposed within the TPZ – negligible impact due to location of existing site structures and available root-sensitive construction techniques	One (1) Tree: AP-00432	-	One (1) Tree: AP-00430	-	Two (2) Trees
No works proposed within the TPZ	One (1) Tree: Tree AP-01828	One (1) Tree: AP-00286	One (1) Tree: Tree S-001	-	Three (3) Trees
Total					Fourteen (14) Trees

5.3.2 Trees Recommended for Retention & Protection – Preparatory School

Proposed works associated with upgrades to the Preparatory School will allow for the retention and protection of one-hundred and seventy-four (174) trees, including **Trees AP-00981, AP-01098, AP-01100, AP-01101, AP-01157, AP-01167 – AP-01169, AP-01171, AP-01961, AP-01963, AP-01967 – AP-01970, AP-01972, AP-01977 – AP-01979, AP-01985 – AP-01988, AP-01989, AP-01990, AP-01991, AP-01993 – AP-01995, AP-01997, AP-01998, AP-02000, AP-02002, AP-02003, AP-02005 – AP-02009, AP-02011, AP-02014 – AP-02016, AP-02018, AP-02021 – AP-02023, AP-02025, AP-02029, AP-02030, AP-02032, AP-02033, AP-02562 – AP-02564, AP-02567, AP-02569, AP-02575, AP-02661, AP-02662, AP-02664, AP-02665, AP-02823, AP-02826, AP-02828, AP-02829, AP-02835 – AP-02840, P-001 – P-006, P-008, P-009, P-010, P-011 – P-083, P-085, P-088 & P-092 – P-110**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 11** below. Refer to **Appendix 4** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 11 – Trees recommended for retention & protection (Preparatory School)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Preparatory School				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major but sustainable incursion to the TPZ (10%) as per AS4970-2009 as a result of proposed stormwater infrastructure and grading works.	-	One (1) Tree: Tree AP-01987	-	-	One (1) Tree
Minor, sustainable incursions to the TPZ (1-9%) as per AS4970-2009 as a result of the proposed buildings or external works including: hard paving areas, stormwater infrastructure and grading works.	Three (3) Trees: Trees AP-01990, AP-01991 & AP-02025	Ten (10) Trees: Trees AP-01168, AP-01187, AP-01993, AP-01994, AP-01995, AP-02567, AP-02575, AP-02665, AP-02840 & P-053	Four (4) Trees: Trees AP-02661, P-083, P-085 & P-088	-	Seventeen (17) Trees
Works proposed within the TPZ – negligible impact due to location of existing site structures	-	Eight (8) Trees: Trees AP-01167, AP-01989, AP-02835, AP-02836, AP-02838, AP-02839, P-006 & P-008	Eight (8) Trees: Trees AP-02664, AP-02837, P-001, P-004, P-011, P-012, P-073 & P-074	-	Sixteen (16) Trees

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Preparatory School				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
No works proposed within the TPZ	Twenty-six (26) Trees: Trees AP-00981, AP-01098, AP-01100, AP-01961, AP-01963, AP-01968, AP-01972, AP-02000, AP-02002, AP-02018, AP-02023, AP-02562 – AP-02564, AP-02826, P-019 – P-023, P-032, P-048, P-055, P-059, P-078 & P-093	Thirty-five (35) Trees: Trees AP-01101, AP-01967, AP-01969, AP-01977 – AP-01979, AP-01998, AP-02003, AP-02007, AP-02008, AP-02014, AP-02030, AP-02032, AP-02033, AP-02569, AP-02829, P-009, P-018, P-030, P-031, P-033, P-034, P-036, P-038, P-050 – P-052, P-056, P-065, P-066, P-069, P-071, P-082, P-107 & P-108	Seventy-nine (79) Trees: Trees AP-01157, AP-01169, AP-01171, AP-01970, AP-01985, AP-01986, AP-01997, AP-02005, AP-02006, AP-02009, AP-02011, AP-02015, AP-02016, AP-02021, AP-02022, AP-02029, AP-02662, AP-02823, AP-02828, P-002, P-003, P-005, P-013 – P-017, P-024 – P-029, P-035, P-037, P-039 – P-047, P-049, P-054, P-057, P-058, P-060 – P-064, P-067, P-068, P-070, P-072, P-075 – P-077, P-079 – P-081, P-092, P-094 – P-106, P-109 & P-110	-	One-hundred and forty (140) Trees
				Total	One-hundred and seventy-four (174) Trees

5.3.3 Trees Recommended for Retention & Protection – Staff Residences

Proposed works associated with the new Staff Residences will allow for the retention and protection of forty-three (43) trees, including **Trees AP-01331 – AP-01335, AP-01339, AP-01341 – AP-01359, AP-01361 – AP-01363, AP-01367 – AP-01373, AP-01380, AP-01381, RE-002, RE-003, RE-004, RE-005, RE-006, RE-007**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 12** below.

Refer to **Appendix 6** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 12 – Trees recommended for retention & protection (Staff Residences)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Staff Residences				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major but sustainable incursions to the TPZ (12-18%) as per AS4970-2009 as a result of proposed retaining walls and stormwater infrastructure	Two (2) Trees: Trees AP-01334 & AP-01380	-	-	-	Two (2) Trees
Minor, sustainable incursions to the TPZ (4-9%) as per AS4970-2009 as a result of the proposed external works including: hard paving areas, stormwater infrastructure and grading works.	Two (2) Trees: Trees AP-01333 & AP-01373	One (1) Tree: Tree AP-01335	-	-	Three (3) Trees
Works proposed within the TPZ – negligible impact due to location of existing site structures	Two (2) Trees: Trees AP-01341 & AP-01348	-	Two (2) Trees: Trees AP-01344 & AP-01345	-	Four (4) Trees

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Staff Residences				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
No works proposed within the TPZ	Twelve (12) Trees: Trees AP-01332, AP-01343, AP-01349, AP-01350, AP-01352 – AP-01354, AP-01362, AP-01363 & AP-01368 – AP-01370	Sixteen (16) Trees: Trees AP-01331, AP-01339, AP-01342, AP-01346, AP-01351, AP-01355, AP-01357 – AP-01359, AP-01361, AP-01367, AP-01371, AP-01372, AP-01381, RE-006 & RE-007	Six (6) Trees: Trees AP-01347, AP-01356 & RE-002 – RE-005	-	Thirty-four (34) Trees
				Total	Forty-three (43) Trees

5.3.4 Trees Recommended for Retention & Protection – Roadway

Proposed works associated with the new Roadway will allow for the retention and protection of one-hundred and fifty (150) trees, including **Trees AP-02084, AP-02086, AP-02428, AP-02440, AP-02441, AP-02443 – AP-02445, AP-02447, AP-02448, AP-02450 – AP-02452, AP-02454, AP-02455, AP-02458, AP-02459, AP-02462 – AP-02464, AP-02469, AP-02470, AP-02475 – AP-02478, AP-02480, AP-02481, AP-02502, AP-02504, AP-02505, AP-02555 – AP-02559, AP-02861, AP-02862, AP-02867, AP-02868, AP-02870, AP-02879, AP-02880, RO-001 – RO-013, RO-015, RO-017 – RO-028, RO-030 – RO-032, RO-034 – RO-039, RO-050 – RO-059, RO-061 – RO-065, RO-067 – RO-098, RO-105 – RO-115, RO-117 – RO-119, RO-122 – RO-132 & RO-134**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 13** below.

Refer to **Appendix 8** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 13 – Trees recommended for retention & protection (Roadway)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Roadway				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major but sustainable incursions to the TPZ (10-16%) as per AS4970-2009 as a result of the proposed external works including: roadways, hard paving areas and grading works.	Five (5) Trees: Trees AP-02455, AP-02458 & AP-02463	-	Two (2) Trees: Trees RO-001 & RO-134	-	Seven (7) Trees
Minor, sustainable incursions to the TPZ (1-8%) as per AS4970-2009 as a result of the proposed external works including: roadways, hard paving areas and grading works.	Five (5) Trees: Trees AP-02086, AP-02462, AP-02477, AP-02478, AP-02481, RO-034 & RO-064	Two (2) Trees: RO-053 & AP-02454	One (1) Tree: RO-132	-	Eight (8) Trees
Works proposed within the TPZ – negligible impact due to location of existing site structures	One (1) Tree: AP-02555	Three (3) Trees: Trees AP-02556, RO-106 & RO-110	Nine (9) Trees: Trees AP-02557 – AP-02559, RO-105, RO-107 – RO-109, RO-111 & RO-115	-	Thirteen (13) Trees

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Roadway				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
No works proposed within the TPZ	Twenty-seven (27) Trees: Trees AP-02084, AP-02445, AP-02448, AP-02450, AP-02452, AP-02469, AP-02470, AP-02475, AP-02476, AP-02481, AP-02504, AP-02505, AP-02867, AP-02880, RO-023, RO-030, RO-036, RO-038, RO-039, RO-051, RO-063, RO-073, RO-074, RO-083, RO-084, RO-091, RO-093 & RO-117	Forty-five (45) Trees: Trees AP-02428, AP-02440, AP-02459, AP-02480, AP-02502, AP-02861, AP-02862, AP-02868, AP-02870, AP-02879, RO-024, RO-025, RO-027, RO-031, RO-035, RO-037, RO-050, RO-052, RO-054, RO-056 – RO-059, RO-061, RO-062, RO-065, RO-067 – RO-069, RO-075 – RO-077, RO-079, RO-081, RO-082, RO-086, RO-088, RO-089, RO-092, RO-094, RO-096, RO-098, RO-113, RO-118 & RO-124	Fifty (50) Trees: Trees AP-02441, AP-02443, AP-02444, AP-02447, AP-02451, AP-02464, RO-002 – RO-013, RO-015, RO-017 – RO-022, RO-026, RO-028, RO-032, RO-055, RO-070 – RO-072, RO-078, RO-080, RO-085, RO-087, RO-090, RO-095, RO-112, RO-114, RO-119, RO-122, RO-123 & RO-125 – RO-131	-	One-hundred and twenty-two (122) Trees
				Total	One-hundred and fifty (150) Trees

5.3.5 Trees Recommended for Retention & Protection – Sports Pavilion

Proposed works associated with the new Sports Pavilion will allow for the retention and protection of four (4) trees, including **Trees AP-02506, AP-02507, AP-02508, AP-02509, AP-02956, AP-02958**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 14** below.

Refer to **Appendix 10** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 14 – Trees recommended for retention & protection (Sports Pavilion)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Sports Pavilion				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
No works proposed within the TPZ	Two (2) Trees: Trees AP-02507 & AP-02509	-	Two (2) Trees: Trees AP-02508 & AP-02958	-	Four (4) Trees
Total					Four (4) Trees

5.3.6 Trees Recommended for Retention & Protection – Day Boy House

Proposed works associated with the new Day Boy House will allow for the retention and protection of eighteen (18) trees, including **Trees AP-01738 – AP-01740, AP-01743 – AP-01745, AP-01759, AP-01797, D-003, D-029, D-040 – D-046 & D-080**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 15** below.

Refer to **Appendix 12** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 15 – Trees recommended for retention & protection (Day Boy House)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Day Boy House				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Minor, sustainable incursions to the TPZ (1%) as per AS4970-2009 as a result of proposed retaining walls.	Three (3) Trees: Trees AP-01738, AP-01740 & AP-01743	One (1) Tree: AP-01735	-	-	Four (4) Trees
No works proposed within the TPZ	Six (6) Trees: Trees AP-01739, AP-01759, AP-01797, D-003, D-029 & D-080	One (1) Tree: AP-01744	Seven (7) Trees: Trees D-040 – D-046	-	Fourteen (14) Trees
Total					Eighteen (18) Trees

5.3.7 Trees Recommended for Retention & Protection – Boarding House

Proposed works associated with the new Boarding House will allow for the retention and protection of twenty-nine (29) trees, including **Trees AP-01530, AP-02320, AP-02347, AP-02369, AP-02370, AP-02735, B-053, B-066, B-100, B-114, B-126, B-138, B-143, B-156, B-159, B-175, B-181, B-216, B-220, B-251, B-252, B-253, B-255 – B-257, B-259, B-261, B-263 & B-264**. A summary of impacts to be sustained as part of these works and subsequent rationale for why they are considered sustainable is provided within is provided within **Table 16** below.

Refer to **Appendix 14** for a plan indicating the location of trees that are to be retained and protected within proximity to these works (shaded green).

Table 16 – Trees recommended for retention & protection (Boarding House)

Works Within the Tree Protection Zone (TPZ)	Trees Recommended for Retention & Protection - Boarding House				
	High Retention Value	Medium Retention Value	Low Retention Value	Priority for Removal	Total
Major but sustainable incursion to the TPZ (20%) as per AS4970-2009 as a result of the proposed external works including: driveway, hard paving areas and retaining walls.	One (1) Tree: AP-01530	-	-	-	One (1) Tree
Minor, sustainable incursion to the TPZ (8%) as per AS4970-2009 as a result of proposed stormwater infrastructure.	One (1) Tree: B-053	-	-	-	One (1) Tree
No works proposed within the TPZ	Seventeen (17) Trees: Trees AP-02320, AP-02347, AP-02369, AP-02735, B-066, B-100, B-114, B-126, B-138, B-143, B-159, B-175, B-181, B-216, B-220, B-253 & B-264	Five (5) Trees: Trees B-251, B-255, B-257, B-259 & B-261	Five (5) Trees: Trees AP-02370, B-156, B-252, B-256 & B-263	-	Twenty-seven (27) Trees
Total					Twenty-nine (29) Trees

5.4 Pruning Impacts

Should the proposed development be approved, selective canopy pruning will be required to be undertaken upon **Tree AP-00433** to provide adequate clearance to the proposed STEAM building. Clearance will also need to be afforded to temporary scaffolding structures required to facilitate the proposed construction works – in this regard, a nominal 1.2m offset has been assumed.

Branch reduction should be made to internal lateral branches or stems which are at least 1/3rd of the diameter of the branch being cut, or removed at the branch collar, consistent with AS4373 -2007 *Pruning of amenity trees*; Sections 6.4 a) & b) and 7.3.

Provided the pruning works are carried out in accordance with AS4373-2007 *Pruning of amenity trees*, it is considered this tree will be capable of tolerating the required level of pruning given the works are generally of a minor nature. Further, it is not expected that the works will result in a significant impact to the existing form or crown balance or trigger any associated instability issues.

Those required pruning works have been specified in **Section 5.4.1** below.

5.4.1 Required Pruning Works – Tree AP-00433 (*Eucalyptus tereticornis*)

Table 17 – Branches adjoining the north-western side of Tree AP-00433 required for removal.

Branch No.	Order	Diameter (mm)	Height above NGL (m)	Location on Tree (N-E-S-W)	Pruning class (as per AS4373)	Est. Overall Canopy %
1	2 nd	200	5	NW	'R' (Reduction)	10%
2	5 th	40	6	NW	'D' (Deadwood)	
3	5 th	40	6	NW	'D' (Deadwood)	
4	3 rd	100	7	NW	'R' (Reduction)	
5	3 rd	70	9	NW	'R' (Reduction)	

Refer to **Figure 14** below for the location of branches proposed for removal.



Figure 14: 2nd, 3rd & 5th order branches (40-200mm Ø) adjoining the north-western side of Tree AP-00433 required for removal. Final cut locations indicated in red.

5.5 Ancillary Construction Related Impacts

Vehicles, machinery and equipment requiring access to the site have potential to result in inadvertent impacts to those trees being retained including compaction of the root zone, soil disturbance, physical damage to roots, trunk damage etc. and as such will require management.

Furthermore, storage and stockpiling of material may result in similar impacts and will require management. In this regard, protection for those trees to be retained is to be carried out in accordance with **Section 7**.

6 CONCLUSION

6.1 Proposed Development Impact

Based on the plans and information supplied, the proposal would result in the following impacts to existing trees:

Removal of four-hundred and fifty-one (451) trees, including:

- Eighty-seven (87) site trees due to falling directly within the footprint of the proposed buildings and associated external works;
- Thirty-six (36) site trees due to 'Major' and unsustainable incursions to their respective Tree Protection Zones and Structural Root Zones as a result of the proposed buildings and associated external works;
- Three-hundred and twenty (320) site trees to facilitate the establishment of Asset Protection Zones (APZs) in accordance with the Bushfire Assessment Report;
- One (1) site tree to facilitate clearing for demolition works;
- One (1) site tree due to being in poor condition and at risk of exposure from the removal of adjacent vegetation, and;
- Six (6) site trees due to being classified as dead or in severe decline.

Retention and protection of four-hundred and thirty-two (432) trees, including:

- Thirteen (13) site trees which are to be subjected to 'Major' but sustainable incursions to their respective Tree Protection Zones as a result of the proposed buildings and associated external works. Impacts being considered tolerable due to known species tolerance to construction related impacts the availability of contiguous areas of deep soil for compensatory root development;
- Forty (40) site trees which are generally located away from the proposed construction works and are to have 'Minor' (<10%) and sustainable incursions to their respective Tree Protection Zones.
- Thirty-five (35) site trees which are to which are to have works occur within their nominal Tree Protection Zones, however are unlikely to be significantly impacted due to the location of existing site structures which have likely impeded root development in the area of proposed works, and;
- Three-hundred and forty-four (344) site trees which are generally located away from the proposed construction works and are to have nil incursion to their respective Tree Protection Zones.

Specific recommendations as per **Section 7** will need to be adopted to ensure root sensitive construction techniques and methodology are employed which mitigate the potential negative impacts to trees nominated for retention.

7 RECOMMENDATIONS

7.1 Tree Removal

Remove **Trees AP-00287, AP-01156, AP-01158 – AP-01163, AP-01170, AP-01172, AP-01173, AP-01337, AP-01338, AP-01379, AP-01382, AP-01518 – AP-01523, AP-01525, AP-01526, AP-01528, AP-01529, AP-01531, AP-01532, AP-01724, AP-01727 – AP-01729, AP-01731, AP-01733 – AP-01736, AP-01746 – AP-01748, AP-01753, AP-01756, AP-01981, AP-01983, AP-01984, AP-02013, AP-02028, AP-02083, AP-02087, AP-02309, AP-02314 – AP-02316, AP-02318, AP-02319, AP-02321 – AP-02333, AP-02335, AP-02337 – AP-02339, AP-02343 – AP-02346, AP-02348, AP-02349, AP-02351 – AP-02353, AP-02456, AP-02479, AP-02503, AP-02506, AP-02566, AP-02731 – AP-02734, AP-02881, AP-02853, AP-02956, AP-03017, AP-03234, AP-03236, P-007, P-010, P-084, P-086, P-087, P-089, P-090, P-091, P-111, RE-001, RO-014, RO-016, RO-029, RO-033, RO-040 – RO-049, RO-060, RO-066, RO-097, RO-099 – RO-104, RO-116, RO-120, RO-121, RO-133, D-001, D-002, D-004 – D-028, D-030 – D-039, D-047 – D-079, D-081 – D-086, B-001 – B-052, B-054 – B-065, B-067 – B-099, B-101 – B-113, B-115 – B-125, B-127 – B-137, B-139 – B-142, B-144 – B-155, B-157, B-158, B-160 – B-174, B-176 – B-180, B-182 – B-215, B-217 – B-219, B-221 – B-250, B-254, B-258, B-260, B-262 & B-265.** (451 trees) to facilitate the proposed development works.

Development consent and relevant approvals must be obtained prior to the removal or pruning of any tree protected under Part 5.3.4 – *Tree and Vegetation Preservation* of the Parramatta Development Control Plan 2023.

All tree removal work is to be carried out by an experienced Arborist with minimum AQF Level 3 qualifications in accordance with *AS4373-2007 - Pruning of Amenity Trees*, Safe Work Australia Guide for Managing Risks of Tree Trimming and Removal Work (2016) and other applicable legislation.

7.2 Tree Pruning

Undertake selective reduction pruning upon **Tree AP-00433** in accordance with the specification provided at **Section 5.4** to enable suitable clearance to the proposed built form and associated scaffolding.

All tree pruning work is to be carried out by an experienced Arborist with minimum AQF Level 3 qualifications in accordance with *AS4373-2007 Pruning of amenity trees*, Safe Work Australia Guide for Managing Risks of Tree Trimming and Removal Work (2016) and other applicable legislation.

7.3 Tree Retention & Protection

Retain and protect **Trees AP-00285, AP-00286, AP-00288, AP-00291, AP-00430, AP-00432, AP-00433, AP-00981, AP-01098, AP-01100, AP-01101, AP-01157, AP-01167 – AP-01169, AP-01171, AP-01331 – AP-01335, AP-01339, AP-01341 – AP-01359, AP-01361 – AP-01363, AP-01367 – AP-01373, AP-01380, AP-01381, AP-01530, AP-01738 – AP-01740, AP-01743 – AP-01745, AP-01759, AP-01797, AP-01828, AP-01831, AP-01832, AP-01961, AP-01963, AP-01967 – AP-01970, AP-01972, AP-01977 – AP-01979, AP-01985 – AP-01988, AP-01989, AP-01990, AP-01991, AP-01993 – AP-01995, AP-01997, AP-01998, AP-02000, AP-02002, AP-02003, AP-02005 – AP-02009, AP-02011, AP-02014 – AP-02016, AP-02018, AP-02021 – AP-02023, AP-02025, AP-02029, AP-02030, AP-02032, AP-02033, AP-02084, AP-02086, AP-02320, AP-02347, AP-02369, AP-02370, AP-02428, AP-02440, AP-02441, AP-02443 – AP-02445, AP-**

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7.3.1 Project Arborist Engagement

A Project Arborist experienced in tree protection on construction sites should be engaged prior to the commencement of any works on site. The Project Arborist shall monitor and report regularly to the Principal Certifying Authority (PCA) and the Applicant on the condition and protection of the retained trees during the works. The Project Arborist is to supervise and monitor any excavation, machine trenching or compacted fill placement within the TPZ of retained trees throughout construction.

7.3.2 Tree Protection and Management Plan

Following design development and prior to any construction works taking place on site, a dedicated Tree Protection and Management Plan is to be prepared by a suitably qualified AQF Level 5 Arborist. The purpose of this document is to provide a suitable framework for tree protection to ensure all trees nominated for retention are not adversely impacted by the proposed works.

7.4 Replacement Planting

In order to compensate for the loss of amenity resulting from the proposed tree removal, replacement planting should be provided at a minimum ratio of 1:1. This will ensure there is no incremental loss of canopy cover over time and that the integrity of the surrounding landscape setting is maintained in the long-term.

Accordingly, a minimum of four-hundred and fifty-one (451) large growing, locally endemic compensatory tree planting should be provided within the open space areas associated with the wider masterplan. Tree specimens chosen for planting should be provided at a minimum pot size of 200mm and are to align with the requirements for stock selection as stipulated by AS2303-2015 – *Tree stock for landscape use*. The following species should be considered for replacement planting:

- *Angophora costata* (Sydney Red Gum)
- *Eucalyptus pilularis* (Blackbutt)
- *Eucalyptus punctata* (Grey Gum)
- *Eucalyptus resinifera* (Red Mahogany)
- *Syncarpia glomulifera* (Turpentine)

Sincerely,



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APPENDIX 1: TREE ASSESSMENT DATA - The King's School (STEAM Precinct)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-00285	<i>Leptospermum petersonii</i> Lemon-scented Tea Tree	6	7	200	200	150	150	400	4.24	2.25	M	Average	Fair	Medium 15-40yrs	Low	Low	Major (14%) TPZ incursion	Retain & Protect	Included, co-dominant stems from base
AP-00286	<i>Eucalyptus resinifera</i> Red Mahogany	14	5	300				350	3.60	2.13	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Co-dominant, slender form. Multiple branch inclusions
AP-00287	<i>Eucalyptus resinifera</i> Red Mahogany	14	9	600				650	7.20	2.76	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	Major (46%) TPZ incursion + Major (25%) SRZ incursion	Remove	Failed co-dominant leader. Reduced foliage density
AP-00288	<i>Eucalyptus resinifera</i> Red Mahogany	12	7	350				400	4.20	2.25	M	Average	Fair	Long 40yrs +	Medium	High	Minor (<1%) TPZ incursion	Retain & Protect	Crown bias to south
AP-00291	<i>Eucalyptus crebra</i> Narrow-leaved Ironbark	22	16	1050				1250	12.60	3.63	M	Average	Average	Long 40yrs +	High	High	Minor (9%) TPZ incursion	Retain & Protect	Past pruning events - crown lifted. Moderate level of epicormic growth
AP-00430	<i>Callistemon viminalis</i> Weeping Bottlebrush	7	7	250	200	150	100	500	4.41	2.47	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Multi-stemmed from base
AP-00432	<i>Eucalyptus tereticornis</i> Forest Red Gum	15	12	800				1000	9.60	3.31	M	Fair	Average	Long 40yrs +	High	High	Works within nominal TPZ - negligible impact	Retain & Protect	Reduced foliage density within western portion of crown
AP-00433	<i>Eucalyptus tereticornis</i> Forest Red Gum	15	14	900				1050	10.80	3.38	M	Average	Fair	Long 40yrs +	High	High	Major (20%) TPZ incursion	Retain & Protect	Multiple included, co-dominant stems from 3m
AP-01828	<i>Corymbia maculata</i> Spotted Gum	17	14	800				950	9.60	3.24	M	Fair	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Reduced foliage size
AP-01831	<i>Corymbia maculata</i> Spotted Gum	11	7	400				500	4.80	2.47	OM	Fair	Poor	Short 5-15yrs	Medium	Low	Minor (5%) TPZ incursion	Retain & Protect	Significantly educed foliage size / density. Soil heavily compacted around base. Wound to south side of stem with evidence of past decay
AP-01832	<i>Corymbia maculata</i> Spotted Gum	15	12	700				850	8.40	3.09	M	Average	Average	Long 40yrs +	High	High	Minor (2%) TPZ incursion	Retain & Protect	Soil heavily compacted around base.
AP-03110	<i>Eucalyptus paniculata</i> Grey Ironbark	13	9	450				500	5.40	2.47	M	Average	Good	Long 40yrs +	High	High	Minor (9%) TPZ incursion	Retain & Protect	Co-dominant. Minor crown bias to east
AP-03111	<i>Eucalyptus resinifera</i> Red Mahogany	13	6	400				450	4.80	2.37	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	Minor (5%) TPZ incursion	Retain & Protect	Co-dominant. Reduced foliage density
S-001	<i>Callistemon viminalis</i> Weeping Bottlebrush	5	4	100	50			150	2.00	1.50	SM	Fair	Poor	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from base. Mechanical damage. Reduced foliage density
S-002	<i>Callistemon viminalis</i> Weeping Bottlebrush	7	7	200	200	200	200	600	4.80	2.67	M	Average	Average	Medium 15-40yrs	Low	Low	Minor (1%) TPZ incursion	Retain & Protect	Multi-stemmed from base

Tree Inspection Data Notes & Terminology**Tree No. (Tree Number)**

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);

- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

IM – Immature refers to well established but juvenile tree

SM – Semi Mature, a tree that has not grown to mature size

M – Mature, a tree that has reached mature size and will slowly increase in size over time

OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches

S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

Good - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

Average - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

Fair - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

Poor - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50)0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve [12] or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

Retention Value (RV)

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after Barrell 1996, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ); The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

- <10% - negligible incursion
- >10 - <15% - low to moderate level of incursion
- >15 - <20% - moderate level of incursion
- >20 - <25% - moderate to high level of incursion
- >25 - <35% - high level of incursion
- >35% - significant incursion within the TPZ

APPENDIX 2 - TREE LOCATION PLANS: STEAM PRECINCT

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



CPS

CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

LEVEL 3
397 RILEY STREET
SURRY HILLS NSW 2010
PO BOX 1074 BROADWAY NSW 2007
TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
STEAM PRECINCT
- SITE CONTEXT

CLIENT









Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:5000 @ A3
SHEET NUMBER F416_TLP_01 REVISION B

LEGEND

-  OT1 EXISTING TREE TO BE RETAINED
-  OT2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
-  STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
STEAM PRECINCT
- DETAIL

CLIENT

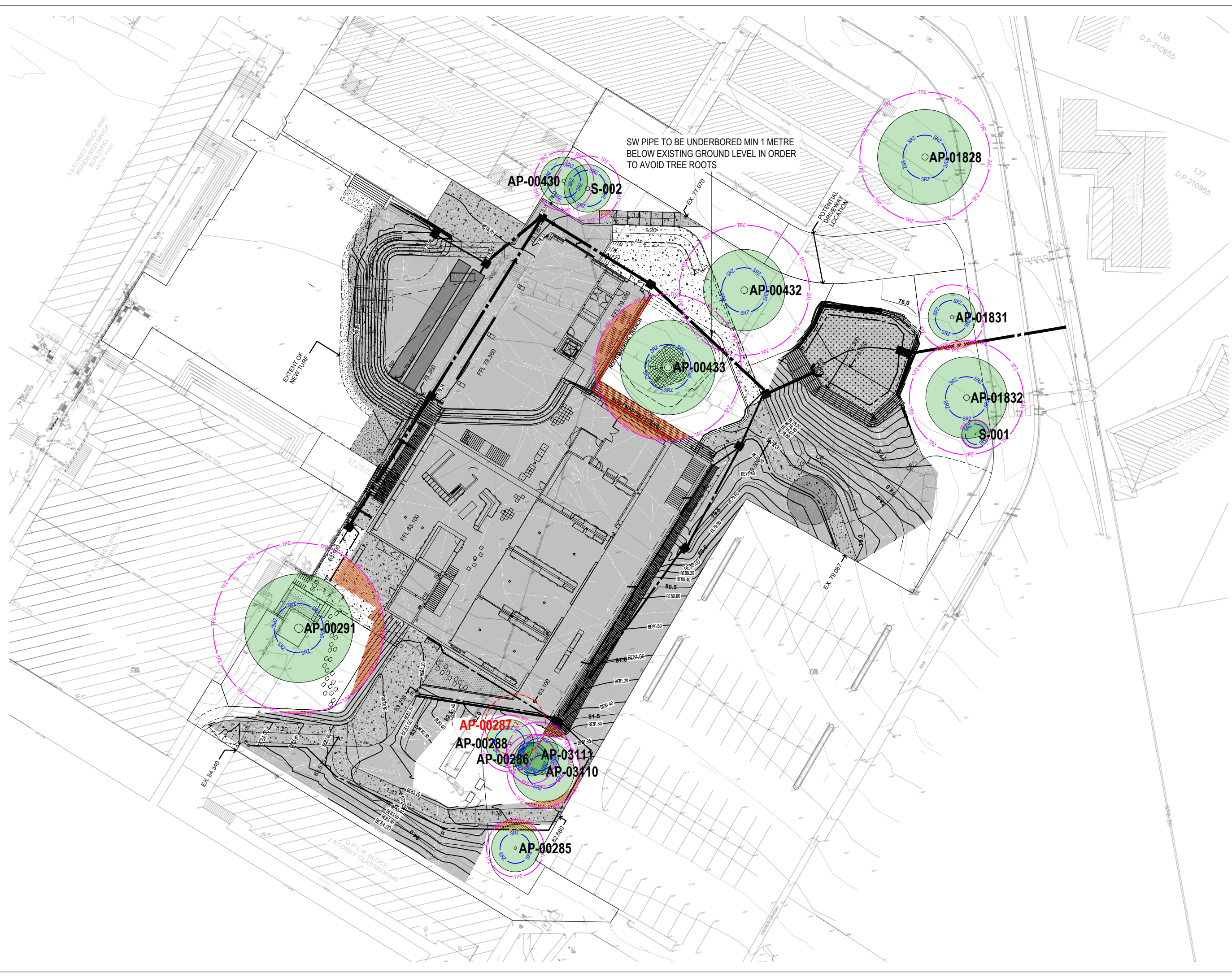


Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:500 @ A3

SHEET NUMBER F416_TLP_02 REVISION B



SW PIPE TO BE UNDERBORED MIN 1 METRE BELOW EXISTING GROUND LEVEL IN ORDER TO AVOID TREE ROOTS

3 STOREY BRICK AND RENDIERED BRICK BUILDING

EXTENT OF NEW TURF

POTENTIAL DRIVEWAY LOCATION

G.P.L.A BLOCK 2 STOREY CLASSROOMS

APPENDIX 3: TREE ASSESSMENT DATA - The King's School (Preparatory School)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-00981	<i>Cedrus deodara</i> Himalayan Cedar	16	13	450	350			600	6.84	2.67	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Bifurcated from 0.5m. Minor deadwood
AP-01098	<i>Cedrus deodara</i> Himalayan Cedar	16	10	450				550	5.40	2.57	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
AP-01100	<i>Cedrus deodara</i> Himalayan Cedar	16	10	450				550	5.40	2.57	M	Average	Fair	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Crown lifted. Failed central leader
AP-01101	<i>Cedrus deodara</i> Himalayan Cedar	13	7	550				650	6.60	2.76	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multiple past pruning events. Crown dieback
AP-01156	<i>Cinnamomum camphora</i> Camphor Laurel	10	14	500	500	400		850	9.75	3.09	M	Average	Average	Long 40yrs +	Medium	High	Major (20%) TPZ incursion	Remove	Multi-stemmed from 1.2m. Minor foliage chlorosis
AP-01157	<i>Grevillea robusta</i> Silky Oak	11	5	400				450	4.80	2.37	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Tip dieback
AP-01161	<i>Butia capitata</i> Jelly Palm	7	5	350				400	3.50	N/A	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed roadway	Remove	Nil
AP-01162	<i>Cinnamomum camphora</i> Camphor Laurel	9	8	600				650	7.20	2.76	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed roadway	Remove	Reduced foliage density. Tip dieback
AP-01167	<i>Pyrus calleryana</i> Callery Pear	7	6	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Crown lifted to 2m
AP-01168	<i>Ulmus glabra 'Lutescens'</i> Golden Elm	8	9	250	250	250	250	400	6.00	2.25	M	Average	Average	Medium 15-40yrs	Medium	Medium	Minor (6%) TPZ incursion	Retain & Protect	Multi-stemmed from base. Dieback within central portion of crown
AP-01169	<i>Callistemon viminalis</i> Weeping Bottlebrush	8	8	250	250			350	4.24	2.13	OM	Poor	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Mower damage to base. Thinning crown
AP-01170	<i>Agonis flexuosa</i> Willow Myrtle	7	6	150	150	150	150	300	3.60	2.00	OM	Poor	Fair	Very Short <5yrs	Low	Low	Within footprint of proposed seating area	Remove	Multi-stemmed from base. In severe decline
AP-01171	<i>Leptospermum petersonii</i> Lemon-scented Tea Tree	8	10	300	300	300		400	6.24	2.25	M	Average	Poor	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Active decay + previous branch failures
AP-01172	<i>Leptospermum petersonii</i> Lemon-scented Tea Tree	6	5	250	100	100	100	350	3.65	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	Major (11%) TPZ incursion	Remove	Multi-stemmed from base. Bracket fungus present to lower stem. Previous branch tear outs
AP-01173	<i>Pyrus calleryana</i> Callery Pear	8	8	200	200	150		300	3.84	2.00	M	Good	Average	Medium 15-40yrs	Medium	Medium	Major (25%) TPZ incursion + Minor (3%) SRZ incursion	Remove	Included, co-dominant leader. Branch bark inclusions throughout crown
AP-01961	<i>Eucalyptus parramattensis</i> Parramatta Red Gum	13	13	850				950	10.20	3.24	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Moderate level of small-medium diameter deadwood
AP-01963	<i>Brachychiton discolor</i> Lacebark Tree	13	9	900				1100	10.80	3.44	M	Good	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant leaders. Minor deadwood
AP-01967	<i>Lagerstroemia indica</i> Crepe Myrtle	8	7	200	200	100	100	250	3.79	1.85	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
AP-01968	<i>Ficus benjamina</i> Weeping Fig	12	12	250	250	250	250	450	6.00	2.37	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Nil
AP-01969	<i>Melaleuca bracteata 'Revolution Gold'</i> Honey Myrtle	8	6	400				450	4.80	2.37	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 2m
AP-01970	<i>Callistemon viminalis</i> Weeping Bottlebrush	7	5	250	250	150		400	4.61	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from base

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01972	<i>Eucalyptus parramattensis</i> Parramatta Red Gum	10	10	700				800	8.40	3.01	M	Fair	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Moderately reduced foliage density
AP-01977	<i>Syzygium paniculatum</i> Magenta Cherry	13	10	300	300			400	5.09	2.25	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Growing within restricted environment
AP-01978	<i>Syzygium paniculatum</i> Magenta Cherry	13	10	300	250			400	4.69	2.25	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Growing within restricted environment
AP-01979	<i>Olea europaea subsp. cuspidata</i> African Olive	10	7	200	200	200	200	300	4.80	2.00	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
AP-01981	<i>Alnus glutinosa</i> Common Alder	7	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed building	Remove	Crown lifted to 2m & crown bias to east
AP-01983	<i>Alnus glutinosa</i> Common Alder	7	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed grading works	Remove	Crown lifted to 2m. Growing within timber decking surround. Pruned eastern side for building clearance
AP-01984	<i>Alnus glutinosa</i> Common Alder	8	7	400				450	4.80	2.37	M	Good	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed grading works	Remove	Multiple past pruning events
AP-01985	<i>Eucalyptus nicholii</i> Narrow-leaved Peppermint	12	8	600				700	7.20	2.85	OM	Fair	Average	Short 5-15yrs	High	Low	No works proposed within TPZ	Retain & Protect	High level of epicormic growth. Tip dieback
AP-01986	<i>Acmena smithii</i> Lilly Pilly	7	5	100	100	100	200	250	3.17	1.85	M	Good	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Included, co-dominant leaders
AP-01987	<i>Liquidambar styraciflua</i> Sweetgum	14	10	550				600	6.60	2.67	M	Good	Average	Medium 15-40yrs	Medium	Medium	Minor (8%) TPZ incursion	Retain & Protect	Minor crown bias to east
AP-01988	<i>Photinia robusta</i> Photinia	8	7	200				350	2.40	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Major (10%) TPZ incursion + Minor (5%) SRZ incursion	Retain & Protect	Multi-stemmed from 1m
AP-01989	<i>Populus nigra 'Italica'</i> Lombardy Poplar	14	7	700				800	8.40	3.01	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Multi-stemmed from base. Deadwood throughout - typical of species. Frass @ base
AP-01990	<i>Corymbia maculata</i> Spotted Gum	14	10	400				450	4.80	2.37	M	Good	Good	Long 40yrs +	High	High	Minor (3%) TPZ incursion	Retain & Protect	Nil
AP-01991	<i>Corymbia maculata</i> Spotted Gum	11	8	400				450	4.80	2.37	M	Good	Good	Long 40yrs +	Medium	High	Minor (3%) TPZ incursion	Retain & Protect	Included, co-dominant leaders from 5m
AP-01993	<i>Jacaranda mimosifolia</i> Jacaranda	6	5	200	150			250	3.00	1.85	M	Average	Fair	Medium 15-40yrs	Medium	Medium	Minor (2%) TPZ incursion	Retain & Protect	Bifurcated stems from 1m. Pruned @ 2m with epicormic crown regrowth
AP-01994	<i>Populus nigra 'Italica'</i> Lombardy Poplar	10	7	350	250			450	5.16	2.37	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Minor (9%) TPZ incursion	Retain & Protect	Deadwood throughout canopy
AP-01995	<i>Stenocarpus sinuatus</i> Firewheel Tree	9	7	350				450	4.20	2.37	M	Good	Average	Medium 15-40yrs	Medium	Medium	Minor (2%) TPZ incursion	Retain & Protect	Multiple past pruning events
AP-01997	<i>Acer negundo</i> Box Elder	10	8	400				450	4.80	2.37	OM	Fair	Poor	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Large diameter deadwood. Active decay from old pruning wound @ 2m
AP-01998	<i>Ilex cornuta</i> Horned Holly	7	8	200	200	200	200	400	4.80	2.25	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Previous tear-out @ 2m over path
AP-02000	<i>Cinnamomum camphora</i> Camphor Laurel	17	18	900	600			1200	12.98	3.57	M	Fair	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Self-sown fig growing in branch union @ 1.2m. Co-dominant leaders. Dieback in upper crown
AP-02002	<i>Lophostemon confertus</i> Brush Box	12	12	800				900	9.60	3.17	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Growing within raised decking area
AP-02003	<i>Pyrus calleryana</i> Callery Pear	7	4	200				250	2.40	1.85	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02005	<i>Jacaranda mimosifolia</i> Jacaranda	6	8	300	250			350	4.69	2.13	OM	Poor	Average	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Co-dominant leaders. Dieback throughout
AP-02006	<i>Lagerstroemia indica</i> Crepe Myrtle	5	5	200	200	200		250	4.16	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing through canopy of AP-02005
AP-02007	<i>Acer negundo</i> Box Elder	7	8	250				300	3.00	2.00	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Co-dominant leaders from 1.2m
AP-02008	<i>Lagerstroemia indica</i> Crepe Myrtle	8	7	200	150	150	150	300	3.93	2.00	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 0.5m
AP-02009	<i>Acer negundo</i> Box Elder	7	5	150	150	150		300	3.12	2.00	M	Fair	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed. Dieback
AP-02011	<i>Pittosporum undulatum</i> Sweet Pittosporum	7	4	300				350	3.60	2.13	M	Poor	Fair	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Significant dieback
AP-02013	<i>Cupressus sp.</i> Cypress	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	-	Remove	Dead
AP-02014	<i>Magnolia x soulangeana</i> Saucer Magnolia	8	8	300				350	3.60	2.13	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Focal tree. Co-dominant leaders
AP-02015	<i>Jacaranda mimosifolia</i> Jacaranda	8	8	300	200			400	4.33	2.25	OM	Poor	Fair	Very Short <5yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Previous branch failure @ 1m - active decay at point of failure. Lean to north. In severe decline
AP-02016	<i>Flindersia australis</i> Australian Teak	6	4	200				250	2.40	1.85	SM	Fair	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Wound to stem @ 1.2m. Reaction wood present
AP-02018	<i>Cinnamomum camphora</i> Camphor Laurel	13	7	200	200	200	200	450	4.80	2.37	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
AP-02021	<i>Melia azedarach</i> White Cedar	6	5	250				300	3.00	2.00	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Deciduous at time of inspection. Deadwood present
AP-02022	<i>Lagerstroemia indica</i> Crepe Myrtle	4	4	50	50	50	50	250	2.00	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Epicormic growth from base
AP-02023	<i>Cinnamomum camphora</i> Camphor Laurel	15	15	1100				1300	13.20	3.69	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Co-dominant leaders. Date palm self-sown @ lower branch union
AP-02025	<i>Jacaranda mimosifolia</i> Jacaranda	13	15	750	500			850	10.82	3.09	M	Average	Fair	Medium 15-40yrs	High	High	Minor (9%) TPZ incursion	Retain & Protect	Advanced specimen. Bifurcated from 1m. Multiple past branch failures. Impacted by wisteria
AP-02028	<i>Liquidambar styraciflua</i> Sweetgum	12	10	600				650	7.20	2.76	M	Average	Fair	Medium 15-40yrs	Medium	Medium	Major (62%) TPZ incursion + Major (45%) SRZ incursion	Remove	Included, co-dominant stems from 2m. High level of epicormic growth
AP-02029	<i>Unknown species</i> -	6	5	150	100	100	100	400	2.75	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
AP-02030	<i>Pistacia chinensis</i> Chinese Pistachio	10	8	400				450	4.80	2.37	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crown bias to west. Heavily impacted by vine
AP-02032	<i>Magnolia x soulangeana</i> Saucer Magnolia	5	7	250	200	200	200	350	5.13	2.13	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
AP-02033	<i>Grevillea robusta</i> Silky Oak	17	8	550				650	6.60	2.76	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Heavily impacted by vine
AP-02562	<i>Cinnamomum camphora</i> Camphor Laurel	15	12	400	350	350	250	700	8.20	2.85	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Multi stemmed from 0.5m
AP-02563	<i>Cinnamomum camphora</i> Camphor Laurel	13	12	500	400	300		650	8.49	2.76	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi stemmed from 0.5m

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02564	<i>Cinnamomum camphora</i> Camphor Laurel	11	12	450	250			550	6.18	2.57	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi stemmed from 0.5m
AP-02566	<i>Cinnamomum camphora</i> Camphor Laurel	8	5	300	300	250		400	5.91	2.25	M	Good	Average	Long 40yrs +	Low	Medium	Within footprint of proposed grading works	Remove	Co-dominant leaders. Wound @ base - occluding
AP-02567	<i>Grevillea robusta</i> Silky Oak	10	8	350				400	4.20	2.25	M	Good	Good	Medium 15-40yrs	Medium	Medium	Minor (3%) TPZ incursion	Retain & Protect	Nil
AP-02569	<i>Cinnamomum camphora</i> Camphor Laurel	11	10	350				350	4.20	2.13	M	Average	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Minor dieback
AP-02575	<i>Grevillea robusta</i> Silky Oak	14	9	650				750	7.80	2.93	M	Average	Average	Medium 15-40yrs	Medium	Medium	Minor (3%) TPZ incursion	Retain & Protect	Moderate level of deadwood/ epicormic growth
AP-02661	<i>Grevillea robusta</i> Silky Oak	9	5	450				500	5.40	2.47	OM	Fair	Poor	Short 5-15yrs	Low	Low	Minor (1%) TPZ incursion	Retain & Protect	Significant amount of small-medium diameter deadwood. Crown dieback - in decline
AP-02662	<i>Crataegus monogyna</i> Common Hawthorn	4	5	100	100	100	100	300	2.40	2.00	OM	Poor	Fair	Very Short <5yrs	Low	Low	No works proposed within TPZ	Retain & Protect	In severe decline
AP-02664	<i>Callistemon viminalis</i> Weeping Bottlebrush	8	6	250	250			350	4.24	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Thinning crown
AP-02665	<i>Leptospermum petersonii</i> Lemon-scented Tea Tree	8	8	250	250	250	250	400	6.00	2.25	M	Good	Average	Medium 15-40yrs	Medium	Medium	Minor (7%) TPZ incursion	Retain & Protect	Multi-stemmed from base
AP-02823	<i>Magnolia x soulangeana</i> Saucer Magnolia	2	1	200				250	2.40	1.85	M	Poor	Poor	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Topped at 2m
AP-02826	<i>Flindersia australis</i> Australian Teak	15	8	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
AP-02828	<i>Olea europaea subsp. cuspidata</i> African Olive	8	3	200				250	2.40	1.85	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Forest form
AP-02829	<i>Leptospermum petersonii</i> Lemon-scented Tea Tree	7	5	250	200	150		350	4.24	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bracket fungus. No sign of stress
AP-02835	<i>Pyrus calleryana</i> Callery Pear	8	8	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Crown lifted to 2m. Multi-stem habit from 1.5m
AP-02836	<i>Pyrus calleryana</i> Callery Pear	8	6	250				300	3.00	2.00	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Sparse crown density. Crown lifted to 2m. Multi-stem habit from 1.5m
AP-02837	<i>Pyrus calleryana</i> Callery Pear	7	6	250				300	3.00	2.00	M	Fair	Average	Short 5-15yrs	Medium	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Reduced foliage density
AP-02838	<i>Pyrus calleryana</i> Callery Pear	7	6	250				300	3.00	2.00	M	Good	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Nil
AP-02839	<i>Pyrus calleryana</i> Callery Pear	7	7	250				300	3.00	2.00	SM	Good	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Nil
AP-02840	<i>Pyrus calleryana</i> Callery Pear	8	8	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Minor (2%) TPZ incursion	Retain & Protect	Nil
AP-03234	<i>Callistemon viminalis</i> Weeping Bottlebrush	7	7	150	150	150	150	350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Major (26%) TPZ incursion + Major (20%) SRZ incursion	Remove	Multi-stemmed from 0.5m
AP-03236	<i>Lagerstroemia indica</i> Crepe Myrtle	7	7	150	150	100		200	2.81	1.68	M	Average	Good	Medium 15-40yrs	Medium	Medium	Within footprint of proposed grading works	Remove	Bifurcated stems from 1.2m. Partially reduced crown density
P-001	<i>Archontophoenix cunninghamiana</i> Bangalow Palm	9	4	200				250	3.00	N/A	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Within stand of palms of same species. Minor lower trunk lean - self corrected

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
P-002	<i>Archontophoenix cunninghamiana</i> Bangalow Palm	9	3	200				250	2.50	N/A	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Within stand of palms of same species. Minor lower trunk lean - self corrected
P-003	<i>Archontophoenix cunninghamiana</i> Bangalow Palm	9	3	200				250	2.50	N/A	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Within stand of palms of same species. Minor lower trunk lean - self corrected
P-004	<i>Archontophoenix cunninghamiana</i> Bangalow Palm	9	5	200	200			350	3.50	N/A	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Within stand of palms of same species. Twin trunks from ground level
P-005	<i>Tibouchina 'Alstonville'</i> Tibouchina	4	3	100	100			150	2.00	1.50	SM	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated stems from 0.15m. Sparse crown density with moderate levels of deadwood
P-006	<i>Grevillea robusta</i> Silky Oak	12	7	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Crown bias to north. Moderate level of medium diameter deadwood
P-007	<i>Grevillea robusta</i> Silky Oak	10	5	250				300	3.00	2.00	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	Within footprint of proposed GLU terrace	Remove	Multiple stems from 5m. Moderate level of small diameter deadwood
P-008	<i>Grevillea robusta</i> Silky Oak	9	5	200	150			250	3.00	1.85	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Previous failure @ 0.5m with epicormic regrowth
P-009	<i>Grevillea robusta</i> Silky Oak	12	6	250	200			300	3.84	2.00	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated stems @ 4m. Exposed root crown on eastern side
P-010	<i>Cinnamomum camphora</i> Camphor Laurel	13	12	600				700	7.20	2.85	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed GLU terrace	Remove	Crown bias to east. Habit supressed by adjoining trees. Multiple suckers approx. 5m in height with 2m radius of tree
P-011	<i>Cinnamomum camphora</i> Camphor Laurel	12	12	300				400	3.60	2.25	M	Fair	Fair	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Likely self-sown. Suppressed form. Poor crown habit
P-012	<i>Cinnamomum camphora</i> Camphor Laurel	12	12	550				650	6.60	2.76	M	Average	Fair	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Included, bifurcated stems from 2m. Supressed, self sown. Crown bias to west
P-013	<i>Grevillea robusta</i> Silky Oak	10	5	250				300	3.00	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Misshapen form. Crown bias to north
P-014	<i>Olea europaea subsp. cuspidata</i> African Olive	7	6	150	250			300	3.50	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 0.5m. Multiple past branch failures
P-015	<i>Olea europaea subsp. cuspidata</i> African Olive	7	5	100	100	50		300	2.00	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 0.5m. Multiple past branch failures
P-016	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	6	250				300	3.00	2.00	M	Poor	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Dieback. Suckering from base. Old wounds to trunk
P-017	<i>Cinnamomum camphora</i> Camphor Laurel	8	8	150	150	150	150	400	3.60	2.25	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Group of small trees
P-018	<i>Cinnamomum camphora</i> Camphor Laurel	12	8	300				400	3.60	2.25	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Moderate trunk lean. Suppressed. Large wound to lower stem - occluding
P-019	<i>Cinnamomum camphora</i> Camphor Laurel	14	12	300	300	300		600	6.24	2.67	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi stemmed from base
P-020	<i>Cinnamomum camphora</i> Camphor Laurel	14	12	300	300	200	200	600	6.12	2.67	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Group
P-021	<i>Cinnamomum camphora</i> Camphor Laurel	14	10	300	150	150		500	4.41	2.47	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Group
P-022	<i>Cinnamomum camphora</i> Camphor Laurel	15	10	250	250	250	250	500	6.00	2.47	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Group
P-023	<i>Cinnamomum camphora</i> Camphor Laurel	15	10	250	250	250	250	600	6.00	2.67	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Group

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
P-024	<i>Olea europaea subsp. cuspidata</i> African Olive	5	5	100	100	100	100	300	2.40	2.00	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Self sown
P-025	<i>Cinnamomum camphora</i> Camphor Laurel	8	7	150	150	150	100	250	3.34	1.85	SM	Good	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed by Tree No. AP-02562
P-026	<i>Cinnamomum camphora</i> Camphor Laurel	10	7	150	150	50		250	2.62	1.85	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed by Tree No. AP-02562
P-027	<i>Cinnamomum camphora</i> Camphor Laurel	10	6	200	100			250	2.68	1.85	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed by Tree No. AP-02562
P-028	<i>Cinnamomum camphora</i> Camphor Laurel	9	6	150	100	100		300	2.47	2.00	SM	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi stemmed from base
P-029	<i>Cinnamomum camphora</i> Camphor Laurel	7	5	100	100			200	2.00	1.68	SM	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi stemmed from base
P-030	<i>Cinnamomum camphora</i> Camphor Laurel	11	8	300				350	3.60	2.13	M	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-031	<i>Washingtonia robusta</i> Mexican Fan Palm	6	4	400				450	3.00	N/A	M	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-032	<i>Harpephyllum caffrum</i> Kaffir Plum	8	8	250	250	250	250	450	6.00	2.37	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Nil
P-033	<i>Acacia mearnsii</i> Black Wattle	7	9	250				300	3.00	2.00	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-034	<i>Grevillea robusta</i> Silky Oak	9	7	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Minor lean away from dam
P-035	<i>Grevillea robusta</i> Silky Oak	7	6	250				300	3.00	2.00	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from 2m
P-036	<i>Eucalyptus sp.</i> Eucalyptus	9	6	250				300	3.00	2.00	SM	Fair	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Star picket @ base
P-037	<i>Tristanopsis laurina</i> Water Gum	6	4	200	200	150		300	3.84	2.00	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within embankment
P-038	<i>Grevillea robusta</i> Silky Oak	8	5	250				300	3.00	2.00	SM	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Growing within embankment
P-039	<i>Tristanopsis laurina</i> Water Gum	5	4	100	50	50		200	2.00	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within embankment
P-040	<i>Tristanopsis laurina</i> Water Gum	5	4	200				250	2.40	1.85	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within embankment
P-041	<i>Tristanopsis laurina</i> Water Gum	6	4	100	100	100	50	200	2.16	1.68	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within embankment
P-042	<i>Syzygium australe</i> Brush Cherry	5	3	100	100	100	100	300	2.40	2.00	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed
P-043	<i>Cinnamomum camphora</i> Camphor Laurel	8	5	300	200			350	4.33	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing hard against wall. Crossing branches
P-044	<i>Cinnamomum camphora</i> Camphor Laurel	8	4	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing hard against wall. Crossing branches. Touching roof structure
P-045	<i>Syzygium sp.</i> Lilly Pilly	8	3	100				200	2.00	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing hard against wall. Crossing branches. Touching roof structure

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
P-046	<i>Cinnamomum camphora</i> Camphor Laurel	8	4	200	200			300	3.39	2.00	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Self seeded. Growing between sheds
P-047	<i>Buckinghamia celsissima</i> Ivory Curl Tree	6	5	200	200	200	150	350	4.53	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Growing within raised garden bed. Heavily impacted by vine
P-048	<i>Flindersia australis</i> Australian Teak	11	5	300				350	3.60	2.13	SM	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant stems from 2m. Vine throughout canopy
P-049	<i>Buckinghamia celsissima</i> Ivory Curl Tree	4	3	100	100			200	2.00	1.68	SM	Good	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Heavily impacted by vine
P-050	<i>Waterhousea floribunda</i> Weeping Lilly Pilly	6	5	250				300	3.00	2.00	SM	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-051	<i>Auranticarpa rhombifolia</i> Diamond Leaf Pittosporum	10	6	200	200			350	3.39	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Supressed by Tree No. AP-02826
P-052	<i>Waterhousea floribunda</i> Weeping Lilly Pilly	6	5	150	150	150	150	200	3.60	1.68	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Supressed
P-053	<i>Cinnamomum camphora</i> Camphor Laurel	10	10	400	300	300		450	7.00	2.37	M	Average	Average	Medium 15-40yrs	Medium	Medium	Minor (1%) TPZ incursion	Retain & Protect	Located within cow pen - soil compacted from animals. Delaminated bark @ base
P-054	<i>Cinnamomum camphora</i> Camphor Laurel	7	4	250				250	3.00	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed
P-055	<i>Cinnamomum camphora</i> Camphor Laurel	11	11	300	300			500	5.09	2.47	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Nil
P-056	<i>Phoenix canariensis</i> Canary Island Date Palm	3	3	250				300	2.50	N/A	SM	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-057	<i>Plumeria rubra var. acutifolia</i> Frangipani	4	4	200	100	50	50	200	2.81	1.68	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-058	<i>Crataegus monogyna</i> Common Hawthorn	3	2	50	50	50	50	100	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-059	<i>Cinnamomum camphora</i> Camphor Laurel	12	8	200	200	200	200	350	4.80	2.13	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-060	<i>Pittosporum undulatum</i> Sweet Pittosporum	4	4	250				300	3.00	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed by AP-02015
P-061	<i>Ligustrum lucidum</i> Broad-leaved Privet	6	5	200	200	200	200	350	4.80	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-062	<i>Ligustrum lucidum</i> Broad-leaved Privet	6	3	150	150	150		200	3.12	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Supressed
P-063	<i>Ligustrum lucidum</i> Broad-leaved Privet	6	3	200	150	150		250	3.50	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Supressed
P-064	<i>Pittosporum undulatum</i> Sweet Pittosporum	6	2	150				200	2.00	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed. Growing on lean toward driveway
P-065	<i>Phoenix canariensis</i> Canary Island Date Palm	5	4	350				350	3.00	N/A	SM	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-066	<i>Pittosporum undulatum</i> Sweet Pittosporum	5	3	100				150	2.00	1.50	SM	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-067	<i>Metrosideros excelsa 'Variegata'</i> New Zealand Christmas Bush	6	4	100	100	100		200	2.08	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil

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P-068	<i>Pittosporum undulatum</i> Sweet Pittosporum	8	6	300				350	3.60	2.13	M	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-069	<i>Olea europaea subsp. cuspidata</i> African Olive	8	10	250	250	250	250	500	6.00	2.47	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from based. Crossing branches throughout crown
P-070	<i>Ligustrum lucidum</i> Broad-leaved Privet	4	4	100	100	100		200	2.08	1.68	M	Poor	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Significant dieback
P-071	<i>Lagerstroemia indica</i> Crepe Myrtle	8	7	200	200	200	200	350	4.80	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-072	<i>Gordonia axillaris</i> Fried Egg Plant	5	2	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Supressed. Lean to north
P-073	<i>Ligustrum lucidum</i> Broad-leaved Privet	5	5	100	100	100	100	300	2.40	2.00	SM	Good	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Multi-stemmed from base
P-074	<i>Pittosporum undulatum</i> Sweet Pittosporum	5	5	100	100	100	100	300	2.40	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Nil
P-075	<i>Tibouchina cv.</i> Tibouchina	6	6	150	150	150	150	300	3.60	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor deadwood
P-076	<i>Citrus limon</i> Lemon	4	4	100	100	100	100	150	2.40	1.50	M	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Vine growing through canopy
P-077	<i>Pittosporum undulatum</i> Sweet Pittosporum	7	4	100	100			150	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-078	<i>Dracaena draco</i> Dragon Tree	5	7	350				400	4.50	N/A	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Advanced specimen. Feature tree
P-079	<i>Nerium oleander</i> Oleander	7	8	100	100	100	100	400	2.40	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-080	<i>Nerium oleander</i> Oleander	7	8	100	100	100	100	400	2.40	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-081	<i>Michelia figo</i> Port Wine Magnolia	4	4	100	100	100	100	400	2.40	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-082	<i>Pyrus calleryana</i> Callery Pear	7	5	200				250	2.40	1.85	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-083	<i>Malus floribunda</i> Crab Apple	3	4	100	100	100	100	200	2.40	1.68	SM	Good	Good	Medium 15-40yrs	Low	Low	Minor (9%) TPZ incursion	Retain & Protect	Bifurcated from base
P-084	<i>Pyrus calleryana</i> Callery Pear	6	3	150				200	2.00	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Nil
P-085	<i>Pyrus calleryana</i> Callery Pear	6	4	100	100	100	100	200	2.40	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	Minor (9%) TPZ incursion	Retain & Protect	Nil
P-086	<i>Pyrus calleryana</i> Callery Pear	7	4	200	100			250	2.68	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Dieback in upper crown
P-087	<i>Pyrus calleryana</i> Callery Pear	6	3	150	100	100		200	2.47	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Nil
P-088	<i>Acmena smithii</i> Lilly Pilly	5	5	100	100	100	100	300	2.40	2.00	SM	Fair	Average	Medium 15-40yrs	Low	Low	Minor (2%) TPZ incursion	Retain & Protect	Tip dieback
P-089	<i>Jacaranda mimosifolia</i> Jacaranda	4	4	100				150	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Crown bias to north

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
P-090	<i>Jacaranda mimosifolia</i> Jacaranda	4	4	100				150	2.00	1.50	SM	Fair	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Previously topped. Reduced foliage density
P-091	<i>Jacaranda mimosifolia</i> Jacaranda	4	4	100				150	2.00	1.50	SM	Fair	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Previously topped
P-092	<i>Tibouchina cv.</i> Tibouchina	6	3	200				250	2.40	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Within residential allotment. Suppressed
P-093	<i>Ficus benjamina</i> Weeping Fig	13	13	300	250	200		350	5.26	2.13	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Within residential allotment. Multi-stemmed from base
P-094	<i>Tibouchina cv.</i> Tibouchina	6	3	200	100			250	2.68	1.85	M	Poor	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Failed co-dominant leader. Suppressed
P-095	<i>Callistemon citrinus</i> Crimson Bottlebrush	4	4	50	50	50		200	2.00	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-096	<i>Tristanopsis laurina</i> Water Gum	5	5	100	100	100	100	200	2.40	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within raised garden bed
P-097	<i>Tristanopsis laurina</i> Water Gum	5	3	100	50			150	2.00	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within raised garden bed
P-098	<i>Tristanopsis laurina</i> Water Gum	4	4	150	100	100	100	250	2.75	1.85	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing within raised garden bed. Branches touching adjacent trellis
P-099	<i>Arbutus unedo</i> Strawberry Tree	5	5	200	150			300	3.00	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Significant lean to west
P-100	<i>Callistemon viminalis</i> Weeping Bottlebrush	7	5	200	150	150	150	400	3.93	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
P-101	<i>Murraya paniculata</i> Orange Jessamine	4	3	100				150	2.00	1.50	SM	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
P-102	<i>Callistemon viminalis</i> Weeping Bottlebrush	4	4	100	100	100		200	2.08	1.68	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing with close proximity to building. Lopped for air conditioning unit
P-103	<i>Prunus sp.</i> Prunus	3	2	50	50	50		150	2.00	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Branches touching adjacent gutter
P-104	<i>Prunus sp.</i> Prunus	3	2	50	50	50		150	2.00	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Branches touching adjacent gutter
P-105	<i>Prunus sp.</i> Prunus	4	4	100	100	100		150	2.08	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Branches touching adjacent gutter
P-106	<i>Prunus sp.</i> Prunus	3	3	100	100	100		150	2.08	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Branches touching adjacent gutter
P-107	<i>Howea forsteriana</i> Kentia Palm	7	4	200				250	3.00	N/A	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-108	<i>Howea forsteriana</i> Kentia Palm	4	4	100				150	3.00	N/A	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
P-109	<i>Unknown species</i> -	8	2	100				150	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Slender Form
P-110	<i>Hymenosporum flavum</i> Native Frangipani	9	3	200				250	2.40	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Forest form. Suppressed
P-111	<i>Cedrus deodara</i> Himalayan Cedar	10	6	250				300	3.00	2.00	SM	Average	Poor	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Remove	Former co-dominant leader topped at ground level. Suppressed by adjacent tree

Tree Inspection Data Notes & Terminology**Tree No. (Tree Number)**

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);
- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

- IM – Immature refers to well established but juvenile tree
- SM – Semi Mature, a tree that has not grown to mature size
- M – Mature, a tree that has reached mature size and will slowly increase in size over time
- OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches
- S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

- Good** - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots
- Average** - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health
- Fair** - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health
- Poor** - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50)0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

Retention Value (RV)

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after Barrell 1996, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ); The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

- <10% - negligible incursion
- >10 - <15% - low to moderate level of incursion
- >15 - <20% - moderate level of incursion
- >20 - <25% - moderate to high level of incursion
- >25 - <35% - high level of incursion
- >35% - significant incursion within the TPZ

APPENDIX 4 - TREE LOCATION PLANS: PREPARATORY SCHOOL

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



CPS

CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
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ARBORICULTURE

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INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
PREPARATORY SCHOOL
- SITE CONTEXT

CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:5000 @ A3

SHEET NUMBER
F416_TLP_03







REVISION
B

DIMENSIONS:
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS:
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

LEGEND

-  OT1 EXISTING TREE TO BE RETAINED
-  OT2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
-  STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS


Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction
PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE
**TREE LOCATION PLAN:
PREPARATORY SCHOOL
- DETAIL**



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:500 @ A3
SHEET NUMBER F416_TLP_04 REVISION B



APPENDIX 5: TREE ASSESSMENT DATA - The King's School (New Staff Residences)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01331	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	10	7	450				500	5.40	2.47	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Past branch tear-out / wound + evidence of past decay on southern side of stem @ 2m. Dieback in upper crown
AP-01332	<i>Corymbia maculata</i> Spotted Gum	17	6	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Slender form
AP-01333	<i>Corymbia maculata</i> Spotted Gum	18	7	450				550	5.40	2.57	M	Average	Average	Long 40yrs +	High	High	Minor (5%) TPZ incursion	Retain & Protect	Slender form
AP-01334	<i>Corymbia maculata</i> Spotted Gum	17	10	600				750	7.20	2.93	M	Fair	Fair	Medium 15-40yrs	High	High	Major (18%) TPZ incursion + Minor (1%) SRZ incursion	Retain & Protect	Mechanical wound and borer activity to northern side of stem @ 1m. Reduced foliage density
AP-01335	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	8	5	250				300	3.00	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	Minor (9%) TPZ incursion	Retain & Protect	Multiple past pruning events
AP-01337	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	11	7	350				400	4.20	2.25	M	Good	Average	Long 40yrs +	Medium	High	Major (24%) TPZ incursion + Major (11%) SRZ incursion	Remove	Minor amount of small diameter deadwood
AP-01338	<i>Eucalyptus pilularis</i> Blackbutt	8	5	200				250	2.40	1.85	SM	Average	Fair	Long 40yrs +	Low	Medium	Major (16%) TPZ incursion + Major (10%) SRZ incursion	Remove	Bifurcated from 2m
AP-01339	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	12	7	300	300			450	5.09	2.37	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated from base. Crown dieback
AP-01341	<i>Eucalyptus pilularis</i> Blackbutt	18	10	650				700	7.80	2.85	M	Fair	Average	Long 40yrs +	High	High	Works within nominal TPZ - negligible impact	Retain & Protect	Reduced crown density
AP-01342	<i>Eucalyptus globulus subsp. bicostata</i> Southern Blue Gum	10	10	350	200			450	4.84	2.37	M	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated from 1m
AP-01343	<i>Corymbia maculata</i> Spotted Gum	16	10	550				650	6.60	2.76	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
AP-01344	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	14	11	750				800	9.00	3.01	S	Poor	Poor	Very Short <5yrs	Medium	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Included, co-dominant stems from 1m. Significantly reduced foliage density. High amount of small-large diameter deadwood
AP-01345	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	13	8	400				500	4.80	2.47	S	Poor	Poor	Very Short <5yrs	Medium	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Significantly reduced foliage density. High amount of small-large diameter deadwood
AP-01346	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	10	6	300				350	3.60	2.13	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Slender form
AP-01347	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	9	8	350				450	4.20	2.37	OM	Poor	Fair	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Reduced foliage density. Trunk lean + crown bias to east
AP-01348	<i>Eucalyptus crebra</i> Narrow-leaved Ironbark	10	7	400	350			450	6.38	2.37	M	Average	Fair	Long 40yrs +	Medium	High	Works within nominal TPZ - negligible impact	Retain & Protect	Included, co-dominant stems from base
AP-01349	<i>Corymbia maculata</i> Spotted Gum	20	12	650				750	7.80	2.93	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
AP-01350	<i>Corymbia maculata</i> Spotted Gum	16	9	400				450	4.80	2.37	M	Good	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
AP-01351	<i>Corymbia maculata</i> Spotted Gum	9	7	200				250	2.40	1.85	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Crown lifted
AP-01352	<i>Corymbia maculata</i> Spotted Gum	17	11	600				650	7.20	2.76	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
AP-01353	<i>Corymbia maculata</i> Spotted Gum	17	9	550				650	6.60	2.76	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01354	<i>Eucalyptus resinifera</i> Red Mahogany	16	11	550				700	6.60	2.85	M	Fair	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Moderate level of epicormic growth
AP-01355	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	9	6	350				400	4.20	2.25	M	Average	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil.
AP-01356	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	9	5	300				350	3.60	2.13	M	Poor	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Extensive deadwood & crown dieback
AP-01357	<i>Eucalyptus globulus subsp. bicostata</i> Southern Blue Gum	9	6	350	150			450	4.57	2.37	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crown heavily skewed to west
AP-01358	<i>Eucalyptus sideroxylon</i> Mugga Ironbark	9	5	300				350	3.60	2.13	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crown heavily skewed to west
AP-01359	<i>Eucalyptus crebra</i> Narrow-leaved Ironbark	9	5	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crown bias to west
AP-01361	<i>Eucalyptus globulus subsp. bicostata</i> Southern Blue Gum	9	6	200	250			400	3.84	2.25	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated from 0.5m
AP-01362	<i>Eucalyptus acmenoides</i> White Mahogany	15	9	500	500			750	8.49	2.93	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant stems from ground level
AP-01363	<i>Corymbia maculata</i> Spotted Gum	18	10	600				800	7.20	3.01	M	Average	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Crown bias to south
AP-01367	<i>Lophostemon confertus</i> Brush Box	14	7	550				600	6.60	2.67	M	Fair	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated stems @ 2m & 3m. Sparse crown density
AP-01368	<i>Angophora costata</i> Sydney Red Gum	15	8	550				600	6.60	2.67	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Heavy crown bias to east
AP-01369	<i>Eucalyptus microcorys</i> Tallowwood	11	8	400				450	4.80	2.37	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multiple stem unions @ 3m & 5m
AP-01370	<i>Eucalyptus microcorys</i> Tallowwood	12	6	350				400	4.20	2.25	M	Good	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant stems from 4m. Crown bias to north
AP-01371	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	11	4	300				350	3.60	2.13	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Poor crown development. Reduced foliage density
AP-01372	<i>Melaleuca quinquenervia</i> Broad-leaved Paperbark	9	3	200				300	2.40	2.00	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Poor crown development. Reduced foliage density
AP-01373	<i>Eucalyptus resinifera</i> Red Mahogany	22	16	1150				1300	13.80	3.69	M	Average	Average	Long 40yrs +	High	High	Minor (4%) TPZ incursion	Retain & Protect	Some outer crown thinning. Multiple past pruning events. Hollow within branch union @ 7m south side
AP-01379	<i>Eucalyptus pilularis</i> Blackbutt	17	13	1150				1300	13.80	3.69	OM	Fair	Fair	Medium 15-40yrs	High	High	Major (14%) TPZ incursion + Major (22%) SRZ incursion	Remove	Past basal decay & borer activity to all sides of stem. Former co-dominant leader topped @ 3m. Reduced crown density
AP-01380	<i>Eucalyptus pilularis</i> Blackbutt	12	9	650				750	7.80	2.93	M	Fair	Average	Long 40yrs +	Medium	High	Major (12%) TPZ incursion + Minor (<1%) SRZ incursion	Retain & Protect	Tip dieback
AP-01381	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	9	8	400				500	4.80	2.47	M	Average	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Tip dieback. High level of epicormic growth. Poor form
AP-01382	<i>Eucalyptus pilularis</i> Blackbutt	14	15	950				1000	11.40	3.31	OM	Fair	Fair	Medium 15-40yrs	High	High	Within footprint of proposed OSD basin	Remove	Multiple past pruning events. Significant dieback in upper crown
RE-001	<i>Olea europaea subsp. cuspidata</i> African Olive	6	5	50	50	50	50	150	2.00	1.50	M	Good	Average	Medium 15-40yrs	Low	Low	Major (76%) TPZ incursion + Major (70%) SRZ incursion	Remove	Multi-stemmed from base
RE-002	<i>Olea europaea subsp. cuspidata</i> African Olive	6	4	50	50	50	50	250	2.00	1.85	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RE-003	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	3	3	100	100			150	2.00	1.50	SM	Poor	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from 1m. High level of epicormic growth
RE-004	<i>Eucalyptus sp.</i> Eucalyptus	5	3	150				200	2.00	1.68	SM	Fair	Poor	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Poor crown development
RE-005	<i>Eucalyptus sp.</i> Eucalyptus	7	3	100				150	2.00	1.50	SM	Average	Poor	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Poor crown development
RE-006	<i>Angophora costata</i> Sydney Red Gum	10	3	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Crown bias to east
RE-007	<i>Eucalyptus microcorys</i> Tallowwood	11	2	150				200	2.00	1.68	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Likely self sown

Tree Inspection Data Notes & Terminology

Tree No. (Tree Number)

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);
- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:
 IM – Immature refers to well established but juvenile tree
 SM – Semi Mature, a tree that has not grown to mature size
 M – Mature, a tree that has reached mature size and will slowly increase in size over time
 OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches
 S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

- Good** - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots
- Average** - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health
- Fair** - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health
- Poor** - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50)0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

Retention Value (RV)

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after *Barrell* 1996, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ); The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

<10% - negligible incursion
>10 - <15% - low to moderate level of incursion
>15 - <20% - moderate level of incursion
>20 - <25% - moderate to high level of incursion
>25 - <35% - high level of incursion
>35% - significant incursion within the TPZ

APPENDIX 6 - TREE LOCATION PLANS: NEW STAFF RESIDENCES

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



CPS

CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

LEVEL 3
397 RILEY STREET
SURRY HILLS NSW 2010
PO BOX 1074 BROADWAY NSW 2007
TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

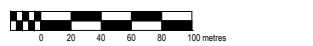
DRAWING TITLE

TREE LOCATION PLAN:
NEW STAFF RESIDENCES
- SITE CONTEXT

CLIENT








Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:5000 @ A3
SHEET NUMBER
F416_TLP_05
REVISION
B

LEGEND

-  OT1 EXISTING TREE TO BE RETAINED
-  OT2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
NEW STAFF RESIDENCES
- DETAIL

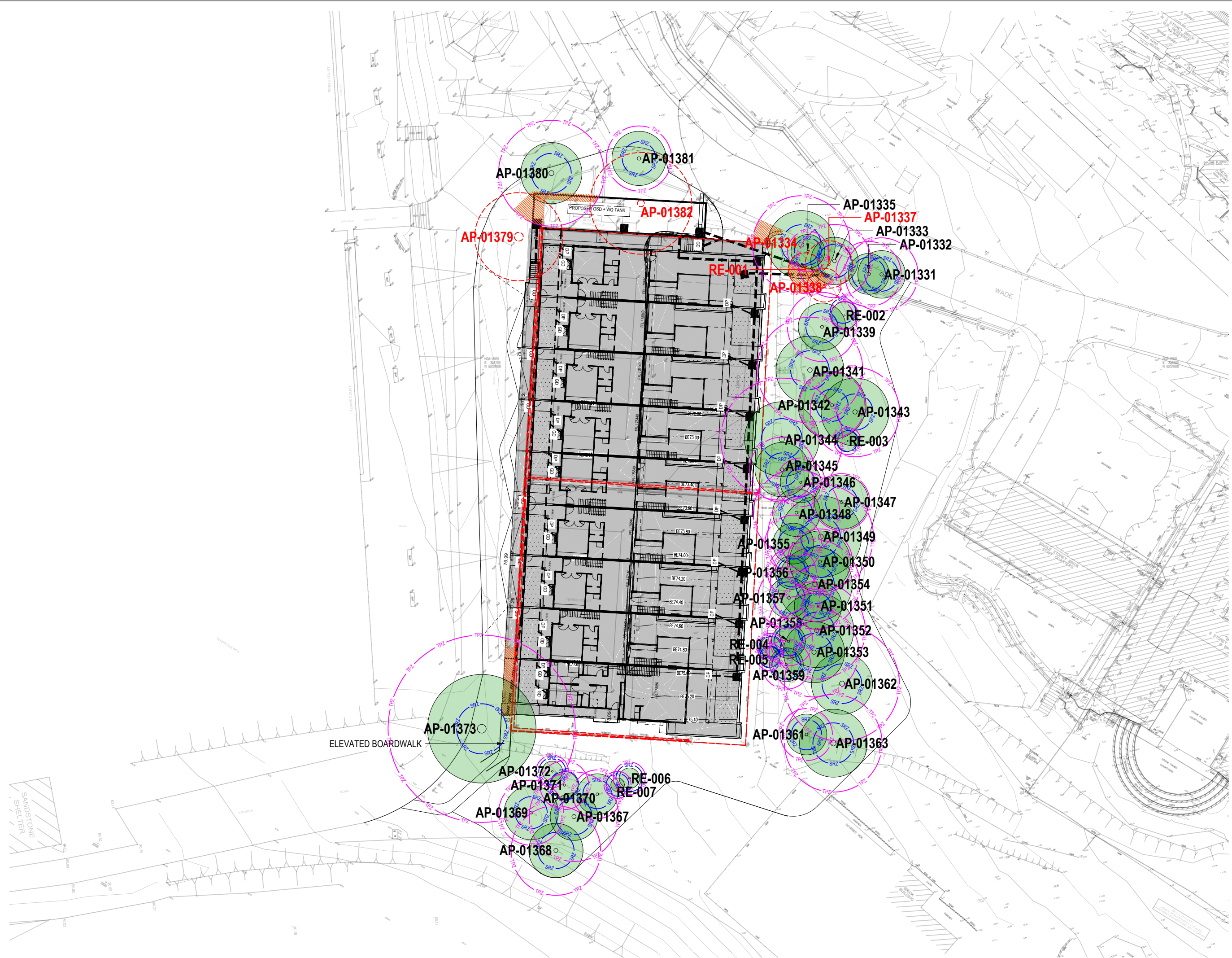
CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:500 @ A3
SHEET NUMBER
F416_TLP_06
REVISION
B



APPENDIX 7: TREE ASSESSMENT DATA - The King's School (New Roadway)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01158	<i>Grevillea robusta</i> Silky Oak	11	7	450	200			600	5.91	2.67	OM	Fair	Average	Short 5-15yrs	Medium	Low	Within footprint of proposed roadway	Remove	Bifurcated from 1m. Crown dieback
AP-01159	<i>Araucaria columnaris</i> Cook Pine	13	3	400				450	4.80	2.37	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed roadway	Remove	Chlorotic foliage. Tip dieback
AP-01160	<i>Podocarpus elatus</i> Illawarra Plum	9	6	450	350			600	6.84	2.67	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed grading works	Remove	Co-dominant stem leaning to south-east
AP-01163	<i>Jacaranda mimosifolia</i> Jacaranda	7	8	350	300	200		500	6.03	2.47	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	Within footprint of proposed roadway	Remove	Multi-stemmed from base
AP-02083	<i>Eucalyptus punctata</i> Grey Gum	17	10	700				950	8.40	3.24	S	Poor	Poor	Very Short <5yrs	Low	Low	No works proposed within TPZ	Remove	Significantly reduced foliage density. High level of small-large diameter deadwood. Wound / borer @ base
AP-02084	<i>Eucalyptus punctata</i> Grey Gum	17	12	1200				1350	14.40	3.75	OM	Good	Poor	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Multiple past branch failures. Entire crown epicormic
AP-02086	<i>Eucalyptus punctata</i> Grey Gum	17	15	900				1300	10.80	3.69	M	Average	Average	Long 40yrs +	High	High	Minor (5%) TPZ incursion	Retain & Protect	Stem canker. Moderate lean to north
AP-02087	<i>Eucalyptus pilularis</i> Blackbutt	18	12	1000				1150	12.00	3.51	M	Average	Fair	Long 40yrs +	High	High	Within footprint of proposed roadway	Remove	Past major branch failures. Moderate level of epicormic growth throughout canopy
AP-02428	<i>Corymbia citriodora</i> Lemon-scented Gum	9	7	300				350	3.60	2.13	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Failed co-dominant leader
AP-02440	<i>Grevillea robusta</i> Silky Oak	10	6	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Stormwater headwall @ base
AP-02441	<i>Eucalyptus punctata</i> Grey Gum	11	7	400				500	4.80	2.47	OM	Poor	Fair	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Wound ascending stem. Failed central leader. Significantly reduced foliage density. Sooty mould
AP-02443	<i>Eucalyptus punctata</i> Grey Gum	11	9	500				550	6.00	2.57	OM	Poor	Fair	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Moderate lean to north. Reduced foliage density. Sooty mould
AP-02444	<i>Eucalyptus punctata</i> Grey Gum	13	10	550				650	6.60	2.76	OM	Fair	Poor	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Moderate trunk lean + crown bias to north. Multiple past branch failures. Large amount of deadwood. Reduced foliage density. Borer
AP-02445	<i>Eucalyptus punctata</i> Grey Gum	15	8	600				750	7.20	2.93	OM	Fair	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Former co-dominant leader topped @ 2m. Wound + borer @ base
AP-02447	<i>Eucalyptus punctata</i> Grey Gum	10	7	350				400	4.20	2.25	OM	Poor	Poor	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Significantly reduced foliage density. In decline
AP-02448	<i>Syncarpia glomulifera</i> Turpentine	10	7	350	350	250		700	6.65	2.85	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
AP-02450	<i>Eucalyptus punctata</i> Grey Gum	16	8	500				600	6.00	2.67	M	Average	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Slender form
AP-02451	<i>Eucalyptus punctata</i> Grey Gum	16	8	500				600	6.00	2.67	OM	Poor	Average	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Significantly reduced foliage density. In decline
AP-02452	<i>Eucalyptus punctata</i> Grey Gum	17	10	600				700	7.20	2.85	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Minor deadwood in upper crown
AP-02454	<i>Eucalyptus punctata</i> Grey Gum	12	10	500				550	6.00	2.57	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Minor (2%) TPZ incursion	Retain & Protect	Moderate defoliation from pest attack
AP-02455	<i>Eucalyptus punctata</i> Grey Gum	18	14	900				1100	10.80	3.44	M	Average	Fair	Medium 15-40yrs	High	High	Major (14%) TPZ incursion	Retain & Protect	Previous branch failures. Dominant deadwood

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02456	<i>Eucalyptus resinifera</i> Red Mahogany	14	10	800				900	9.60	3.17	M	Good	Average	Long 40yrs +	High	High	Major (30%) TPZ incursion	Remove	Co-dominant
AP-02458	<i>Eucalyptus resinifera</i> Red Mahogany	14	12	600	500			850	9.37	3.09	M	Good	Fair	Long 40yrs +	High	High	Major (16%) TPZ incursion	Retain & Protect	Included, co-dominant stems from base. Multiple past branch failures
AP-02459	<i>Jacaranda mimosifolia</i> Jacaranda	8	8	250	250	250	250	450	6.00	2.37	M	Average	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated from base. Previously topped
AP-02462	<i>Eucalyptus nicholii</i> Narrow-leaved Peppermint	12	9	600				650	7.20	2.76	M	Average	Average	Long 40yrs +	Medium	High	Minor (<1%) TPZ incursion	Retain & Protect	Co-dominant. Minor deadwood
AP-02463	<i>Eucalyptus nicholii</i> Narrow-leaved Peppermint	10	9	500				600	6.00	2.67	M	Average	Average	Long 40yrs +	Medium	High	Major (11%) TPZ incursion	Retain & Protect	Co-dominant. Minor deadwood
AP-02464	<i>Schinus molle var. areira</i> Pepper Tree	6	7	250	250	150	100	400	4.76	2.25	M	Fair	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from base
AP-02469	<i>Corymbia maculata</i> Spotted Gum	18	9	750				900	9.00	3.17	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Co-dominant
AP-02470	<i>Corymbia maculata</i> Spotted Gum	20	13	700				900	8.40	3.17	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Co-dominant
AP-02475	<i>Corymbia maculata</i> Spotted Gum	22	12	800				1000	9.60	3.31	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Good form. Co-dominant crown
AP-02476	<i>Corymbia maculata</i> Spotted Gum	19	8	550				700	6.60	2.85	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Good form. Co-dominant crown
AP-02477	<i>Corymbia maculata</i> Spotted Gum	21	8	650				750	7.80	2.93	M	Good	Good	Long 40yrs +	High	High	Minor (8%) TPZ incursion	Retain & Protect	Good form. Co-dominant crown
AP-02478	<i>Corymbia maculata</i> Spotted Gum	18	9	550				750	6.60	2.93	M	Good	Good	Long 40yrs +	High	High	Major (12%) TPZ incursion	Retain & Protect	Good form. Co-dominant crown
AP-02479	<i>Corymbia maculata</i> Spotted Gum	18	10	650				750	7.80	2.93	M	Good	Good	Long 40yrs +	High	High	Major (27%) TPZ incursion + Minor (2%) SRZ incursion	Remove	Good form. Co-dominant crown
AP-02480	<i>Pinus patula</i> Mexican Weeping Pine	14	8	400				500	4.80	2.47	M	Fair	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Deadwood. Thinning canopy
AP-02481	<i>Eucalyptus tereticornis</i> Forest Red Gum	22	15	850				1050	10.20	3.38	M	Average	Good	Long 40yrs +	High	High	Major (12%) TPZ incursion	Retain & Protect	Good form
AP-02502	<i>Pyrus communis</i> Pear	7	8	300	300	250	250	1100	6.63	3.44	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Advanced specimen. Coppiced growth from base
AP-02503	<i>Syncarpia glomulifera</i> Turpentine	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	-	Remove	Dead
AP-02504	<i>Syncarpia glomulifera</i> Turpentine	12	10	550	400	300	200	900	9.24	3.17	M	Average	Fair	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 10m. Previous leader failure @ 3m
AP-02505	<i>Syncarpia glomulifera</i> Turpentine	14	9	550				750	6.60	2.93	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Failed central leader. Canker affecting remaining co-dominant stems @ 4m
AP-02555	<i>Corymbia citriodora</i> Lemon-scented Gum	13	7	400				450	4.80	2.37	M	Average	Average	Long 40yrs +	Medium	High	Works within nominal TPZ - negligible impact	Retain & Protect	Minor crown bias to east
AP-02556	<i>Eucalyptus saigna</i> Sydney Blue Gum	11	9	700				800	8.40	3.01	M	Average	Fair	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Multiple wounds/cankers ascending trunk and at branch unions. Unusual swelling within stem @ 2m
AP-02557	<i>Eucalyptus pilularis</i> Blackbutt	16	10	750				850	9.00	3.09	OM	Fair	Fair	Short 5-15yrs	High	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Multiple past branch failures. Reduced foliage density. Deadwood + epicormic growth

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02558	<i>Eucalyptus pilularis</i> Blackbutt	15	11	600	450			900	9.00	3.17	OM	Fair	Fair	Short 5-15yrs	High	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Included, co-dominant stems from base. Reduced foliage density, Tip dieback, epicormic growth
AP-02559	<i>Eucalyptus pilularis</i> Blackbutt	10	8	1000				1100	12.00	3.44	OM	Average	Poor	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Leader previously topped @ 5m. Remaining branches and foliage heavily biased to south- east. Large wound with termite activity
AP-02861	<i>Eucalyptus punctata</i> Grey Gum	8	6	350				400	4.20	2.25	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Minor defoliation from pest
AP-02862	<i>Eucalyptus punctata</i> Grey Gum	9	6	300				350	3.60	2.13	SM	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Failed co-dominant leader
AP-02867	<i>Eucalyptus saligna</i> Sydney Blue Gum	11	9	300	250	250		550	5.56	2.57	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 0.5m
AP-02868	<i>Eucalyptus saligna</i> Sydney Blue Gum	11	7	350	250	200		500	5.69	2.47	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 0.5m. Reduced foliage density
AP-02870	<i>Eucalyptus saligna</i> Sydney Blue Gum	9	6	300	250	100		450	4.84	2.37	SM	Average	Fair	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from 1m
AP-02879	<i>Eucalyptus punctata</i> Grey Gum	7	6	400				450	4.80	2.37	SM	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
AP-02880	<i>Corymbia citriodora</i> Lemon-scented Gum	12	7	350				400	4.20	2.25	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Nil
AP-02881	Dead tree -	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	-	Remove	Dead
RO-001	<i>Liquidambar styraciflua</i> Sweetgum	5	4	400				500	4.80	2.47	M	Good	Fair	Medium 15-40yrs	Low	Low	Major (10%) TPZ incursion + Minor (3%) SRZ incursion	Retain & Protect	Council street tree. Excessive pruning - topped for powerline clearance
RO-002	<i>Cotoneaster glaucophyllus</i> Cotoneaster	5	5	150	150	150	150	500	3.60	2.47	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base. Shrub habit. Past branch failures
RO-003	<i>Acacia parramattensis</i> Parramatta Wattle	6	3	100				150	2.00	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Topped for powerline clearance
RO-004	<i>Ligustrum lucidum</i> Broad-leaved Privet	5	4	200	100	50		300	2.75	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Pruned/topped. Basal epicormic growth
RO-005	<i>Acacia implexa</i> Hickory Wattle	11	4	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor basal decay
RO-006	<i>Acacia implexa</i> Hickory Wattle	10	3	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor lean to west
RO-007	<i>Acacia implexa</i> Hickory Wattle	11	4	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor basal decay
RO-008	<i>Acacia implexa</i> Hickory Wattle	11	3	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor lean to east
RO-009	<i>Acacia implexa</i> Hickory Wattle	6	3	150				200	2.00	1.68	M	Fair	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Leader failure. Moderate stem decay
RO-010	<i>Acacia implexa</i> Hickory Wattle	9	2	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Slender form
RO-011	<i>Acacia implexa</i> Hickory Wattle	11	3	200				250	2.40	1.85	M	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Moderate deadwood
RO-012	<i>Acacia implexa</i> Hickory Wattle	7	4	100	100			200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from base

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-013	<i>Acacia implexa</i> Hickory Wattle	11	3	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor deadwood
RO-014	Dead tree -	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	No works proposed within TPZ	Remove	Dead
RO-015	<i>Acacia implexa</i> Hickory Wattle	11	3	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor lean to north
RO-016	Dead tree -	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	No works proposed within TPZ	Remove	Dead
RO-017	<i>Acacia implexa</i> Hickory Wattle	10	2	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Slender form
RO-018	<i>Acacia implexa</i> Hickory Wattle	6	3	150				200	2.00	1.68	M	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor canopy bias to north
RO-019	<i>Acacia implexa</i> Hickory Wattle	11	3	250				300	3.00	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
RO-020	<i>Acacia implexa</i> Hickory Wattle	8	3	100				150	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Minor canopy bias to east
RO-021	<i>Acacia implexa</i> Hickory Wattle	10	3	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
RO-022	<i>Grevillea robusta</i> Silky Oak	11	5	250				350	3.00	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Branch dieback. Supressed
RO-023	<i>Eucalyptus tereticornis</i> Forest Red Gum	18	9	500				600	6.00	2.67	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Minor lean to north-east
RO-024	<i>Grevillea robusta</i> Silky Oak	12	4	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Past pruning. Minor epicormic growth
RO-025	<i>Grevillea robusta</i> Silky Oak	12	4	250				300	3.00	2.00	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Minor epicormic growth
RO-026	<i>Grevillea robusta</i> Silky Oak	13	4	200				250	2.40	1.85	M	Fair	Average	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Sparse canopy. Branch dieback
RO-027	<i>Grevillea robusta</i> Silky Oak	13	7	300				350	3.60	2.13	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-028	<i>Acacia parramattensis</i> Parramatta Wattle	7	4	200				250	2.40	1.85	M	Fair	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Leader failure. Stem decay / canker
RO-029	<i>Corymbia citriodora</i> Lemon-scented Gum	9	2	150				200	2.00	1.68	SM	Good	Average	Long 40yrs +	Low	Medium	Major (40%) TPZ incurison + Major (38%) SRZ incurison	Remove	Appears self-seeded
RO-030	<i>Corymbia citriodora</i> Lemon-scented Gum	22	15	750				950	9.00	3.24	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Minor canopy bias to north
RO-031	<i>Corymbia citriodora</i> Lemon-scented Gum	8	2	150				200	2.00	1.68	SM	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Appears self-seeded
RO-032	<i>Grevillea robusta</i> Silky Oak	14	7	450				500	5.40	2.47	M	Fair	Average	Short 5-15yrs	Medium	Low	No works proposed within TPZ	Retain & Protect	Sparse canopy. Branch failures. Stem swelling
RO-033	<i>Cinnamomum camphora</i> Camphor Laurel	11	9	500	350	250	100	950	8.00	3.24	M	Average	Average	Long 40yrs +	Medium	High	Within footprint of proposed roadway	Remove	Multi-stemmed from base. Branch dieback. Epicormic growth
RO-034	<i>Corymbia citriodora</i> Lemon-scented Gum	22	25	1150				1300	13.80	3.69	M	Good	Good	Long 40yrs +	High	High	Minor (<1%) TPZ incurison	Retain & Protect	Moderate canopy bias to north

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-035	<i>Corymbia citriodora</i> Lemon-scented Gum	7	2	100				150	2.00	1.50	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Appears self-seeded
RO-036	<i>Corymbia citriodora</i> Lemon-scented Gum	19	4	200				250	2.40	1.85	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Moderate canopy bias to east
RO-037	<i>Corymbia citriodora</i> Lemon-scented Gum	8	2	100				150	2.00	1.50	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Appears self-seeded
RO-038	<i>Corymbia citriodora</i> Lemon-scented Gum	16	7	300				350	3.60	2.13	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Minor canopy bias to west
RO-039	<i>Corymbia citriodora</i> Lemon-scented Gum	14	5	200				250	2.40	1.85	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Minor canopy bias to west. Slender form
RO-040	<i>Acacia parramattensis</i> Parramatta Wattle	6	3	100				150	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	Major (25%) TPZ incursion + Major (20%) SRZ incursion	Remove	Nil
RO-041	<i>Acacia parramattensis</i> Parramatta Wattle	5	4	100	100			200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	Major (14%) TPZ incursion + Minor (6%) SRZ incursion	Remove	Bifurcated from base
RO-042	<i>Acacia parramattensis</i> Parramatta Wattle	4	4	50				100	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Group of 6 x small trees
RO-043	<i>Acacia parramattensis</i> Parramatta Wattle	2	2	50				100	2.00	1.50	M	Average	Poor	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Major lean to east. Topped
RO-044	<i>Acacia parramattensis</i> Parramatta Wattle	4	2	50				100	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Group of 3 x small trees
RO-045	<i>Acacia parramattensis</i> Parramatta Wattle	3	3	50	50			100	2.00	1.50	M	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Major lean to east
RO-046	<i>Acacia parramattensis</i> Parramatta Wattle	3	3	50	50	50		150	2.00	1.50	M	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Major lean to east
RO-047	<i>Olea europaea subsp. cuspidata</i> African Olive	9	5	200	100	50		300	2.75	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	Major (34%) TPZ incursion + Major (29%) SRZ incursion	Remove	Multi-stemmed from base
RO-048	<i>Olea europaea subsp. cuspidata</i> African Olive	8	6	200	200			350	3.39	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Bifurcated from 0.5m. Past pruning for roadway clearance
RO-049	<i>Olea europaea subsp. cuspidata</i> African Olive	9	6	300	50			350	3.65	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Minor lean to east
RO-050	<i>Melia azedarach</i> White Cedar	10	7	350				400	4.20	2.25	M	Average	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Moderate lean to north. Past pruning for road clearance
RO-051	<i>Cinnamomum camphora</i> Camphor Laurel	11	7	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Crossing stems with T52
RO-052	<i>Grevillea robusta</i> Silky Oak	12	8	250				350	3.00	2.13	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crossing stems with T51
RO-053	<i>Grevillea robusta</i> Silky Oak	13	7	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	Minor (2%) TPZ incursion	Retain & Protect	Nil
RO-054	<i>Cinnamomum camphora</i> Camphor Laurel	11	5	150				200	2.00	1.68	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Slender form
RO-055	<i>Grevillea robusta</i> Silky Oak	11	4	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Slender form
RO-056	<i>Grevillea robusta</i> Silky Oak	15	7	250				300	3.00	2.00	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-057	<i>Cinnamomum camphora</i> Camphor Laurel	10	4	200				250	2.40	1.85	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Minor epicormic growth
RO-058	<i>Cinnamomum camphora</i> Camphor Laurel	10	5	150				250	2.00	1.85	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Minor epicormic growth
RO-059	<i>Grevillea robusta</i> Silky Oak	14	6	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-060	<i>Ficus benjamina</i> Weeping Fig	13	13	650	350			900	8.86	3.17	M	Average	Good	Long 40yrs +	Medium	High	Within footprint of proposed roadway	Remove	Pruned for roadway clearance
RO-061	<i>Grevillea robusta</i> Silky Oak	15	8	350				400	4.20	2.25	M	Good	Good	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-062	<i>Cinnamomum camphora</i> Camphor Laurel	10	6	250	200	150		450	4.24	2.37	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-063	<i>Cinnamomum camphora</i> Camphor Laurel	12	7	300	150	150	100	400	4.57	2.25	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Group of 2 x trees
RO-064	<i>Cinnamomum camphora</i> Camphor Laurel	12	6	250	150	100		400	3.70	2.25	M	Average	Average	Long 40yrs +	Medium	High	Minor (2%) TPZ incursion	Retain & Protect	Surrounded by privet
RO-065	<i>Grevillea robusta</i> Silky Oak	15	7	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Surrounded by privet
RO-066	<i>Cinnamomum camphora</i> Camphor Laurel	11	4	150				200	2.00	1.68	SM	Average	Average	Long 40yrs +	Low	Medium	Major (41%) TPZ incursion + Major (40%) SRZ incursion	Remove	Group of 4 x trees . Surrounded by privet
RO-067	<i>Cinnamomum camphora</i> Camphor Laurel	10	3	150				200	2.00	1.68	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Group of 4 x trees . Surrounded by privet
RO-068	<i>Grevillea robusta</i> Silky Oak	14	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-069	<i>Cinnamomum camphora</i> Camphor Laurel	11	6	250				300	3.00	2.00	M	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-070	<i>Acacia implexa</i> Hickory Wattle	7	3	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Group of 4 x trees . Vine throughout stem + canopy
RO-071	<i>Grevillea robusta</i> Silky Oak	13	7	250				300	3.00	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Vine throughout lower canopy
RO-072	<i>Acacia implexa</i> Hickory Wattle	6	8	50				100	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Moderate lean to east
RO-073	<i>Eucalyptus pilularis</i> Blackbutt	15	9	550				650	6.60	2.76	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Minor canopy bias to east
RO-074	<i>Eucalyptus punctata</i> Grey Gum	16	12	850				1000	10.20	3.31	M	Fair	Fair	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Reduced foliage density. Substantial deadwood. Arboreal termite nest
RO-075	<i>Corymbia citriodora</i> Lemon-scented Gum	7	4	100	100	100		300	2.08	2.00	SM	Average	Fair	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Failed co-dominant leader. Multi-stemmed from base
RO-076	<i>Corymbia citriodora</i> Lemon-scented Gum	10	7	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Slender form
RO-077	<i>Angophora costata</i> Sydney Red Gum	9	6	200				300	2.40	2.00	SM	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Crown bias to west
RO-078	<i>Acacia parramattensis</i> Parramatta Wattle	8	6	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Crown bias to west

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-079	<i>Eucalyptus pilularis</i> Blackbutt	10	7	300	300			500	5.09	2.47	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Growing at dam edge. Root plate partially inundated
RO-080	<i>Cinnamomum camphora</i> Camphor Laurel	7	7	150	100	100	100	350	2.75	2.13	SM	Fair	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Growing at dam edge. Root plate partially inundated. Chlorotic foliage
RO-081	<i>Eucalyptus saligna</i> Sydney Blue Gum	13	7	450				500	5.40	2.47	M	Fair	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Reduced foliage density
RO-082	<i>Cinnamomum camphora</i> Camphor Laurel	9	9	400	300	150	150	900	6.52	3.17	M	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-083	<i>Eucalyptus saligna</i> Sydney Blue Gum	14	11	550	550			850	9.33	3.09	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant stems from 1m. Evidence of past decay & borer activity @ base. Moderate level of small diameter deadwood
RO-084	<i>Eucalyptus saligna</i> Sydney Blue Gum	14	9	450	200			500	5.91	2.47	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Multiple included, co-dominant stems from 1m
RO-085	<i>Cupaniopsis anacardioides</i> Tuckeroo	6	6	300				350	3.60	2.13	M	Good	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Recently failed central leader. Hanging in crown
RO-086	<i>Syncarpia glomulifera</i> Turpentine	8	4	150	100	100		300	2.47	2.00	SM	Average	Fair	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multiple included, co-dominant stems from base
RO-087	<i>Backhousia citriodora</i> Lemon Myrtle	5	4	50	50			100	2.00	1.50	M	Good	Good	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
RO-088	<i>Corymbia citriodora</i> Lemon-scented Gum	15	7	300				400	3.60	2.25	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Included, co-dominant leader recently failed @ 4m
RO-089	<i>Cinnamomum camphora</i> Camphor Laurel	10	11	400	250	200	200	700	6.60	2.85	M	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-090	<i>Callistemon viminalis</i> Weeping Bottlebrush	4	4	100	50	50		150	2.00	1.50	M	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-091	<i>Eucalyptus pilularis</i> Blackbutt	11	7	400	250	200		600	6.15	2.67	M	Average	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Growing on bund. Multi-stemmed from base
RO-092	<i>Casuarina glauca</i> Swamp Oak	11	5	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Growing on bund
RO-093	<i>Corymbia citriodora</i> Lemon-scented Gum	14	7	300	250			400	4.69	2.25	M	Average	Fair	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant stems from 0.5m
RO-094	<i>Eucalyptus saligna</i> Sydney Blue Gum	10	5	200	150			300	3.00	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Bifurcated from 0.5m. Slender form
RO-095	<i>Eucalyptus punctata</i> Grey Gum	8	5	300	100	100		350	3.98	2.13	SM	Fair	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Bifurcated from base. Reduced foliage density. In decline
RO-096	<i>Eucalyptus robusta</i> Swamp Mahogany	8	4	150	100	100		250	2.47	1.85	SM	Average	Fair	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-097	<i>Cinnamomum camphora</i> Camphor Laurel	13	11	400	400	400		1000	8.31	3.31	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed roadway	Remove	Group of 3 x trees. Basal decay. Branch dieback
RO-098	<i>Butia capitata</i> Jelly Palm	9	3	350				400	2.50	N/A	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Stangler fig established on stem
RO-099	<i>Araucaria heterophylla</i> Norfolk Island Pine	6	5	250				300	3.00	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Topped @ 5m
RO-100	<i>Pyrus calleryana</i> Callery Pear	4	1	50				100	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-101	<i>Cinnamomum camphora</i> Camphor Laurel	8	7	250	150	100	100	450	3.89	2.37	SM	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Multi-stemmed from base
RO-102	<i>Cinnamomum camphora</i> Camphor Laurel	7	5	100	100	100	100	300	2.40	2.00	SM	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Multi-stemmed from base
RO-103	<i>Ligustrum lucidum</i> Broad-leaved Privet	6	4	150				200	2.00	1.68	M	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed roadway	Remove	Supressed. Suckering
RO-104	<i>Pittosporum undulatum</i> Sweet Pittosporum	5	5	150	100			200	2.16	1.68	M	Poor	Fair	Very Short <5yrs	Low	Low	Within footprint of proposed roadway	Remove	Severe chlorosis. In decline
RO-105	<i>Cinnamomum camphora</i> Camphor Laurel	7	6	150	150	150	150	400	3.60	2.25	SM	Good	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Multi-stemmed from base
RO-106	<i>Cinnamomum camphora</i> Camphor Laurel	10	8	350	250	100		450	5.30	2.37	M	Average	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Multi-stemmed from base
RO-107	<i>Ligustrum lucidum</i> Broad-leaved Privet	9	6	250	250	250	200	400	5.72	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Weed species. Multiple included, co-dominant stems from 1m
RO-108	<i>Cinnamomum camphora</i> Camphor Laurel	9	6	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Nil
RO-109	<i>Phoenix canariensis</i> Canary Island Date Palm	6	6	800				800	4.00	N/A	SM	Average	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Minor frond dieback. Assume self seeded
RO-110	<i>Grevillea robusta</i> Silky Oak	14	5	450				500	5.40	2.47	M	Average	Average	Medium 15-40yrs	Medium	Medium	Works within nominal TPZ - negligible impact	Retain & Protect	Slender form
RO-111	<i>Eucalyptus pilularis</i> Blackbutt	8	5	250				300	3.00	2.00	SM	Fair	Average	Medium 15-40yrs	Low	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Reduced foliage density
RO-112	<i>Cinnamomum camphora</i> Camphor Laurel	8	7	350	300	100	100	500	5.79	2.47	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-113	<i>Eucalyptus pilularis</i> Blackbutt	8	3	200				250	2.40	1.85	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Slender form
RO-114	<i>Pittosporum undulatum</i> Sweet Pittosporum	7	7	200	150	150	100	350	3.70	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-115	<i>Eucalyptus pilularis</i> Blackbutt	16	10	650				700	7.80	2.85	OM	Fair	Fair	Short 5-15yrs	High	Low	Works within nominal TPZ - negligible impact	Retain & Protect	Multiple past branch failures. Reduced foliage density. Deadwood + epicormic growth
RO-116	<i>Callistemon viminalis</i> Weeping Bottlebrush	6	6	250	150			300	3.50	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	Major (37%) TPZ incurison + Major (28%) SRZ incurison	Remove	Growing within drainage swale. Multiple past pruning events
RO-117	<i>Eucalyptus resinifera</i> Red Mahogany	15	12	700				800	8.40	3.01	M	Good	Average	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Past branch failures
RO-118	<i>Ficus benjamina</i> Weeping Fig	6	9	250	250	250	250	500	6.00	2.47	M	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-119	<i>Acacia implexa</i> Hickory Wattle	5	4	200				250	2.40	1.85	SM	Good	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Moderate lean + crown bias to east
RO-120	<i>Acacia implexa</i> Hickory Wattle	5	4	50	50			100	2.00	1.50	SM	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed grading works	Remove	Gall wasp. Lean
RO-121	<i>Acacia implexa</i> Hickory Wattle	5	5	150				200	2.00	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed grading works	Remove	Supressed
RO-122	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	7	200	200	200		400	4.16	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Weed species. Multi-stemmed from base

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
RO-123	<i>Ligustrum lucidum</i> Broad-leaved Privet	10	7	150	150	150	150	250	3.60	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Weed species. Multi-stemmed from base
RO-124	<i>Eucalyptus pilularis</i> Blackbutt	13	6	300				400	3.60	2.25	SM	Good	Good	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
RO-125	<i>Ligustrum lucidum</i> Broad-leaved Privet	5	5	50	50	50	50	150	2.00	1.50	SM	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Weed species. Multi-stemmed from base
RO-126	<i>Acer buergerianum</i> Trident Maple	5	4	50	50	50		150	2.00	1.50	SM	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi-stemmed from base
RO-127	<i>Eucalyptus racemosa</i> Narrow-leaved Scribbly Gum	6	4	100				150	2.00	1.50	SM	Fair	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Reduced foliage density
RO-128	<i>Acer buergerianum</i> Trident Maple	5	3	50	50	50		100	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
RO-129	<i>Ligustrum lucidum</i> Broad-leaved Privet	7	4	50	50			150	2.00	1.50	SM	Average	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Weed species. Multi-stemmed from base
RO-130	<i>Eucalyptus racemosa</i> Narrow-leaved Scribbly Gum	8	3	150	100			200	2.16	1.68	SM	Average	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Birfurcated from base.
RO-131	<i>Acer buergerianum</i> Trident Maple	6	4	200				250	2.40	1.85	M	Fair	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Deadwood. Thinning canopy
RO-132	<i>Cinnamomum camphora</i> Camphor Laurel	7	5	100	100	100	100	250	2.40	1.85	SM	Good	Fair	Medium 15-40yrs	Low	Low	Minor (4%) TPZ incursion	Retain & Protect	Multi-stemmed from base
RO-133	<i>Cinnamomum camphora</i> Camphor Laurel	7	6	200	200	150	100	450	4.02	2.37	SM	Good	Average	Medium 15-40yrs	Low	Low	Within footprint of future roadway	Remove	Multi-stemmed from base
RO-134	<i>Liquidambar styraciflua</i> Sweetgum	5	4	400				500	4.80	2.47	M	Good	Fair	Medium 15-40yrs	Low	Low	Major (13%) TPZ incursion + Minor (3%) SRZ incursion	Retain & Protect	Council street tree. Excessive pruning - topped for powerline clearance

Tree Inspection Data Notes & Terminology

Tree No. (Tree Number)

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);

- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

IM – Immature refers to well established but juvenile tree

SM – Semi Mature, a tree that has not grown to mature size

M – Mature, a tree that has reached mature size and will slowly increase in size over time

OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches

S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

Good - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

Average - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

Fair - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

Poor - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50)0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)® (IACA 2010)®.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

Retention Value (RV)

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after Barrell 1996, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ): The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

<10% - negligible incursion

>10 - <15% - low to moderate level of incursion

>15 - <20% - moderate level of incursion

>20 - <25% - moderate to high level of incursion

>25 - <35% - high level of incursion

>35% - significant incursion within the TPZ

APPENDIX 8 - TREE LOCATION PLANS: NEW ROADWAY

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



NEW ROADWAY:
REFER F416_TLP_08
TO F416_TLP_12

CPS

CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

LEVEL 3
397 RILEY STREET
SURRY HILLS NSW 2010
PO BOX 1074 BROADWAY NSW 2007
TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

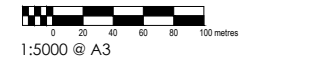
DRAWING TITLE

TREE LOCATION PLAN:
NEW ROADWAY
- SITE CONTEXT

CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:5000 @ A3

SHEET NUMBER
F416_TLP_07






REVISION
B

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
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LEGEND

-  OT1 EXISTING TREE TO BE RETAINED
-  OT2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
NEW ROADWAY
- DETAIL (PAGE 2 OF 5)

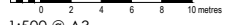
CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

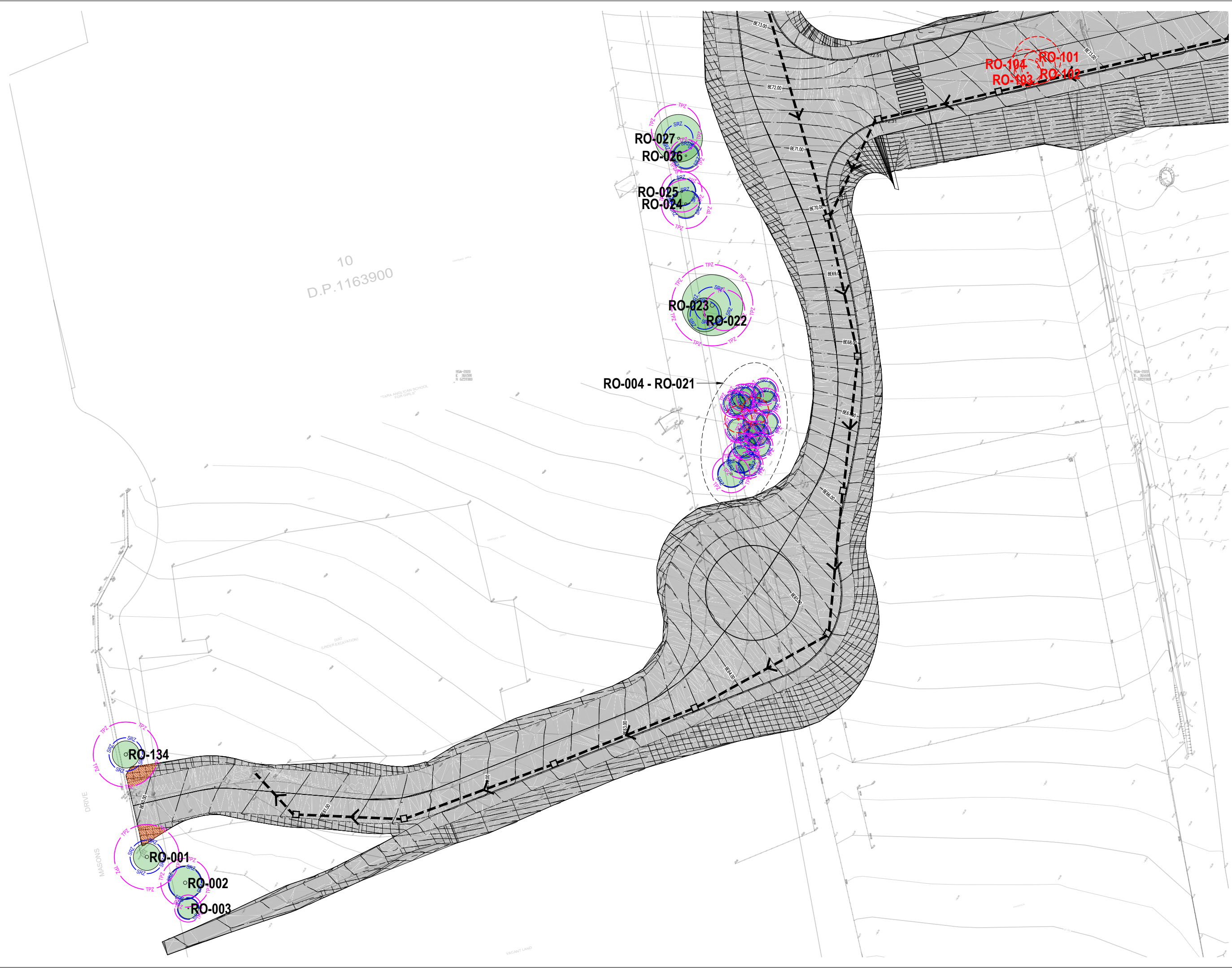


1:500 @ A3



SHEET NUMBER
F416_TLP_09

REVISION
B









DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
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LEGEND

-  T1 EXISTING TREE TO BE RETAINED
-  T2 EXISTING TREE TO BE REMOVED
-  SRZ TREE PROTECTION ZONE
-  TPZ STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN THE KING'S SCHOOL NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
NEW ROADWAY
- DETAIL (PAGE 3 OF 5)

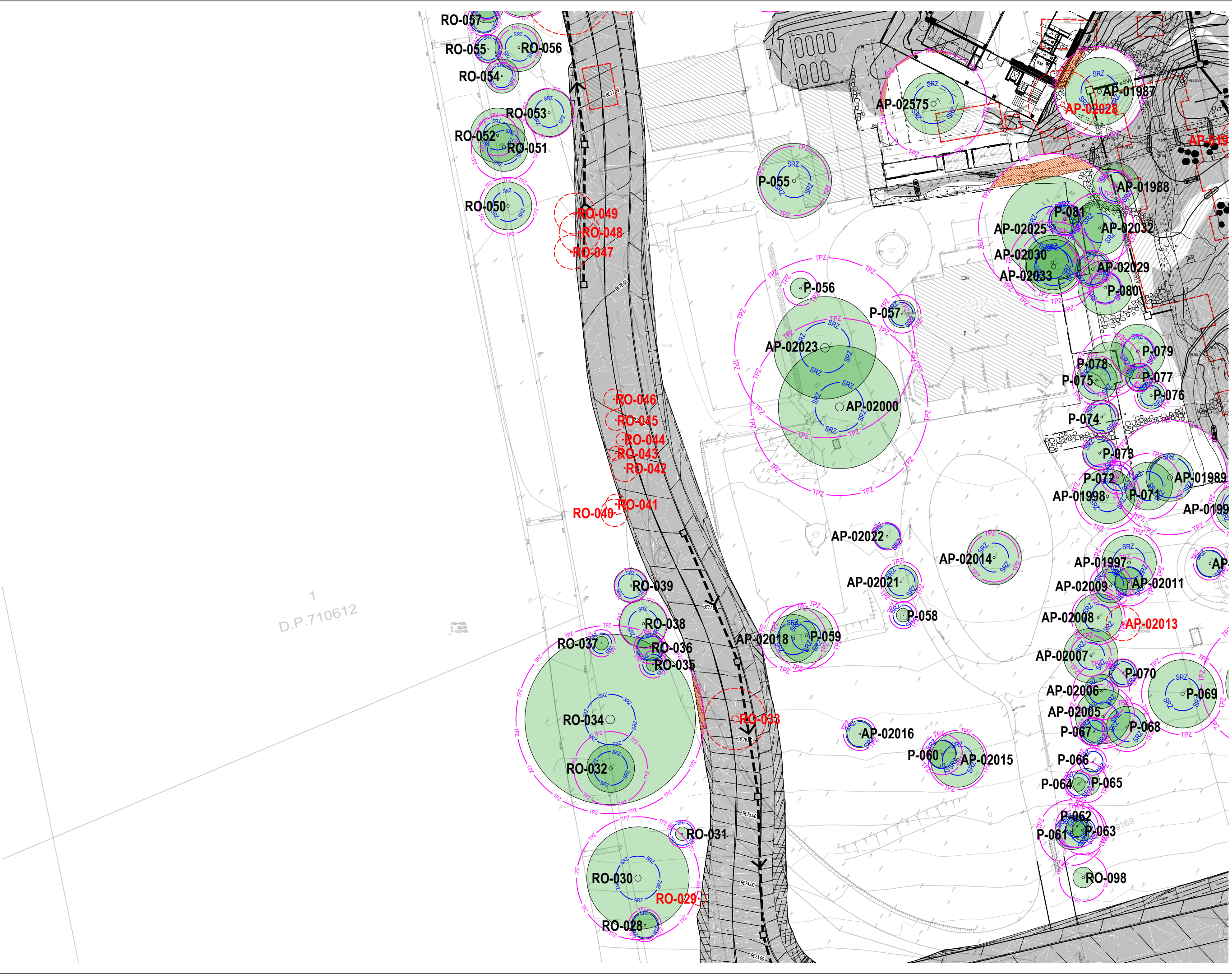
CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

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SHEET NUMBER F416_TLP_10 REVISION B









DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
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LEGEND

-  T1 EXISTING TREE TO BE RETAINED
-  T2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
-  STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

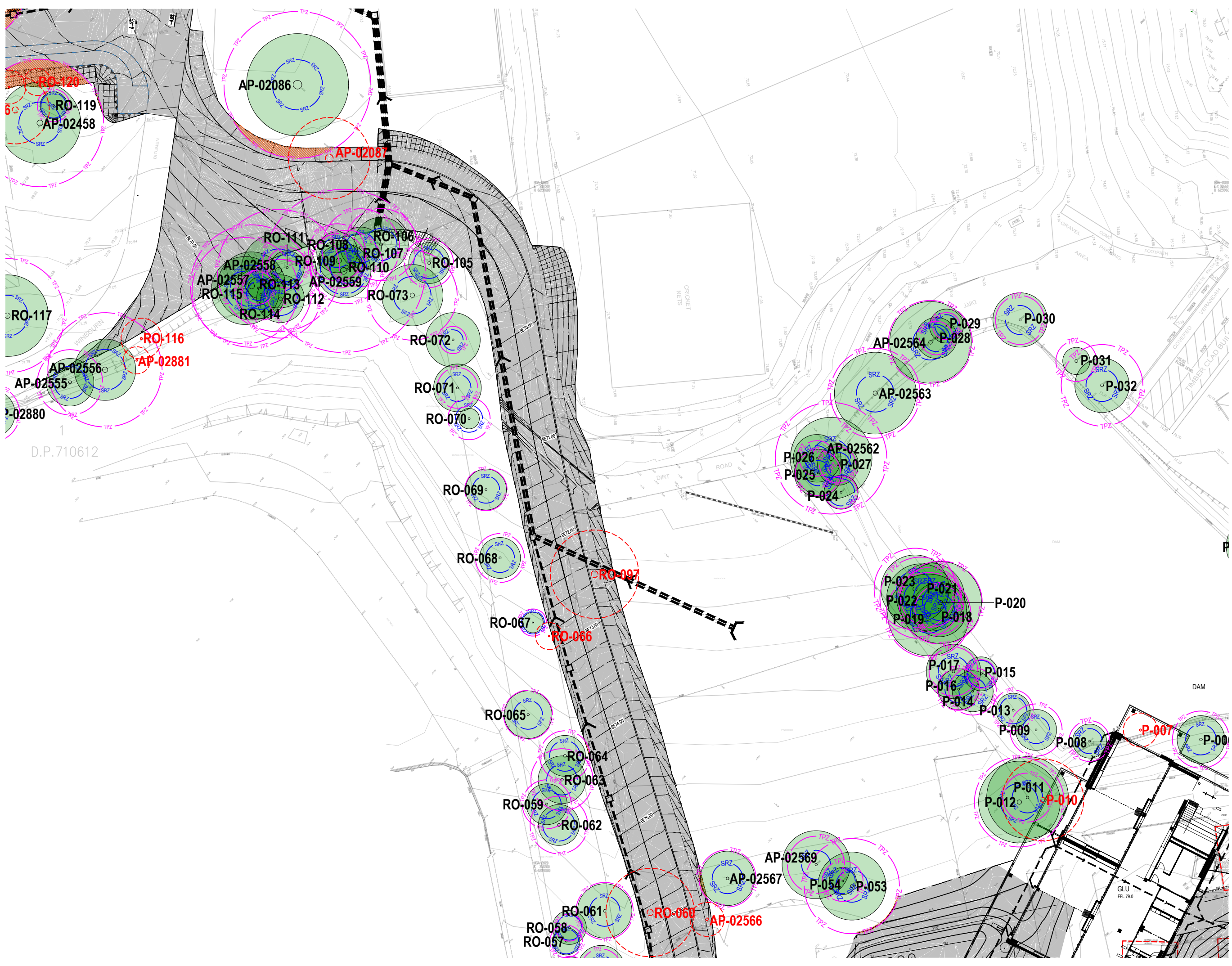
TREE LOCATION PLAN:
NEW ROADWAY
- DETAIL (PAGE 4 OF 5)

CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:500 @ A3
SHEET NUMBER F416_TLP_11 REVISION B



D.P.710612

DAM

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DIMENSIONS :
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Verify all dimensions on site prior to construction.

CIVIL STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
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LEGEND

- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION ZONE
- STRUCTURAL ROOT ZONE
- TPZ INCURSION ZONE
- DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
NEW ROADWAY
- DETAIL (PAGE 5 OF 5)

CLIENT

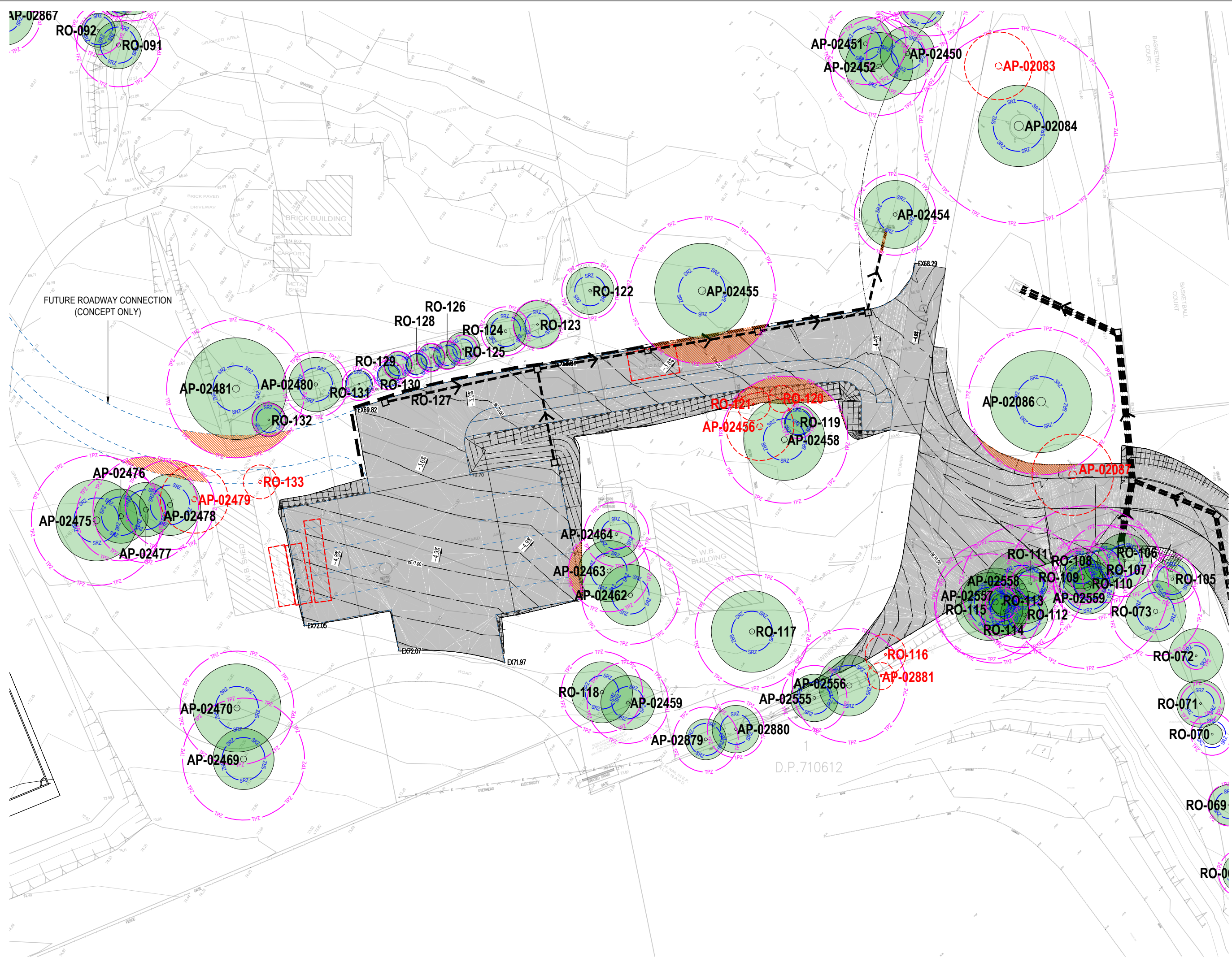


Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:500 @ A3

SHEET NUMBER
F416_TLP_12

REVISION
B



APPENDIX 9: TREE ASSESSMENT DATA - The King's School (Sport Pavilion)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02506	<i>Cinnamomum camphora</i> Camphor Laurel	12	14	400	600	500		1100	10.53	3.44	M	Good	Good	Long 40yrs +	Medium	High	Within footprint of proposed building	Remove	Crown rased
AP-02507	<i>Eucalyptus tereticornis</i> Forest Red Gum	14	10	700				750	8.40	2.93	M	Good	Average	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Included, co-dominant leaders. Wound from tear out
AP-02508	<i>Eucalyptus tereticornis</i> Forest Red Gum	3	2	200				200	2.40	1.68	SM	Poor	Poor	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Loss of leader
AP-02509	<i>Eucalyptus tereticornis</i> Forest Red Gum	8	10	650				700	7.80	2.85	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Nil
AP-02956	<i>Eucalyptus tereticornis</i> Forest Red Gum	9	6	350				400	4.20	2.25	SM	Average	Average	Long 40yrs +	Low	Medium	Within footprint of proposed building	Remove	Nil
AP-02958	<i>Eucalyptus tereticornis</i> Forest Red Gum	7	5	200				300	2.40	2.00	SM	Average	Poor	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Canker at union of co-dominant leaders

Tree Inspection Data Notes & Terminology**Tree No. (Tree Number)**

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);

- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

IM – Immature refers to well established but juvenile tree

SM – Semi Mature, a tree that has not grown to mature size

M – Mature, a tree that has reached mature size and will slowly increase in size over time

OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches

S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

Good - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

Average - the tree appears stressed and has some crown dieback, and/ or a few epicormic shoots, and/ or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

Fair - the tree may have areas of crown dieback, and/ or epicormic shoots, and/ or areas of decay, and/ or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

Poor - the tree may have large areas of crown dieback, and/ or many epicormic shoots, and/ or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50) \div 0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)® (IACA 2010)®.

1. High Significance in Landscape**2. Medium Significance in Landscape****3. Low Significance in Landscape****Retention Value (RV)**

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to overage condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites.

Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after Barrell 1996, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

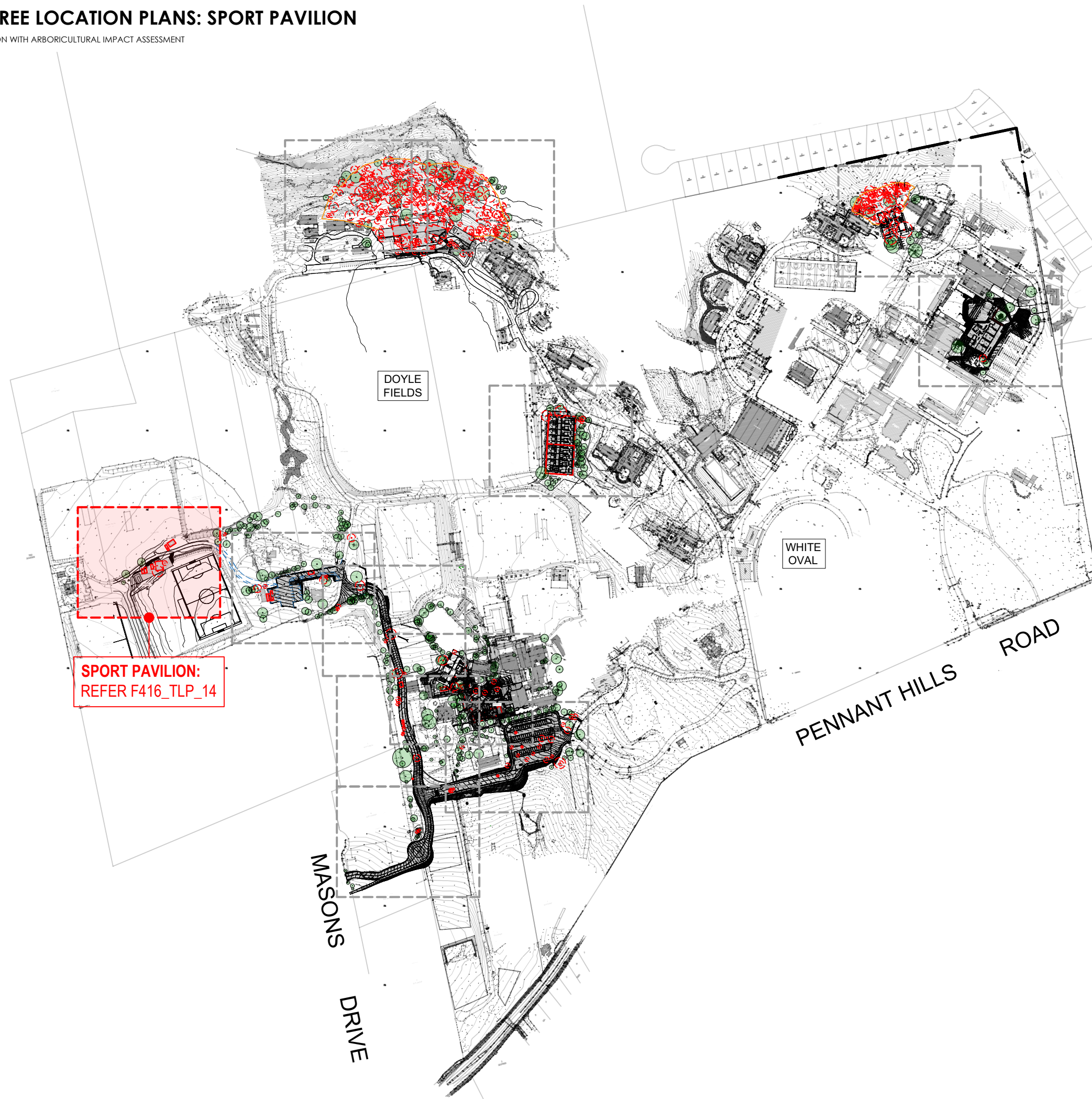
The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ): The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

- <10% - negligible incursion
- >10 - <15% - low to moderate level of incursion
- >15 - <20% - moderate level of incursion
- >20 - <25% - moderate to high level of incursion
- >25 - <35% - high level of incursion
- >35% - significant incursion within the TPZ

APPENDIX 10 - TREE LOCATION PLANS: SPORT PAVILION

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



CPS

CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

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SURRY HILLS NSW 2010
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INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
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B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
SPORT PAVILION
- SITE CONTEXT

CLIENT



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale









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SHEET NUMBER F416_TLP_13 REVISION B

DIMENSIONS :
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LEGEND

-  **T1** EXISTING TREE TO BE RETAINED
-  **T2** EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
-  STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

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PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
SPORT PAVILION
- DETAIL

CLIENT

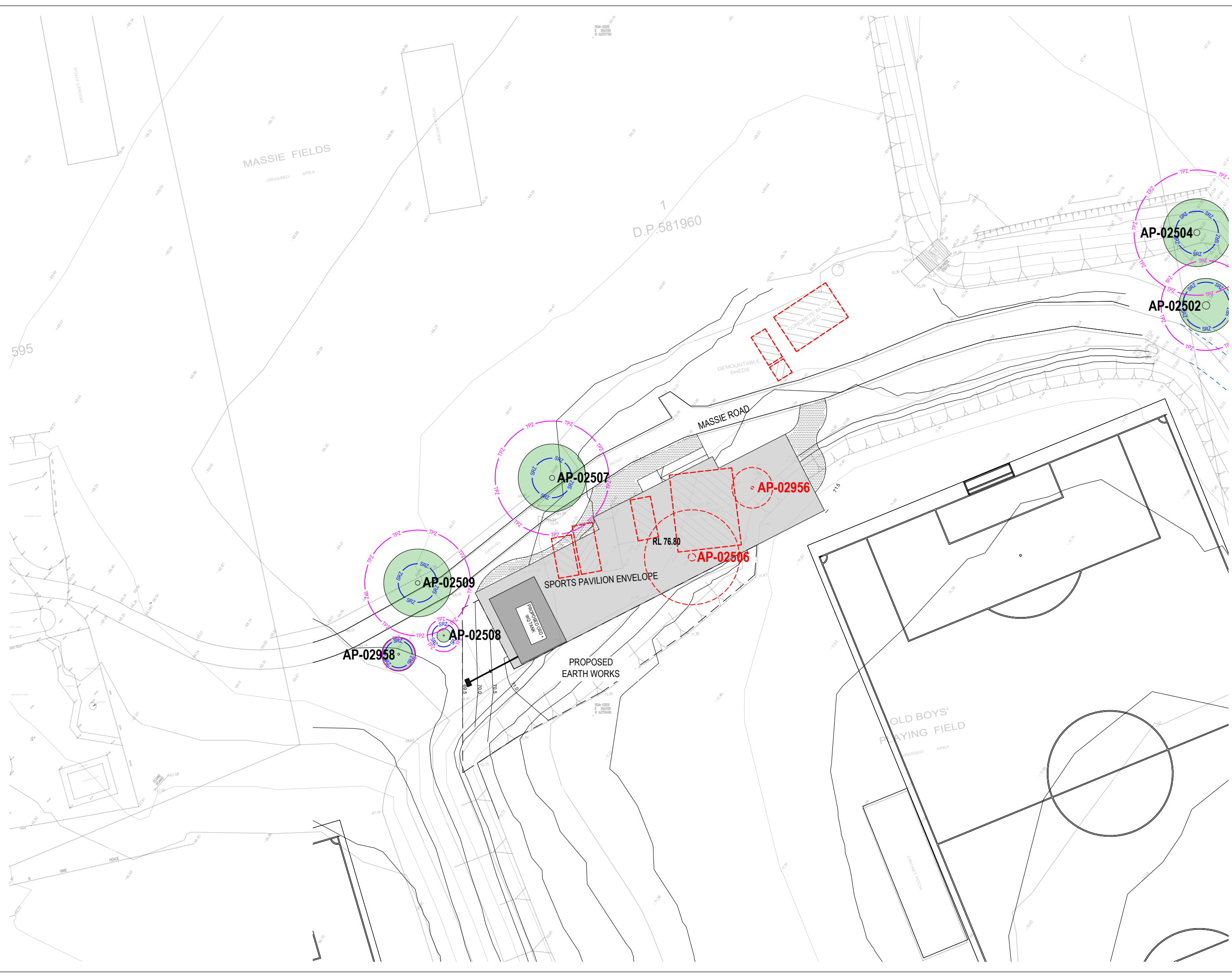


Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:500 @ A3

SHEET NUMBER
F416_TLP_14

REVISION
B



APPENDIX 11: TREE ASSESSMENT DATA - The King's School (Day Boy House)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01724	<i>Angophora costata</i> Sydney Red Gum	14	12	550				700	6.60	2.85	M	Good	Good	Long 40yrs +	Medium	High	Major (43%) TPZ incursion + Major (36%) SRZ incursion	Remove	Nil.
AP-01727	<i>Angophora costata</i> Sydney Red Gum	16	8	450				550	5.40	2.57	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed building	Remove	Forest form. Minor deadwood
AP-01728	<i>Melia azedarach</i> White Cedar	10	2	350				450	4.20	2.37	M	Poor	Poor	Very Short <5yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Heavily impacted by vine
AP-01729	<i>Eucalyptus pilularis</i> Blackbutt	20	10	800				850	9.60	3.09	M	Poor	Fair	Short 5-15yrs	Medium	Low	APZ Clearing	Remove	Decortivating bark
AP-01731	<i>Eucalyptus pilularis</i> Blackbutt	19	16	900				1100	10.80	3.44	M	Average	Good	Long 40yrs +	High	High	APZ Clearing	Remove	Good form
AP-01733	<i>Pinus patula</i> Mexican Weeping Pine	14	6	450				600	5.40	2.67	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	Within footprint of proposed building	Remove	Deadwood
AP-01734	<i>Eucalyptus pilularis</i> Blackbutt	18	13	850				950	10.20	3.24	M	Average	Average	Long 40yrs +	High	High	Within footprint of proposed hard paving area	Remove	Dominant
AP-01735	<i>Angophora costata</i> Sydney Red Gum	20	13	550				650	6.60	2.76	M	Average	Average	Medium 15-40yrs	High	High	Within footprint of proposed building	Remove	Deadwood, thinning crown
AP-01736	<i>Eucalyptus paniculata</i> Grey Ironbark	20	16	750				900	9.00	3.17	M	Good	Good	Long 40yrs +	High	High	Major (38%) TPZ incursion + Major (11%) SRZ incursion	Remove	Minor deadwood
AP-01738	<i>Eucalyptus fibrosa</i> Red Ironbark	20	13	550				650	6.60	2.76	M	Average	Average	Medium 15-40yrs	High	High	Minor (1%) TPZ incursion	Retain & Protect	Large wound to trunk. Good reaction wood
AP-01739	<i>Quercus robur</i> English Oak	10	11	300	250			350	4.69	2.13	M	Good	Good	Long 40yrs +	Medium	High	No works proposed within TPZ	Retain & Protect	Minor deadwood
AP-01740	<i>Eucalyptus paniculata</i> Grey Ironbark	20	16	700				800	8.40	3.01	M	Average	Average	Long 40yrs +	High	High	Minor (<1%) TPZ incursion	Retain & Protect	Minor dieback. Previous pruning - lopped branches. Rope brace to inclusion in upper canopy
AP-01743	<i>Eucalyptus paniculata</i> Grey Ironbark	22	10	700				900	8.40	3.17	M	Average	Average	Medium 15-40yrs	High	High	Minor (<1%) TPZ incursion	Retain & Protect	Borer damage. Decortivating bark
AP-01744	<i>Triadica sebifera</i> Chinese Tallow	13	8	550				650	6.60	2.76	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Crown raised
AP-01745	<i>Nyssa sylvatica</i> Tupelo	11	9	450				550	5.40	2.57	M	Average	Average	Medium 15-40yrs	Medium	Medium	Minor (1%) TPZ incursion	Retain & Protect	Deciduous
AP-01746	<i>Angophora costata</i> Sydney Red Gum	21	20	900				1100	10.80	3.44	M	Good	Good	Long 40yrs +	High	High	Within footprint of proposed building	Remove	Minor deadwood. Co-dominant leaders @ 12m - rope brace
AP-01747	<i>Angophora costata</i> Sydney Red Gum	16	12	400				500	4.80	2.47	M	Average	Good	Long 40yrs +	Medium	High	Within footprint of proposed building	Remove	Co-dominant
AP-01748	<i>Angophora costata</i> Sydney Red Gum	14	10	400				500	4.80	2.47	M	Average	Good	Long 40yrs +	Medium	High	Within footprint of proposed building	Remove	Co-dominant
AP-01753	<i>Angophora costata</i> Sydney Red Gum	13	4	250	250			550	4.24	2.57	M	Poor	Fair	Short 5-15yrs	Low	Low	Within footprint of proposed building	Remove	Major canopy dieback
AP-01756	<i>Angophora costata</i> Sydney Red Gum	13	8	500				550	6.00	2.57	M	Average	Average	Long 40yrs +	Medium	High	Major (26%) TPZ incursion + Major (27%) SRZ incursion	Remove	Butress covered in mulch
AP-01759	<i>Fraxinus excelsior</i> 'Aurea' Golden Ash	12	12	550				650	6.60	2.76	M	Average	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Epicormic shoots

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01797	<i>Angophora costata</i> Sydney Red Gum	20	18	800				1000	9.60	3.31	M	Fair	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Reduced foliage density
D-001	<i>Lagerstroemia indica</i> Crepe Myrtle	6	5	200	200	100		300	3.60	2.00	M	Average	Good	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Canopy covered with vine
D-002	<i>Angophora costata</i> Sydney Red Gum	20	12	400				500	4.80	2.47	M	Average	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Supressed by vine. Treehouse
D-003	<i>Angophora costata</i> Sydney Red Gum	20	13	700				800	8.40	3.01	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Treehouse
D-004	<i>Angophora costata</i> Sydney Red Gum	18	10	500				600	6.00	2.67	S	Poor	Poor	Very Short <5yrs	Medium	Low	AP2 Clearing	Remove	Failed central leader. In severe decline
D-005	<i>Angophora costata</i> Sydney Red Gum	10	5	200				250	2.40	1.85	SM	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Failed central leader
D-006	<i>Pittosporum undulatum</i> Sweet Pittosporum	8	5	200				250	2.40	1.85	M	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-007	<i>Ligustrum lucidum</i> Broad-leaved Privet	9	5	200				250	2.40	1.85	SM	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-008	<i>Eucalyptus punctata</i> Grey Gum	25	18	900				1100	10.80	3.44	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Vine ascending trunk to 14m
D-009	<i>Ligustrum Lucidum</i> Broad-leaved Privet	7	4	100				100	2.00	1.50	SM	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-010	<i>Angophora costata</i> Sydney Red Gum	18	11	450				550	5.40	2.57	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Previous included leader failure. Dieback + vine in canopy
D-011	<i>Angophora costata</i> Sydney Red Gum	16	7	300				350	3.60	2.13	M	Average	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Co-dominant leaders
D-012	<i>Pittosporum undulatum</i> Sweet Pittosporum	11	7	300				350	3.60	2.13	M	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-013	<i>Pittosporum undulatum</i> Sweet Pittosporum	11	6	300				350	3.60	2.13	M	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-014	<i>Cinnamomum camphora</i> Camphor Laurel	12	13	500	400	400	300	900	9.75	3.17	M	Good	Fair	Long 40yrs +	Low	Medium	Within footprint of proposed building	Remove	Multiple included, co-dominant leaders from base
D-015	<i>Morus sp.</i> Mulberry	7	5	150	150	100	250	300	4.11	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Supressed
D-016	<i>Ligustrum Lucidum</i> Broad-leaved Privet	9	6	200	200			350	3.39	2.13	M	Good	Fair	Medium 15-40yrs	Low	Low	Major (30%) TPZ incursion + Major (25%) SRZ incursion	Remove	Bifucated from 1m. Weed species
D-017	<i>Ligustrum Lucidum</i> Broad-leaved Privet	11	8	400	300	200		600	6.46	2.67	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Multi-stemmed from base. Weed species
D-018	<i>Ligustrum Lucidum</i> Broad-leaved Privet	11	7	450	400			700	7.22	2.85	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Multi-stemmed from base. Weed species
D-019	<i>Ligustrum Lucidum</i> Broad-leaved Privet	8	3	100				100	2.00	1.50	SM	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-020	<i>Ligustrum Lucidum</i> Broad-leaved Privet	12	9	400	300	400		800	7.68	3.01	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-021	<i>Angophora costata</i> Sydney Red Gum	17	10	350				450	4.20	2.37	M	Good	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
D-022	<i>Cinnamomum camphora</i> Camphor Laurel	9	8	300				350	3.60	2.13	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
D-023	<i>Cinnamomum camphora</i> Camphor Laurel	15	12	450	450			700	7.64	2.85	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Included, co-dominant leaders from base
D-024	<i>Cinnamomum camphora</i> Camphor Laurel	9	10	300				350	3.60	2.13	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
D-025	<i>Cinnamomum camphora</i> Camphor Laurel	9	8	300				350	3.60	2.13	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
D-026	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	4	200				200	2.40	1.68	SM	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-027	<i>Cinnamomum camphora</i> Camphor Laurel	17	12	400	500			800	7.68	3.01	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
D-028	<i>Eucalyptus pilularis</i> Blackbutt	20	14	500				650	6.00	2.76	M	Average	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
D-029	<i>Eucalyptus pilularis</i> Blackbutt	25	16	800				1000	9.60	3.31	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
D-030	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	8	350	350	350		600	7.27	2.67	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-031	<i>Angophora costata</i> Sydney Red Gum	16	10	350				450	4.20	2.37	M	Good	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
D-032	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	8	200	350	100		400	4.98	2.25	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-033	<i>Eucalyptus pilularis</i> Blackbutt	16	8	500				600	6.00	2.67	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Reduced foliage density. Termites
D-034	<i>Angophora costata</i> Sydney Red Gum	9	4	200	150			300	3.00	2.00	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Co-dominant
D-035	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	5	150				200	2.00	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species
D-036	<i>Ligustrum lucidum</i> Broad-leaved Privet	7	4	100				150	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species
D-037	<i>Ligustrum lucidum</i> Broad-leaved Privet	7	4	150				200	2.00	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species
D-038	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	6	350				450	4.20	2.37	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species
D-039	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	8	350	300			450	5.53	2.37	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Multi-stemmed from base. Weed species
D-040	<i>Camellia sasanqua</i> Camellia	3	2	50	50	50	50	150	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge
D-041	<i>Camellia sasanqua</i> Camellia	3	3	100	50	50		150	2.00	1.50	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge
D-042	<i>Camellia sasanqua</i> Camellia	4	3	150				200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge
D-043	<i>Camellia sasanqua</i> Camellia	3	2	100				150	2.00	1.50	SM	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
D-044	<i>Camellia sasanqua</i> Camellia	3	2	150	100	50		250	2.24	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge
D-045	<i>Camellia sasanqua</i> Camellia	3	2	100	100	50	50	200	2.00	1.68	M	Fair	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge. Wisteria in canopy
D-046	<i>Camellia sasanqua</i> Camellia	3	2	50	50	50	50	200	2.00	1.68	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Planted to form hedge
D-047	<i>Eucalyptus resinifera</i> Red Mahogany	11	4	250				300	3.00	2.00	SM	Poor	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Slender form. Crown dieback
D-048	<i>Eucalyptus pilularis</i> Blackbutt	18	8	450				550	5.40	2.57	M	Fair	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Moderate deadwood
D-049	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	7	250	200	100		400	4.02	2.25	M	Good	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-050	<i>Ligustrum lucidum</i> Broad-leaved Privet	9	7	100	100	100	100	300	2.40	2.00	M	Good	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-051	<i>Angophora costata</i> Sydney Red Gum	16	7	400				450	4.80	2.37	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Reduced foliage density
D-052	<i>Pittosporum undulatum</i> Sweet Pittosporum	7	7	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Crown bias to east
D-053	<i>Glochidion ferdinandi</i> Cheese Tree	8	5	200				250	2.40	1.85	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Supressed
D-054	<i>Eucalyptus pilularis</i> Blackbutt	10	4	250				300	3.00	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender form
D-055	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	8	300				450	3.60	2.37	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Suckers
D-056	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	7	250	150	100		350	3.70	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-057	<i>Cinnamomum camphora</i> Camphor Laurel	13	5	250				300	3.00	2.00	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender form
D-058	<i>Angophora costata</i> Sydney Red Gum	19	10	650				750	7.80	2.93	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Reduced foliage density. Moderate deadwood
D-059	<i>Ligustrum lucidum</i> Broad-leaved Privet	10	8	250	100	100		300	3.45	2.00	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-060	<i>Ligustrum lucidum</i> Broad-leaved Privet	7	3	200				250	2.40	1.85	M	Good	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Suckers
D-061	<i>Eucalyptus resinifera</i> Red Mahogany	15	7	350				450	4.20	2.37	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Crown bias to west
D-062	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	7	200	200			400	3.39	2.25	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Bifurcated from base
D-063	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	7	350				400	4.20	2.25	OM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Weed species. Reduced foliage density
D-064	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	6	250	150			300	3.50	2.00	OM	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Bifurcated from base
D-065	<i>Ligustrum lucidum</i> Broad-leaved Privet	11	6	250				300	3.00	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
D-066	<i>Angophora costata</i> Sydney Red Gum	14	5	350				400	4.20	2.25	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender form. Reduced foliage density
D-067	<i>Pittosporum undulatum</i> Sweet Pittosporum	9	5	200				250	2.40	1.85	OM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Reduced foliage density. Impacted by vine
D-068	<i>Pittosporum undulatum</i> Sweet Pittosporum	8	4	200	150			300	3.00	2.00	OM	Poor	Fair	Very Short <5yrs	Low	Low	AP2 Clearing	Remove	Reduced foliage density. Impacted by vine
D-069	<i>Eucalyptus resinifera</i> Red Mahogany	19	10	500				600	6.00	2.67	M	Average	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Minor deadwood in upper crown
D-070	<i>Ligustrum lucidum</i> Broad-leaved Privet	13	8	450				550	5.40	2.57	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Suckers
D-071	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	8	400	250	100	100	600	5.91	2.67	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-072	<i>Ligustrum lucidum</i> Broad-leaved Privet	12	7	300	300	150		500	5.40	2.47	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-073	<i>Ligustrum lucidum</i> Broad-leaved Privet	11	6	250	200			450	3.84	2.37	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-074	<i>Ligustrum lucidum</i> Broad-leaved Privet	11	7	200	150	150	150	350	3.93	2.13	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Multi-stemmed from base
D-075	<i>Eucalyptus punctata</i> Grey Gum	22	12	750				850	9.00	3.09	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Moderate level of deadwood & epicormic growth in upper crown
D-076	<i>Ligustrum lucidum</i> Broad-leaved Privet	10	5	300				400	3.60	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Slender form
D-077	<i>Eucalyptus punctata</i> Grey Gum	17	6	450				550	5.40	2.57	M	Average	Fair	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender form. Multiple past branch failures
D-078	<i>Angophora costata</i> Sydney Red Gum	15	7	300				450	3.60	2.37	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender form. Failed co-dominant leader
D-079	<i>Acacia parramattensis</i> Parramatta Wattle	9	3	200				250	2.40	1.85	OM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	In decline
D-080	<i>Eucalyptus pilularis</i> Blackbutt	24	16	1100				1300	13.20	3.69	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Advanced specimen. Dominant
D-081	<i>Cinnamomum camphora</i> Camphor Laurel	10	4	200				250	2.40	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender form
D-082	<i>Cinnamomum camphora</i> Camphor Laurel	12	5	250				300	3.00	2.00	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender form
D-083	<i>Ligustrum lucidum</i> Broad-leaved Privet	8	4	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed species. Slender form
D-084	<i>Pittosporum undulatum</i> Sweet Pittosporum	10	6	250				300	3.00	2.00	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
D-085	<i>Angophora costata</i> Sydney Red Gum	10	7	350				450	4.20	2.37	OM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Reduced foliage density. Suppressed
D-086	<i>Angophora costata</i> Sydney Red Gum	18	12	650				750	7.80	2.93	M	Average	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Moderate level of deadwood

Tree Inspection Data Notes & Terminology**Tree No. (Tree Number)**

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

The trees height and crown spread is recorded in metres (m):

The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

IM – Immature refers to well established but juvenile tree

SM – Semi Mature, a tree that has not grown to mature size

M – Mature, a tree that has reached mature size and will slowly increase in size over time

OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches

S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

Good - the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

Average - the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

Fair - the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

Poor - the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50) \div 0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)® (IACA 2010)®.

1. High Significance in Landscape**2. Medium Significance in Landscape****3. Low Significance in Landscape****Retention Value (RV)**

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. If works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after *Barrell 1996*, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned – Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ): The area required for tree stability, Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

<10% - negligible incursion

>10 - <15% - low to moderate level of incursion

>15 - <20% - moderate level of incursion

>20 - <25% - moderate to high level of incursion

>25 - <35% - high level of incursion

>35% - significant incursion within the TPZ

APPENDIX 12 - TREE LOCATION PLANS: DAY BOY HOUSE

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



DAY BOY HOUSE:
REFER F416_TLP_16



CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

LEVEL 3
397 RILEY STREET
SURRY HILLS NSW 2010
PO BOX 1074 BROADWAY NSW 2007
TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN

THE KING'S SCHOOL
NORTH PARRAMATTA

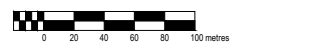
DRAWING TITLE

TREE LOCATION PLAN:
DAY BOY HOUSE
- SITE CONTEXT

CLIENT

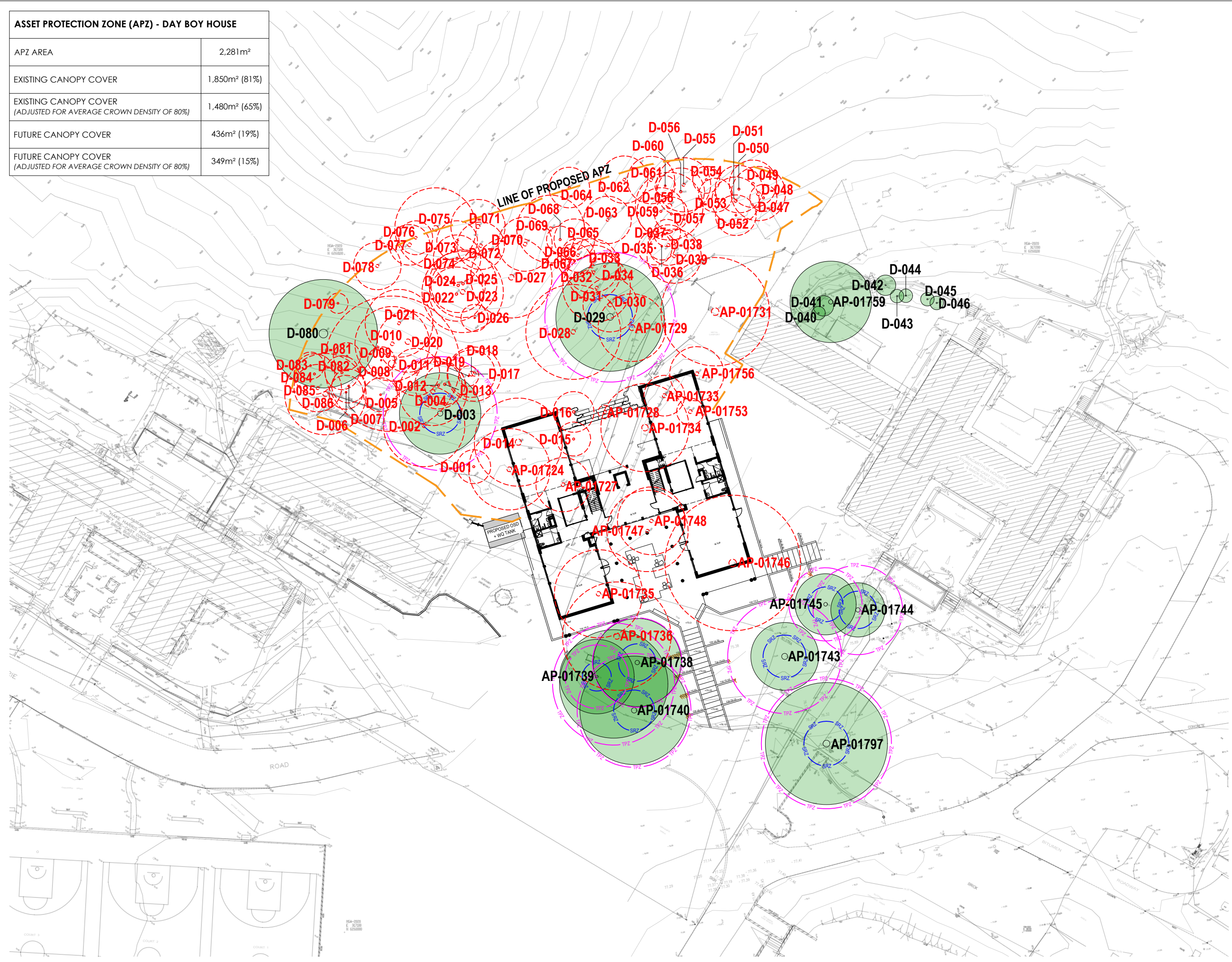


Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:5000 @ A3
SHEET NUMBER F416_TLP_15 REVISION B

ASSET PROTECTION ZONE (APZ) - DAY BOY HOUSE	
APZ AREA	2,281m ²
EXISTING CANOPY COVER	1,850m ² (81%)
EXISTING CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	1,480m ² (65%)
FUTURE CANOPY COVER	436m ² (19%)
FUTURE CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	349m ² (15%)



CPS

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ARBORICULTURE

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TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

LEGEND

- T1 EXISTING TREE TO BE RETAINED
- T2 EXISTING TREE TO BE REMOVED
- TREE PROTECTION ZONE
- STRUCTURAL ROOT ZONE
- TPZ INCURSION ZONE
- DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction
PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE

TREE LOCATION PLAN:
DAY BOY HOUSE
- DETAIL



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale

1:500 @ A3

SHEET NUMBER
F416_TLP_16

REVISION
B

APPENDIX 13: TREE ASSESSMENT DATA - The King's School (Boarding House)

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure/ Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-01518	<i>Liquidambar styraciflua</i> Sweetgum	10	8	400				500	4.80	2.47	M	Good	Good	Medium 15-40yrs	Medium	Medium	Within footprint of proposed field retaining walls	Remove	Nil
AP-01519	<i>Syncarpia glomulifera</i> Turpentine	9	4	450				500	5.40	2.47	M	Average	Average	Medium 15-40yrs	Medium	Medium	Within footprint of proposed building	Remove	Co-dominant
AP-01520	<i>Syncarpia glomulifera</i> Turpentine	9	6	550				600	6.60	2.67	M	Average	Fair	Long 40yrs +	Low	Medium	Major (44%) TPZ incursion + Major (36%) SRZ incursion	Remove	Suppressed
AP-01521	<i>Syncarpia glomulifera</i> Turpentine	9	4	450				500	5.40	2.47	M	Average	Fair	Long 40yrs +	Low	Medium	Major (33%) TPZ incursion + Major (15%) SRZ incursion	Remove	Suppressed
AP-01522	<i>Eucalyptus pilularis</i> Blackbutt	15	12	700				800	8.40	3.01	M	Good	Good	Medium 15-40yrs	High	High	Major (46%) TPZ incursion + Major (18%) SRZ incursion	Remove	Prominent
AP-01523	<i>Syncarpia glomulifera</i> Turpentine	11	5	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	Low	Medium	Within footprint of proposed driveway	Remove	Nil
AP-01525	<i>Angophora costata</i> Sydney Red Gum	12	6	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	Low	Medium	Within footprint of proposed stair structure	Remove	Nil
AP-01526	<i>Angophora costata</i> Sydney Red Gum	9	5	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	Low	Medium	Within footprint of proposed driveway	Remove	Nil
AP-01528	<i>Syncarpia glomulifera</i> Turpentine	11	4	450				450	5.40	2.37	M	Average	Fair	Medium 15-40yrs	Medium	Medium	Major (60%) TPZ incursion + Major (23%) SRZ incursion	Remove	Crown raised
AP-01529	<i>Grevillea robusta</i> Silky Oak	12	5	400				500	4.80	2.47	M	Average	Average	Short 5-15yrs	Medium	Low	Major (40%) TPZ incursion + Major (28%) SRZ incursion	Remove	Nil
AP-01530	<i>Angophora costata</i> Sydney Red Gum	13	10	450	450			700	7.64	2.85	M	Average	Average	Medium 15-40yrs	High	High	Major (20%) TPZ incursion	Retain & Protect	Co-dominant. Prominent
AP-01531	<i>Eucalyptus pilularis</i> Blackbutt	13	8	550				600	6.60	2.67	M	Average	Average	Long 40yrs +	Medium	High	Major (30%) TPZ incursion + Minor (5%) SRZ incursion	Remove	Nil
AP-01532	<i>Eucalyptus pilularis</i> Blackbutt	13	6	550				700	6.60	2.85	M	Average	Fair	Medium 15-40yrs	Medium	Medium	Within footprint of proposed driveway	Remove	Basal flare
AP-02309	<i>Eucalyptus pilularis</i> Blackbutt	17	16	600				750	7.20	2.93	M	Fair	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Branch failures. Reduced foliage density
AP-02314	<i>Eucalyptus pilularis</i> Blackbutt	18	12	800				900	9.60	3.17	OM	Poor	Fair	Short 5-15yrs	High	Low	Major (28%) TPZ incursion + Minor (2%) SRZ incursion	Remove	Major canopy dieback
AP-02315	<i>Syncarpia glomulifera</i> Turpentine	13	5	500				650	6.00	2.76	M	Average	Good	Long 40yrs +	Low	Medium	Major (28%) TPZ incursion + Major (18%) SRZ incursion	Remove	Nil
AP-02316	<i>Syncarpia glomulifera</i> Turpentine	12	5	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
AP-02318	<i>Syncarpia glomulifera</i> Turpentine	10	6	400				450	4.80	2.37	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Good form
AP-02319	<i>Eucalyptus pilularis</i> Blackbutt	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	AP2 Clearing	Remove	Dead
AP-02320	<i>Eucalyptus pilularis</i> Blackbutt	20	15	700				850	8.40	3.09	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Advanced specimen
AP-02321	<i>Syncarpia glomulifera</i> Turpentine	12	6	450	350			600	6.84	2.67	M	Good	Good	Long 40yrs +	Low	Medium	Within footprint of proposed building	Remove	Multi-stem

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02322	<i>Eucalyptus resinifera</i> Red Mahogany	16	10	650				750	7.80	2.93	M	Fair	Average	Medium 15-40yrs	Medium	Medium	Major (42%) TPZ incursion + Major (32%) SRZ incursion	Remove	Impacted by wisteria
AP-02323	<i>Syncarpia glomulifera</i> Turpentine	12	6	600				700	7.20	2.85	OM	Poor	Fair	Short 5-15yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Major deadwood
AP-02324	<i>Robinia pseudoacacia</i> Black Locust	5	7	250				300	3.00	2.00	OM	Poor	Fair	Short 5-15yrs	Low	Low	Within footprint of proposed building	Remove	Major deadwood
AP-02325	<i>Robinia pseudoacacia</i> Black Locust	8	3	200				250	2.40	1.85	OM	Poor	Fair	Short 5-15yrs	Low	Low	Within footprint of proposed building	Remove	Major deadwood
AP-02326	<i>Syncarpia glomulifera</i> Turpentine	11	6	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	Medium	High	Within footprint of proposed fied retaining walls	Remove	Nil
AP-02327	<i>Syncarpia glomulifera</i> Turpentine	6	5	300				400	3.60	2.25	SM	Average	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed building	Remove	Lopped
AP-02328	<i>Eucalyptus pilularis</i> Blackbutt	14	8	400				550	4.80	2.57	M	Average	Average	Long 40yrs +	Medium	High	Major (63%) TPZ incursion + Major (34%) SRZ incursion	Remove	Nil
AP-02329	<i>Syncarpia glomulifera</i> Turpentine	12	8	450	400			600	7.22	2.67	M	Average	Average	Long 40yrs +	Medium	High	Within footprint of proposed hard paving area	Remove	Nil
AP-02330	<i>Eucalyptus eugenioides</i> Thin-leaved Stringybark	9	6	400				450	4.80	2.37	M	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Nil
AP-02331	<i>Syncarpia glomulifera</i> Turpentine	11	8	500	600			800	9.37	3.01	M	Good	Average	Long 40yrs +	Medium	High	Within footprint of proposed driveway	Remove	Nil
AP-02332	<i>Syncarpia glomulifera</i> Turpentine	9	5	350	250	200		450	5.69	2.37	M	Fair	Fair	Long 40yrs +	Low	Medium	Within footprint of proposed building	Remove	Multi trunk
AP-02333	<i>Syncarpia glomulifera</i> Turpentine	12	8	600				750	7.20	2.93	M	Good	Average	Long 40yrs +	Medium	High	Within footprint of proposed driveway	Remove	Dominant
AP-02335	<i>Syncarpia glomulifera</i> Turpentine	11	4	450				500	5.40	2.47	M	Good	Good	Long 40yrs +	Low	Medium	Within footprint of proposed hard paving area	Remove	Nil
AP-02337	<i>Corymbia gummifera</i> Red Bloodwood	17	10	550	450			800	8.53	3.01	M	Fair	Good	Medium 15-40yrs	High	High	Within footprint of proposed building	Remove	Reduced canopy
AP-02338	<i>Syncarpia glomulifera</i> Turpentine	11	5	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	Low	Medium	Major (18%) TPZ incursion	Remove	Nil
AP-02339	<i>Syncarpia glomulifera</i> Turpentine	6	4	450	300			650	6.49	2.76	M	Average	Poor	Medium 15-40yrs	Low	Low	Major (30%) TPZ incursion + Major (30%) SRZ incursion	Remove	Topped
AP-02343	<i>Ulmus parvifolia</i> Chinese Elm	5	8	400	350			500	6.38	2.47	M	Average	Good	Medium 15-40yrs	Low	Low	Within footprint of proposed retaining wall	Remove	Nil
AP-02344	<i>Eucalyptus pilularis</i> Blackbutt	16	10	800				900	9.60	3.17	M	Good	Average	Long 40yrs +	High	High	Within footprint of proposed building	Remove	Previous pruning events
AP-02345	<i>Syncarpia glomulifera</i> Turpentine	13	5	450				550	5.40	2.57	M	Good	Average	Long 40yrs +	Low	Medium	Major (29%) TPZ incursion + Major (14%) SRZ incursion	Remove	Suppressed
AP-02346	<i>Eucalyptus pilularis</i> Blackbutt	18	8	600				700	7.20	2.85	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
AP-02347	<i>Eucalyptus pilularis</i> Blackbutt	18	10	700				850	8.40	3.09	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
AP-02348	<i>Eucalyptus pilularis</i> Blackbutt	17	7	550				650	6.60	2.76	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
AP-02349	<i>Eucalyptus pilularis</i> Blackbutt	16	8	650				700	7.80	2.85	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
AP-02351	<i>Eucalyptus resinifera</i> Red Mahogany	14	12	500				600	6.00	2.67	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Good form
AP-02352	<i>Syncarpia glomulifera</i> Turpentine	7	6	150				250	2.00	1.85	SM	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
AP-02353	<i>Angophora costata</i> Sydney Red Gum	12	5	400				500	4.80	2.47	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Topped
AP-02369	<i>Eucalyptus pilularis</i> Blackbutt	18	12	800				900	9.60	3.17	M	Fair	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Nil
AP-02370	<i>Syncarpia glomulifera</i> Turpentine	13	7	400	350	350		600	7.64	2.67	M	Poor	Fair	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Multi trunk, Major canopy dieback
AP-02731	<i>Eucalyptus pilularis</i> Blackbutt	16	9	450				550	5.40	2.57	M	Fair	Average	Long 40yrs +	Medium	High	Minor (8%) TPZ incursion + AP2 Clearing	Remove	Asymmetric canopy
AP-02732	<i>Eucalyptus pilularis</i> Blackbutt	18	8	500				600	6.00	2.67	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Slender forest form
AP-02733	<i>Eucalyptus sp.</i> Eucalyptus	-	-	-	-	-	-	-	-	-	-	-	-	Dead	Low	Priority for Removal	AP2 Clearing	Remove	Dead
AP-02734	<i>Eucalyptus pilularis</i> Blackbutt	18	9	500				600	6.00	2.67	M	Poor	Fair	Short 5-15yrs	High	Low	AP2 Clearing	Remove	Canopy dieback
AP-02735	<i>Eucalyptus pilularis</i> Blackbutt	20	18	700				800	8.40	3.01	M	Average	Fair	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Good form. Large cavity @ 8m
AP-02853	<i>Pittosporum undulatum</i> Sweet Pittosporum	6	5	200				300	2.40	2.00	M	Average	Average	Short 5-15yrs	Low	Low	Within footprint of proposed driveway	Remove	Nil
AP-03017	<i>Angophora costata</i> Sydney Red Gum	10	5	300				400	3.60	2.25	SM	Good	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed driveway	Remove	Nil
B-001	<i>Malus floribunda</i> Japanese Crab Apple	3	7	100	100	150		300	2.47	2.00	OM	Fair	Poor	Short 5-15yrs	Low	Low	Within footprint of proposed building	Remove	Over mature
B-002	<i>Phoenix canariensis</i> Canary Island Date Palm	3	4	400				500	3.00	N/A	SM	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Self seeded
B-003	<i>Acacia floribunda</i> White Sally Wattle	5	5	100				200	2.00	1.68	SM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Nil
B-004	<i>Photinia serratifolia</i> Chinese Photinia	5	4	200				250	2.40	1.85	SM	Fair	Fair	Short 5-15yrs	Low	Low	Demolition works	Remove	Nil
B-005	<i>Acer palmatum</i> Japanese Maple	3	5	150	100	100	100	300	2.75	2.00	M	Average	Average	Short 5-15yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Nil
B-006	<i>Acer negundo</i> Box Elder	4	6	250	200			400	3.84	2.25	M	Average	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Weed
B-007	<i>Ligustrum lucidum</i> Broad-leaved Privet	6	7	200	250	100	100	450	4.20	2.37	M	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed building	Remove	Weed
B-008	<i>Camellia sasanqua</i> Camellia	6	4	150	100			200	2.16	1.68	M	Fair	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed building	Remove	Suppressed
B-009	<i>Cupressus sempervirens</i> Mediterranean Cypress	6	1	150				200	2.00	1.68	M	Average	Average	Short 5-15yrs	Low	Low	Within footprint of proposed building	Remove	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-010	<i>Eucalyptus pilularis</i> Blackbutt	5	3	200				250	2.40	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	Major (25%) TPZ incursion + Minor (4%) SRZ incursion	Remove	Suppressed
B-011	<i>Eucalyptus pilularis</i> Blackbutt	6	4	150				250	2.00	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed hard paving area	Remove	Suppressed
B-012	<i>Corymbia gummifera</i> Red Bloodwood	5	3	150				200	2.00	1.68	SM	Fair	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed driveway	Remove	Suppressed
B-013	<i>Phoenix canariensis</i> Canary Island Date Palm	5	6	450				500	4.00	N/A	SM	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed driveway	Remove	Self seeded
B-014	<i>Ulmus parvifolia</i> Chinese Elm	4	7	250	200			400	3.84	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	Within footprint of proposed building	Remove	Nil
B-015	<i>Syncarpia glomulifera</i> Turpentine	7	4	150	200	200		400	3.84	2.25	SM	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-016	<i>Syncarpia glomulifera</i> Turpentine	8	4	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-017	<i>Eucalyptus pilularis</i> Blackbutt	18	12	500				600	6.00	2.67	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Past branch failures. Reduced foliage density
B-018	<i>Angophora costata</i> Sydney Red Gum	14	7	350				400	4.20	2.25	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil
B-019	<i>Eucalyptus pilularis</i> Blackbutt	19	12	700				800	8.40	3.01	M	Average	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Past branch failures
B-020	<i>Syncarpia glomulifera</i> Turpentine	13	10	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil
B-021	<i>Syncarpia glomulifera</i> Turpentine	6	4	200				250	2.40	1.85	SM	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Supressed. Torn leader
B-022	<i>Syncarpia glomulifera</i> Turpentine	9	5	300	300			450	5.09	2.37	M	Average	Fair	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-023	<i>Syncarpia glomulifera</i> Turpentine	10	6	250				450	3.00	2.37	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-024	<i>Eucalyptus pilularis</i> Blackbutt	15	7	500				600	6.00	2.67	M	Average	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Past branch failures
B-025	<i>Angophora costata</i> Sydney Red Gum	12	3	250				300	3.00	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Reduced canopy
B-026	<i>Angophora costata</i> Sydney Red Gum	12	5	350				400	4.20	2.25	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender forest form
B-027	<i>Angophora costata</i> Sydney Red Gum	12	5	300				350	3.60	2.13	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender forest form
B-028	<i>Eucalyptus resinifera</i> Red Mahogany	13	5	350				400	4.20	2.25	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-029	<i>Eucalyptus pilularis</i> Blackbutt	17	15	550				650	6.60	2.76	M	Average	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Nil
B-030	<i>Eucalyptus resinifera</i> Red Mahogany	8	3	150				200	2.00	1.68	SM	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-031	<i>Cinnamomum camphora</i> Camphor Laurel	8	5	150	150	150		450	3.12	2.37	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-032	<i>Syncarpia glomulifera</i> Turpentine	8	3	150				200	2.00	1.68	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender forest form
B-033	<i>Eucalyptus pilularis</i> Blackbutt	19	13	650				800	7.80	3.01	M	Average	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Large tree
B-034	<i>Angophora costata</i> Sydney Red Gum	8	5	250				350	3.00	2.13	SM	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-035	<i>Syncarpia glomulifera</i> Turpentine	9	4	200	150			250	3.00	1.85	SM	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Multi trunk
B-036	<i>Syncarpia glomulifera</i> Turpentine	9	5	200				250	2.40	1.85	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-037	<i>Syncarpia glomulifera</i> Turpentine	9	5	200	200	150		350	3.84	2.13	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Multi trunk
B-038	<i>Syncarpia glomulifera</i> Turpentine	10	5	450				550	5.40	2.57	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Trunk wound. Lean
B-039	<i>Corymbia gummifera</i> Red Bloodwood	9	2	250				350	3.00	2.13	M	Poor	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-040	<i>Eucalyptus pilularis</i> Blackbutt	18	12	550				700	6.60	2.85	M	Average	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Corrected lean. Reduced canopy
B-041	<i>Eucalyptus pilularis</i> Blackbutt	9	3	150				250	2.00	1.85	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender forest form
B-042	<i>Syncarpia glomulifera</i> Turpentine	8	4	250				350	3.00	2.13	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-043	<i>Eucalyptus pilularis</i> Blackbutt	16	10	450				550	5.40	2.57	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Branch tear-outs. Reduced canopy
B-044	<i>Eucalyptus pilularis</i> Blackbutt	17	11	450				500	5.40	2.47	M	Average	Fair	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Asymmetric canopy
B-045	<i>Syncarpia glomulifera</i> Turpentine	8	3	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Slender forest form
B-046	<i>Syncarpia glomulifera</i> Turpentine	12	5	300				400	3.60	2.25	M	Average	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Lean. Decortivating bark
B-047	<i>Eucalyptus pilularis</i> Blackbutt	14	4	300				350	3.60	2.13	SM	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender forest form
B-048	<i>Corymbia gummifera</i> Red Bloodwood	11	4	250				300	3.00	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Basal wound
B-049	<i>Syncarpia glomulifera</i> Turpentine	13	5	500				600	6.00	2.67	M	Average	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Multi-trunk
B-050	<i>Syncarpia glomulifera</i> Turpentine	14	6	350				400	4.20	2.25	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Good form
B-051	<i>Syncarpia glomulifera</i> Turpentine	11	3	250				350	3.00	2.13	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-052	<i>Corymbia gummifera</i> Red Bloodwood	12	6	450				500	5.40	2.47	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Deadwood
B-053	<i>Eucalyptus pilularis</i> Blackbutt	17	16	850				900	10.20	3.17	M	Average	Average	Long 40yrs +	High	High	Major (8%) TPZ incursion	Retain & Protect	Bifurcated from 2m

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-054	<i>Grevillea robusta</i> Silky Oak	12	5	300				400	3.60	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-055	<i>Eucalyptus pilularis</i> Blackbutt	16	10	500				550	6.00	2.57	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Asymmetric Canopy
B-056	<i>Morus sp.</i> Mulberry	8	6	200				250	2.40	1.85	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Weed
B-057	<i>Corymbia gummifera</i> Red Bloodwood	11	8	350				350	4.20	2.13	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Good form
B-058	<i>Corymbia gummifera</i> Red Bloodwood	8	3	150				200	2.00	1.68	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Small, Suppressed
B-059	<i>Syncarpia glomulifera</i> Turpentine	12	7	300				450	3.60	2.37	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Good form
B-060	<i>Cinnamomum camphora</i> Camphor Laurel	7	5	150	150	150	150	600	3.60	2.67	M	Good	Fair	Medium 15-40yrs	Low	Low	Within footprint of proposed driveway	Remove	Weed
B-061	<i>Angophora costata</i> Sydney Red Gum	10	6	200				250	2.40	1.85	SM	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-062	<i>Eucalyptus pilularis</i> Blackbutt	13	5	300				350	3.60	2.13	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-063	<i>Eucalyptus pilularis</i> Blackbutt	10	5	300				400	3.60	2.25	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-064	<i>Corymbia gummifera</i> Red Bloodwood	12	4	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Slender forest form
B-065	<i>Angophora costata</i> Sydney Red Gum	10	5	300				350	3.60	2.13	M	Fair	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed by pilularis
B-066	<i>Eucalyptus pilularis</i> Blackbutt	18	10	500	500			700	8.49	2.85	M	Fair	Fair	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Canopy dieback
B-067	<i>Angophora costata</i> Sydney Red Gum	13	6	450				500	5.40	2.47	M	Poor	Fair	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Major deadwood & canopy dieback
B-068	<i>Eucalyptus pilularis</i> Blackbutt	15	5	400				450	4.80	2.37	SM	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-069	<i>Eucalyptus pilularis</i> Blackbutt	17	7	400				500	4.80	2.47	M	Average	Fair	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Asymmetric canopy
B-070	<i>Syncarpia glomulifera</i> Turpentine	9	5	250				300	3.00	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-071	<i>Eucalyptus pilularis</i> Blackbutt	17	8	550				650	6.60	2.76	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Asymmetric canopy with reduced density
B-072	<i>Angophora costata</i> Sydney Red Gum	10	7	300				400	3.60	2.25	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Pink tag
B-073	<i>Eucalyptus pilularis</i> Blackbutt	13	10	500				550	6.00	2.57	M	Average	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-074	<i>Corymbia gummifera</i> Red Bloodwood	8	2	150				200	2.00	1.68	SM	Poor	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Dieback
B-075	<i>Corymbia gummifera</i> Red Bloodwood	10	3	100	150			250	2.16	1.85	SM	Fair	Fair	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Included leader at base

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-076	<i>Eucalyptus pilularis</i> Blackbutt	12	3	300				350	3.60	2.13	M	Average	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Supressed, growing on lean
B-077	<i>Corymbia gummifera</i> Red Bloodwood	14	7	400				450	4.80	2.37	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Crossing branches with B-078
B-078	<i>Eucalyptus pilularis</i> Blackbutt	16	10	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-079	<i>Eucalyptus pilularis</i> Blackbutt	15	7	500				550	6.00	2.57	M	Average	Poor	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Decay to lower trunk
B-080	<i>Corymbia gummifera</i> Red Bloodwood	12	3	200				250	2.40	1.85	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Forest form
B-081	<i>Eucalyptus pilularis</i> Blackbutt	18	15	700				800	8.40	3.01	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-082	<i>Corymbia gummifera</i> Red Bloodwood	7	4	100	100			200	2.00	1.68	SM	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Co-dominant leaders from base
B-083	<i>Corymbia gummifera</i> Red Bloodwood	12	5	300				350	3.60	2.13	M	Average	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-084	<i>Corymbia gummifera</i> Red Bloodwood	15	6	300	150			350	4.02	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Co-dominant leaders from base
B-085	<i>Corymbia gummifera</i> Red Bloodwood	10	5	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Flying fox rope tied around trunk
B-086	<i>Eucalyptus pilularis</i> Blackbutt	18	14	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-087	<i>Eucalyptus pilularis</i> Blackbutt	18	12	450				550	5.40	2.57	M	Good	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Included, co-dominant from 2m
B-088	<i>Eucalyptus pilularis</i> Blackbutt	20	15	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Included, co-dominant from 2.5m
B-089	<i>Eucalyptus pilularis</i> Blackbutt	12	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Growing on significant lean
B-090	<i>Syncarpia glomulifera</i> Turpentine	8	5	250				300	3.00	2.00	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Large wound to lower trunk, good reaction wood present
B-091	<i>Eucalyptus pilularis</i> Blackbutt	13	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Forest Form. Suppressed
B-092	<i>Eucalyptus pilularis</i> Blackbutt	13	6	300				350	3.60	2.13	M	Good	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Supressed
B-093	<i>Eucalyptus pilularis</i> Blackbutt	20	17	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-094	<i>Eucalyptus pilularis</i> Blackbutt	16	7	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Co-dominant trees
B-095	<i>Eucalyptus pilularis</i> Blackbutt	16	7	450				500	5.40	2.47	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-096	<i>Eucalyptus pilularis</i> Blackbutt	14	6	250				300	3.00	2.00	M	Average	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-097	<i>Eucalyptus pilularis</i> Blackbutt	18	13	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-098	<i>Angophora costata</i> Sydney Red Gum	16	13	450				550	5.40	2.57	M	Good	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Larger wound to trunk. Bracket fungus present
B-099	<i>Eucalyptus pilularis</i> Blackbutt	6	3	200				200	2.40	1.68	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Loss of main leader
B-100	<i>Eucalyptus pilularis</i> Blackbutt	20	15	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
B-101	<i>Eucalyptus pilularis</i> Blackbutt	16	14	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-102	<i>Eucalyptus pilularis</i> Blackbutt	11	4	200				250	2.40	1.85	SM	Average	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Wound to lower trunk
B-103	<i>Eucalyptus pilularis</i> Blackbutt	17	15	350				450	4.20	2.37	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-104	<i>Eucalyptus pilularis</i> Blackbutt	19	13	450				450	5.40	2.37	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Slightly supressed
B-105	<i>Eucalyptus pilularis</i> Blackbutt	21	20	500	450	150		700	8.27	2.85	M	Average	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Bifurcated from 1.5m
B-106	<i>Angophora costata</i> Sydney Red Gum	15	15	450				600	5.40	2.67	M	Average	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Growing in lean
B-107	<i>Syncarpia glomulifera</i> Turpentine	13	7	400				550	4.80	2.57	M	Good	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Supressed by T106
B-108	<i>Syncarpia glomulifera</i> Turpentine	12	7	300				400	3.60	2.25	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-109	<i>Syncarpia glomulifera</i> Turpentine	16	12	450				600	5.40	2.67	M	Good	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Burnt out hollow at base
B-110	<i>Eucalyptus pilularis</i> Blackbutt	18	15	550	400			700	8.16	2.85	M	Average	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Bifurcated from base
B-111	<i>Eucalyptus pilularis</i> Blackbutt	10	6	250				300	3.00	2.00	S	Poor	Poor	Very Short <5yrs	Low	Low	AP2 Clearing	Remove	In severe decline
B-112	<i>Eucalyptus pilularis</i> Blackbutt	16	14	400				550	4.80	2.57	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-113	<i>Corymbia gummifera</i> Red Bloodwood	8	5	200				200	2.40	1.68	SM	Average	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-114	<i>Eucalyptus pilularis</i> Blackbutt	18	15	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
B-115	<i>Corymbia gummifera</i> Red Bloodwood	13	7	300				350	3.60	2.13	M	Average	Good	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-116	<i>Corymbia gummifera</i> Red Bloodwood	10	4	200				250	2.40	1.85	SM	Poor	Poor	Very Short <5yrs	Low	Low	AP2 Clearing	Remove	In severe decline
B-117	<i>Eucalyptus pilularis</i> Blackbutt	16	7	400				450	4.80	2.37	M	Poor	Average	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Dieback, wound at base
B-118	<i>Eucalyptus pilularis</i> Blackbutt	20	12	450				600	5.40	2.67	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-119	<i>Corymbia gummifera</i> Red Bloodwood	14	7	300				350	3.60	2.13	M	Fair	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Nil.

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-120	<i>Eucalyptus pilularis</i> Blackbutt	16	15	450				550	5.40	2.57	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-121	<i>Angophora costata</i> Sydney Red Gum	15	7	350				400	4.20	2.25	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-122	<i>Eucalyptus pilularis</i> Blackbutt	18	15	400				450	4.80	2.37	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-123	<i>Eucalyptus pilularis</i> Blackbutt	18	16	500				600	6.00	2.67	M	Good	Fair	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Wound to trunk. Reaction wood present
B-124	<i>Eucalyptus pilularis</i> Blackbutt	13	6	400				450	4.80	2.37	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	On lean
B-125	<i>Eucalyptus pilularis</i> Blackbutt	18	8	400				500	4.80	2.47	M	Poor	Average	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Dieback, large wound at base
B-126	<i>Eucalyptus pilularis</i> Blackbutt	22	20	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
B-127	<i>Eucalyptus pilularis</i> Blackbutt	18	8	300	300			600	5.09	2.67	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Co-dominant Leaders
B-127A	<i>Eucalyptus pilularis</i> Blackbutt	20	20	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Not tagged
B-128	<i>Eucalyptus pilularis</i> Blackbutt	20	13	500				550	6.00	2.57	M	Good	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Slight lean
B-129	<i>Eucalyptus pilularis</i> Blackbutt	12	4	350	300			500	5.53	2.47	OM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Failed co-dominant leader
B-130	<i>Eucalyptus pilularis</i> Blackbutt	14	7	300				300	3.60	2.00	M	Fair	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Wound lower trunk
B-131	<i>Eucalyptus pilularis</i> Blackbutt	18	8	400				450	4.80	2.37	M	Fair	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Large wound to lower trunk
B-132	<i>Eucalyptus pilularis</i> Blackbutt	14	3	300				350	3.60	2.13	M	Fair	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Dieback, Suppressed
B-133	<i>Angophora costata</i> Sydney Red Gum	9	5	200				250	2.40	1.85	SM	Fair	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-134	<i>Corymbia gummifera</i> Red Bloodwood	6	4	150				200	2.00	1.68	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-135	<i>Eucalyptus pilularis</i> Blackbutt	21	14	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Suppressed by T136
B-136	<i>Eucalyptus pilularis</i> Blackbutt	22	14	550				650	6.60	2.76	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-137	<i>Corymbia gummifera</i> Red Bloodwood	13	9	350				400	4.20	2.25	M	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Dieback
B-138	<i>Eucalyptus pilularis</i> Blackbutt	18	16	450				600	5.40	2.67	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil.
B-139	<i>Corymbia gummifera</i> Red Bloodwood	12	3	200				200	2.40	1.68	SM	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-140	<i>Eucalyptus pilularis</i> Blackbutt	21	11	400				500	4.80	2.47	M	Average	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-141	<i>Eucalyptus pilularis</i> Blackbutt	21	18	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-142	<i>Corymbia gummifera</i> Red Bloodwood	14	10	300				350	3.60	2.13	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-143	<i>Eucalyptus pilularis</i> Blackbutt	22	20	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
B-144	<i>Corymbia gummifera</i> Red Bloodwood	8	3	250				300	3.00	2.00	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Dieback
B-145	<i>Syncarpia glomulifera</i> Turpentine	12	8	250	300	150		450	5.02	2.37	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	3 x leaders from base
B-146	<i>Eucalyptus pilularis</i> Blackbutt	16	12	350				450	4.20	2.37	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-147	<i>Eucalyptus pilularis</i> Blackbutt	21	17	600				700	7.20	2.85	M	Average	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Large wound @ buttress
B-148	<i>Corymbia gummifera</i> Red Bloodwood	16	10	350				400	4.20	2.25	M	Poor	Average	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Nil
B-149	<i>Eucalyptus pilularis</i> Blackbutt	18	10	450				550	5.40	2.57	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
B-150	<i>Corymbia gummifera</i> Red Bloodwood	14	7	300				400	3.60	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-151	<i>Eucalyptus pilularis</i> Blackbutt	16	10	300				400	3.60	2.25	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-152	<i>Eucalyptus pilularis</i> Blackbutt	16	12	450				550	5.40	2.57	M	Average	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
B-153	<i>Corymbia gummifera</i> Red Bloodwood	14	10	400				500	4.80	2.47	M	Good	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Slightly suppressed
B-154	<i>Corymbia gummifera</i> Red Bloodwood	14	7	250				300	3.00	2.00	M	Average	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-155	<i>Eucalyptus pilularis</i> Blackbutt	17	12	450				550	5.40	2.57	M	Fair	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Dieback
B-156	<i>Corymbia gummifera</i> Red Bloodwood	13	6	350				450	4.20	2.37	M	Average	Average	Short 5-15yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Loss of co-dominant leader
B-157	<i>Eucalyptus pilularis</i> Blackbutt	18	15	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil
B-158	<i>Eucalyptus pilularis</i> Blackbutt	21	20	700				900	8.40	3.17	M	Good	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Bifurcated from 3m
B-159	<i>Eucalyptus pilularis</i> Blackbutt	22	18	650				800	7.80	3.01	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
B-160	<i>Corymbia gummifera</i> Red Bloodwood	17	14	400				500	4.80	2.47	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
B-161	<i>Corymbia gummifera</i> Red Bloodwood	14	14	250				300	3.00	2.00	SM	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Forest Form, Suppressed
B-162	<i>Eucalyptus pilularis</i> Blackbutt	16	10	350				400	4.20	2.25	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-163	<i>Eucalyptus pilularis</i> Blackbutt	18	16	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Phototropic Lean
B-164	<i>Eucalyptus pilularis</i> Blackbutt	15	10	400				500	4.80	2.47	M	Average	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Growing on lean over ridge
B-165	<i>Eucalyptus pilularis</i> Blackbutt	14	8	350				400	4.20	2.25	M	Average	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Growing on lean over ridge
B-166	<i>Eucalyptus pilularis</i> Blackbutt	17	10	400				600	4.80	2.67	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Growing on lean over ridge
B-167	<i>Eucalyptus pilularis</i> Blackbutt	14	6	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-168	<i>Eucalyptus pilularis</i> Blackbutt	15	7	250				300	3.00	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-169	<i>Corymbia gummifera</i> Red Bloodwood	11	5	300				350	3.60	2.13	M	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Leader snap out. Large wound to trunk
B-170	<i>Eucalyptus pilularis</i> Blackbutt	17	10	300				400	3.60	2.25	M	Good	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-171	<i>Eucalyptus pilularis</i> Blackbutt	19	10	200	400			550	5.37	2.57	M	Average	Poor	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Co-dom @ base + Decay present
B-172	<i>Eucalyptus pilularis</i> Blackbutt	20	15	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
B-173	<i>Corymbia gummifera</i> Red Bloodwood	15	12	350				450	4.20	2.37	M	Poor	Average	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Dieback
B-174	<i>Corymbia gummifera</i> Red Bloodwood	16	10	400				500	4.80	2.47	M	Poor	Average	Short 5-15yrs	Medium	Low	AP2 Clearing	Remove	Dieback. Large basal wound
B-175	<i>Eucalyptus pilularis</i> Blackbutt	21	20	600				700	7.20	2.85	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
B-176	<i>Eucalyptus pilularis</i> Blackbutt	13	13	400				500	4.80	2.47	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-177	<i>Eucalyptus pilularis</i> Blackbutt	15	10	400				500	4.80	2.47	M	Average	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil
B-178	<i>Corymbia gummifera</i> Red Bloodwood	15	8	300				350	3.60	2.13	M	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	In decline
B-179	<i>Corymbia gummifera</i> Red Bloodwood	15	8	350				450	4.20	2.37	M	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-180	<i>Corymbia gummifera</i> Red Bloodwood	17	16	500				600	6.00	2.67	M	Good	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Borer damage to lower trunk
B-181	<i>Eucalyptus pilularis</i> Blackbutt	22	18	500				600	6.00	2.67	M	Good	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Nil
B-182	<i>Eucalyptus pilularis</i> Blackbutt	10	3	200				300	2.40	2.00	SM	Average	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Nil
B-183	<i>Corymbia gummifera</i> Red Bloodwood	10	8	200				250	2.40	1.85	SM	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-184	<i>Corymbia gummifera</i> Red Bloodwood	14	7	300				400	3.60	2.25	M	Average	Good	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-185	<i>Eucalyptus pilularis</i> Blackbutt	16	7	250				300	3.00	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-186	<i>Eucalyptus pilularis</i> Blackbutt	17	11	600				650	7.20	2.76	M	Fair	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Nil.
B-187	<i>Corymbia gummifera</i> Red Bloodwood	8	5	200				250	2.40	1.85	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Fine damage
B-188	<i>Corymbia gummifera</i> Red Bloodwood	8	8	300				300	3.60	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Fruiting bodies
B-189	<i>Eucalyptus pilularis</i> Blackbutt	17	12	700				850	8.40	3.09	M	Average	Fair	Long 40yrs +	High	High	AP2 Clearing	Remove	Dominant, deadwood
B-190	<i>Corymbia gummifera</i> Red Bloodwood	12	5	300				400	3.60	2.25	M	Average	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Fine damage
B-191	<i>Eucalyptus pilularis</i> Blackbutt	17	7	400				550	4.80	2.57	M	Average	Poor	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Trunk cavity
B-192	<i>Eucalyptus pilularis</i> Blackbutt	19	11	500				550	6.00	2.57	M	Average	Good	Long 40yrs +	High	High	AP2 Clearing	Remove	Nil.
B-193	<i>Eucalyptus pilularis</i> Blackbutt	17	7	350				450	4.20	2.37	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-194	<i>Corymbia gummifera</i> Red Bloodwood	14	6	350				450	4.20	2.37	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-195	<i>Eucalyptus pilularis</i> Blackbutt	13	5	350				400	4.20	2.25	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-196	<i>Eucalyptus pilularis</i> Blackbutt	16	6	450				500	5.40	2.47	M	Fair	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil.
B-197	<i>Eucalyptus pilularis</i> Blackbutt	18	10	500				500	6.00	2.47	M	Average	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil.
B-198	<i>Eucalyptus pilularis</i> Blackbutt	18	7	550				600	6.60	2.67	M	Fair	Good	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Good form
B-199	<i>Syncarpia glomulifera</i> Turpentine	9	3	250				300	3.00	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Fire damage
B-200	<i>Eucalyptus pilularis</i> Blackbutt	19	7	400				550	4.80	2.57	M	Fair	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-201	<i>Corymbia gummifera</i> Red Bloodwood	7	2	200				250	2.40	1.85	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-202	<i>Eucalyptus pilularis</i> Blackbutt	18	8	500				550	6.00	2.57	M	Fair	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Good form
B-203	<i>Eucalyptus pilularis</i> Blackbutt	18	12	450				500	5.40	2.47	M	Fair	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-204	<i>Corymbia gummifera</i> Red Bloodwood	12	5	300				350	3.60	2.13	M	Poor	Average	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Regrowth
B-205	<i>Eucalyptus pilularis</i> Blackbutt	19	7	500				600	6.00	2.67	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Suppressed
B-206	<i>Eucalyptus pilularis</i> Blackbutt	28	10	500				600	6.00	2.67	M	Average	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Dominant

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-207	<i>Eucalyptus pilularis</i> Blackbutt	20	12	500				550	6.00	2.57	M	Average	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Dominant
B-208	<i>Eucalyptus pilularis</i> Blackbutt	19	8	450				550	5.40	2.57	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-209	<i>Angophora costata</i> Sydney Red Gum	9	2	250				350	3.00	2.13	M	Poor	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Regrowth
B-210	<i>Eucalyptus pilularis</i> Blackbutt	18	10	500				550	6.00	2.57	M	Fair	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Nil.
B-211	<i>Syncarpia glomulifera</i> Turpentine	11	3	200				300	2.40	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-212	<i>Syncarpia glomulifera</i> Turpentine	13	4	200				300	2.40	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Suppressed
B-213	<i>Angophora costata</i> Sydney Red Gum	11	6	350				400	4.20	2.25	M	Average	Average	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Suppressed
B-214	<i>Eucalyptus pilularis</i> Blackbutt	17	8	500				600	6.00	2.67	M	Average	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Suppressed
B-215	<i>Eucalyptus pilularis</i> Blackbutt	20	12	500				600	6.00	2.67	M	Average	Good	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Nil.
B-216	<i>Eucalyptus pilularis</i> Blackbutt	19	14	600				750	7.20	2.93	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Dominant
B-217	<i>Angophora costata</i> Sydney Red Gum	12	4	250				300	3.00	2.00	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-218	<i>Syncarpia glomulifera</i> Turpentine	12	4	250				300	3.00	2.00	M	Average	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-219	<i>Angophora costata</i> Sydney Red Gum	13	3	200				250	2.40	1.85	SM	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil.
B-220	<i>Eucalyptus pilularis</i> Blackbutt	19	12	600				700	7.20	2.85	M	Average	Good	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Dominant, good form
B-221	<i>Eucalyptus pilularis</i> Blackbutt	20	12	500				650	6.00	2.76	M	Average	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Large cavity
B-222	<i>Corymbia gummifera</i> Red Bloodwood	10	4	200				300	2.40	2.00	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-223	<i>Corymbia gummifera</i> Red Bloodwood	8	4	200				300	2.40	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Decortifying bark
B-224	<i>Corymbia gummifera</i> Red Bloodwood	9	4	200				250	2.40	1.85	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-225	<i>Eucalyptus pilularis</i> Blackbutt	17	10	400				500	4.80	2.47	M	Fair	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Nil
B-226	<i>Corymbia gummifera</i> Red Bloodwood	9	6	200				300	2.40	2.00	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Nil
B-227	<i>Eucalyptus pilularis</i> Blackbutt	14	5	250				300	3.00	2.00	SM	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Deadwood. Poor branch attachments
B-228	<i>Eucalyptus pilularis</i> Blackbutt	17	12	500				550	6.00	2.57	M	Fair	Fair	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Deadwood

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-229	<i>Eucalyptus pilularis</i> Blackbutt	15	8	350				450	4.20	2.37	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-230	<i>Eucalyptus pilularis</i> Blackbutt	16	7	450				500	5.40	2.47	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Asymmetric crown
B-231	<i>Eucalyptus pilularis</i> Blackbutt	17	4	350				400	4.20	2.25	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-232	<i>Eucalyptus pilularis</i> Blackbutt	17	9	450				500	5.40	2.47	M	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Suppressed
B-233	<i>Eucalyptus pilularis</i> Blackbutt	10	3	200				250	2.40	1.85	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Fire damage
B-234	<i>Eucalyptus pilularis</i> Blackbutt	18	10	500				550	6.00	2.57	M	Average	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Dominant
B-235	<i>Corymbia gummifera</i> Red Bloodwood	9	3	200				250	2.40	1.85	SM	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Fire damage. Trunk wound
B-236	<i>Eucalyptus pilularis</i> Blackbutt	15	6	450				450	5.40	2.37	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Asymmetric crown. Trunk wound
B-237	<i>Corymbia gummifera</i> Red Bloodwood	8	3	200				250	2.40	1.85	M	Poor	Poor	Short 5-15yrs	Low	Low	AP2 Clearing	Remove	Fire damage
B-238	<i>Eucalyptus pilularis</i> Blackbutt	15	5	350				400	4.20	2.25	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-239	<i>Syncarpia glomulifera</i> Turpentine	13	4	300				350	3.60	2.13	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-240	<i>Eucalyptus pilularis</i> Blackbutt	17	6	350				450	4.20	2.37	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-241	<i>Eucalyptus pilularis</i> Blackbutt	15	5	350				400	4.20	2.25	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-242	<i>Corymbia gummifera</i> Red Bloodwood	15	5	400				500	4.80	2.47	M	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Asymmetrical Canopy
B-243	<i>Corymbia gummifera</i> Red Bloodwood	9	5	250				300	3.00	2.00	M	Fair	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Leaning
B-244	<i>Corymbia gummifera</i> Red Bloodwood	11	5	200				200	2.40	1.68	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed, Trunk Wound
B-245	<i>Corymbia gummifera</i> Red Bloodwood	15	4	250				300	3.00	2.00	M	Fair	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed
B-246	<i>Eucalyptus pilularis</i> Blackbutt	17	9	650				850	7.80	3.09	M	Fair	Average	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Previous branch failures. Dominant
B-247	<i>Eucalyptus pilularis</i> Blackbutt	14	7	400				500	4.80	2.47	M	Fair	Poor	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed, Asymmetrical crown
B-248	<i>Eucalyptus pilularis</i> Blackbutt	18	12	600				700	7.20	2.85	M	Fair	Average	Long 40yrs +	High	High	AP2 Clearing	Remove	Dominant
B-249	<i>Corymbia gummifera</i> Red Bloodwood	12	6	300				400	3.60	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Nil
B-250	<i>Corymbia gummifera</i> Red Bloodwood	15	4	200				300	2.40	2.00	M	Average	Fair	Medium 15-40yrs	Low	Low	AP2 Clearing	Remove	Suppressed

Tree No.	Genus & species Common Name	Height (m)	Crown Spread (m)	DBH #1 (mm)	DBH #2 (mm)	DBH #3 (mm)	DBH #4 (mm)	DGL (mm)	TPZ Radius (m)	SRZ Radius (m)	Age Class	Health / Vitality	Structure / Condition	SULE Rating	Landscape Significance	Retention Value	Development Impact	Retain / Remove	Comments
B-251	<i>Eucalyptus pilularis</i> Blackbutt	18	8	350				450	4.20	2.37	M	Average	Fair	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Suppressed
B-252	<i>Eucalyptus pilularis</i> Blackbutt	14	5	200				300	2.40	2.00	SM	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
B-253	<i>Eucalyptus pilularis</i> Blackbutt	18	10	500				600	6.00	2.67	M	Fair	Average	Medium 15-40yrs	High	High	No works proposed within TPZ	Retain & Protect	Co-dominant
B-254	<i>Syncarpia glomulifera</i> Turpentine	10	6	200	200			350	3.39	2.13	M	Good	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Co-dominant
B-255	<i>Syncarpia glomulifera</i> Turpentine	12	6	350				500	4.20	2.47	M	Average	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Basal hollow
B-256	<i>Syncarpia glomulifera</i> Turpentine	10	4	300				400	3.60	2.25	M	Average	Average	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Nil
B-257	<i>Syncarpia glomulifera</i> Turpentine	9	4	200				300	2.40	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Nil
B-258	<i>Syncarpia glomulifera</i> Turpentine	11	6	250				300	3.00	2.00	SM	Average	Average	Long 40yrs +	Low	Medium	AP2 Clearing	Remove	Minor past branch failures
B-259	<i>Angophora costata</i> Sydney Red Gum	16	7	400				500	4.80	2.47	M	Fair	Average	Medium 15-40yrs	Medium	Medium	No works proposed within TPZ	Retain & Protect	Reduced foliage density. Moderate deadwood
B-260	<i>Angophora costata</i> Sydney Red Gum	13	8	550				650	6.60	2.76	OM	Fair	Fair	Medium 15-40yrs	Medium	Medium	AP2 Clearing	Remove	Multiple past branch failures. Reduced foliage density. Moderate level of epicormic growth & deadwood. Several occupied hollows
B-261	<i>Syncarpia glomulifera</i> Turpentine	8	4	200				250	2.40	1.85	SM	Good	Average	Long 40yrs +	Low	Medium	No works proposed within TPZ	Retain & Protect	Slender forest form
B-262	<i>Eucalyptus pilularis</i> Blackbutt	18	10	600				700	7.20	2.85	OM	Fair	Fair	Medium 15-40yrs	High	High	AP2 Clearing	Remove	Fire damage. Basal wound. Multiple past branch failures. Moderate deadwood
B-263	<i>Angophora costata</i> Sydney Red Gum	12	7	350				400	4.20	2.25	M	Fair	Fair	Medium 15-40yrs	Low	Low	No works proposed within TPZ	Retain & Protect	Reduced foliage density
B-264	<i>Eucalyptus pilularis</i> Blackbutt	21	12	650				750	7.80	2.93	M	Average	Fair	Long 40yrs +	High	High	No works proposed within TPZ	Retain & Protect	Fire damage
B-265	<i>Eucalyptus pilularis</i> Blackbutt	19	9	600				700	7.20	2.85	M	Fair	Average	Long 40yrs +	Medium	High	AP2 Clearing	Remove	Fire damage. Multiple past branch failures. Moderate deadwood

Tree Inspection Data Notes & Terminology

Tree No. (Tree Number)

The tree number associated to each tree located on or adjacent to the subject site. Relates to the Tree Location Plan held at Appendix 2.

Botanical Name and Common Name

The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. is recorded to indicate this.

Height, Crown Width and DBH

- The trees height and crown spread is recorded in metres (m);

- The tree DBH is recorded in millimetres (mm). DBH is an abbreviation of Diameter (of the trunk) measured at Breast Height (or 1.4m from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites

Age Class

The age class of each tree is estimated as either:

IM – Immature refers to well established but juvenile tree

SM – Semi Mature, a tree that has not grown to mature size

M – Mature, a tree that has reached mature size and will slowly increase in size over time

OM – Over Mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches

S – Senescent, an over mature tree that is now in decline

Health & Condition

The trees health and vigour is recorded as a measurement of:

Good – the tree does not appear to appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots

Average – the tree appears stressed and has some crown dieback, and/or a few epicormic shoots, and/or some deadwood in the crown and some new growth at branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health

Fair – the tree may have areas of crown dieback, and/or epicormic shoots, and/or areas of decay, and/or reduced new growth at branch tips. These trees have been stressed for a short period of time, remediation of the growing environment may improve trees health

Poor – the tree may have large areas of crown dieback, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long period of time, remediation of the growing environment would not return the tree to good health.

SRZ (Structural Root Zone)

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is responsible primarily for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress into the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is taken from the Australian Standard 4970 – 2009 Protection of Trees on Development Sites): $(D \times 50)0.42 \times 0.64$

TPZ (Tree Protection Zone)

The TPZ is a radial area measured by multiplying the DBH by twelve (12) or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees in Development Sites. An incursion up to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the Project Arborist and compensated for elsewhere. Justification methodology may vary depending on site or individual tree's health, vigour and ability to withstand disturbance and may require root investigation.

Landscape Significance

The landscape significance of a tree or group of trees is determined using a combination of health/vigour/condition, amenity, heritage and ecological values in accordance with IACA Significance of a Tree, Assessment Rating System (STARS)® (IACA 2010)®.

1. High Significance in Landscape
2. Medium Significance in Landscape
3. Low Significance in Landscape

Retention Value (RV)

Determined by [1] tree free of visual defects and viable for retention, [2] viable for retention with minor faults which may reduce SULE, [3] trees which should not restrict development applications containing faults that are likely to become problematic in the short term, [4] trees to be considered for removal due to average condition.

High Retention - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 Protection of trees on development sites. Tree sensitive construction measures must be implemented e.g. pier and beam etc. if works are to proceed within the Tree Protection Zone.

Medium Retention - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.

Low Retention - 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.

S.U.L.E. Categories

Safe Useful Life Expectancy (after *Barrell 1996*, modified by the author). A trees S.U.L.E. category is the life expectancy of the tree modified first by its age, health, condition, safety and location. S.U.L.E. assessments may be modified as dictated by changes in trees health and environment.

Long - Appear retainable at the time of assessment for over 40 years with an acceptable degree of risk assuming reasonable maintenance.

Medium - Appear to be retainable at the time of assessment for 15 to 40 years with an acceptable degree of risk assuming reasonable maintenance.

Short - Trees appear to be retainable at the time of assessment for 5 to 15 years with an acceptable degree of risk assuming reasonable maintenance.

Very Short - Removal - Trees which should be scheduled for removal within the very short term or as specified within this report.

Small, Young or Regularly Pruned - Trees under 5m in height that can be easily moved or replaced, includes screen plantings or hedge lines.

Development Impact

Brief outline of the impact of the proposed development works or ancillary construction related activities likely to impact the tree.

Retain/Remove

The proposed removal or retention recommendation in light of the proposed development related impacts.

NOTES: This report acknowledges the current Australian Standards 'Protection of Trees on Development Sites' AS 4970 – 2009 with reference to the Tree Protection Zone (TPZ); being a combination of the root and crown area requiring protection. The TPZ takes into consideration the Structural Root Zone (SRZ); The area required for tree stability. Determined by AS4970 - 2009 Figure 1, Table of determining the SRZ, section 3.3.5 of the standards. The standard states where a greater than 10% encroachment occurs the arborist is to take into consideration the schedule of determining impacts as set within AS4970 s. 3.3.4. Encroachments are referred to within this report as major or minor encroachments (AS4970 s. 3.3.2 & 3.3.3). Below is the terminology used for estimated percentage of development incursion used within this report. To retain specific trees and ensure their viability, development must take into consideration protection of the TPZ radius. The extent of inclusion within the TPZ radius has been categorised within this report as follows:

- <10% - negligible incursion
- >10 - <15% - low to moderate level of incursion
- >15 - <20% - moderate level of incursion
- >20 - <25% - moderate to high level of incursion
- >25 - <35% - high level of incursion
- >35% - significant incursion within the TPZ

APPENDIX 14 - TREE LOCATION PLANS: BOARDING HOUSE

NOTE: MUST BE READ IN CONJUNCTION WITH ARBORICULTURAL IMPACT ASSESSMENT



BOARDING HOUSE:
REFER F416_TLP_18
TO F416_TLP_19



CREATIVE PLANNING SOLUTIONS
TOWN PLANNING
LANDSCAPE ARCHITECTURE
ARBORICULTURE

LEVEL 3
397 RILEY STREET
SURRY HILLS NSW 2010
PO BOX 1074 BROADWAY NSW 2007
TEL: + (61) 2 8039 7461
INFO@CPSPLANNING.COM.AU
CPSPLANNING.COM.AU

DIMENSIONS:
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS:
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROJECT

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

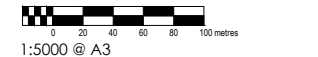
DRAWING TITLE

TREE LOCATION PLAN:
BOARDING HOUSE
- SITE CONTEXT

CLIENT



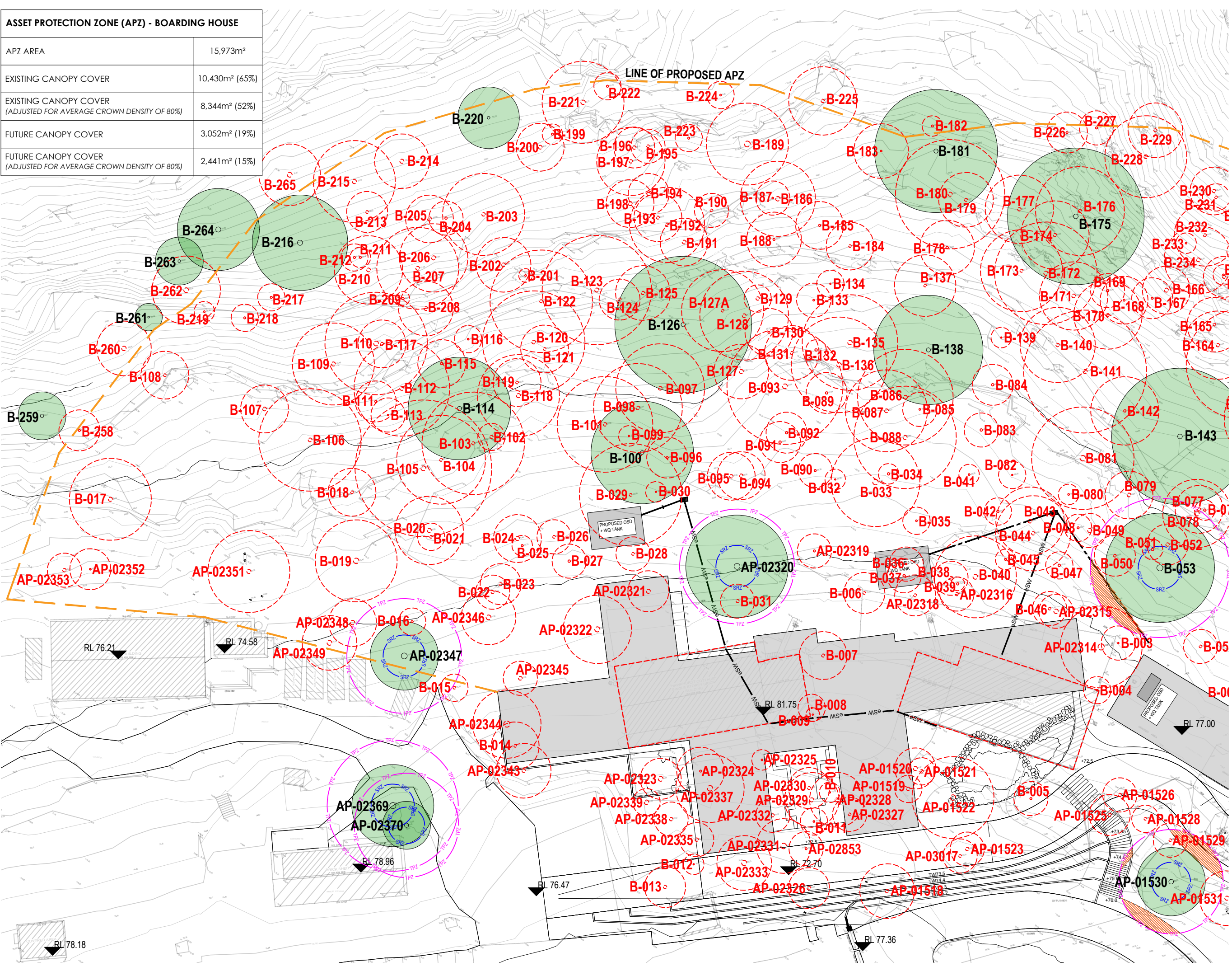
Drawn : TP
Designed : TP
Project No. : F416
Bar Scale



1:5000 @ A3
SHEET NUMBER F416_TLP_17 REVISION B

ASSET PROTECTION ZONE (APZ) - BOARDING HOUSE

APZ AREA	15,973m ²
EXISTING CANOPY COVER	10,430m ² (65%)
EXISTING CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	8,344m ² (52%)
FUTURE CANOPY COVER	3,052m ² (19%)
FUTURE CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	2,441m ² (15%)



DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL, STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

LEGEND

- OT1 EXISTING TREE TO BE RETAINED
- OT2 EXISTING TREE TO BE REMOVED
- TREE PROTECTION ZONE
- STRUCTURAL ROOT ZONE
- TPZ INCURSION ZONE
- DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE
**TREE LOCATION PLAN:
BOARDING HOUSE
- DETAIL (PAGE 1 OF 2)**



ASSET PROTECTION ZONE (APZ) - BOARDING HOUSE






APZ AREA	15,973m ²
EXISTING CANOPY COVER	10,430m ² (65%)
EXISTING CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	8,344m ² (52%)
FUTURE CANOPY COVER	3,052m ² (19%)
FUTURE CANOPY COVER (ADJUSTED FOR AVERAGE CROWN DENSITY OF 80%)	2,441m ² (15%)

DIMENSIONS :
All dimensions are in millimetres unless otherwise noted. Do not scale from this drawing.

Verify all dimensions on site prior to construction.

CIVIL STRUCTURAL, HYDRAULIC, ELECTRICAL AND SPECIALIST WATER FEATURE WORKS :
Refer to specialist and consultant's drawings for all information contained within these documents relating to and nominated as specialist and consultant work. Specialist and consultant drawing information contained in the landscape documents are indicative only and not for construction or certification purposes.

LEGEND

-  T1 EXISTING TREE TO BE RETAINED
-  T2 EXISTING TREE TO BE REMOVED
-  TREE PROTECTION ZONE
STRUCTURAL ROOT ZONE
-  TPZ INCURSION ZONE
-  DEMOLITION WORKS

Issue Code	Issue Description	By	Chk	Date
B	DESIGN AMENDMENTS	TP	GT	06.10.23
A	FOR SSDA SUBMISSION	TP	GT	08.09.23

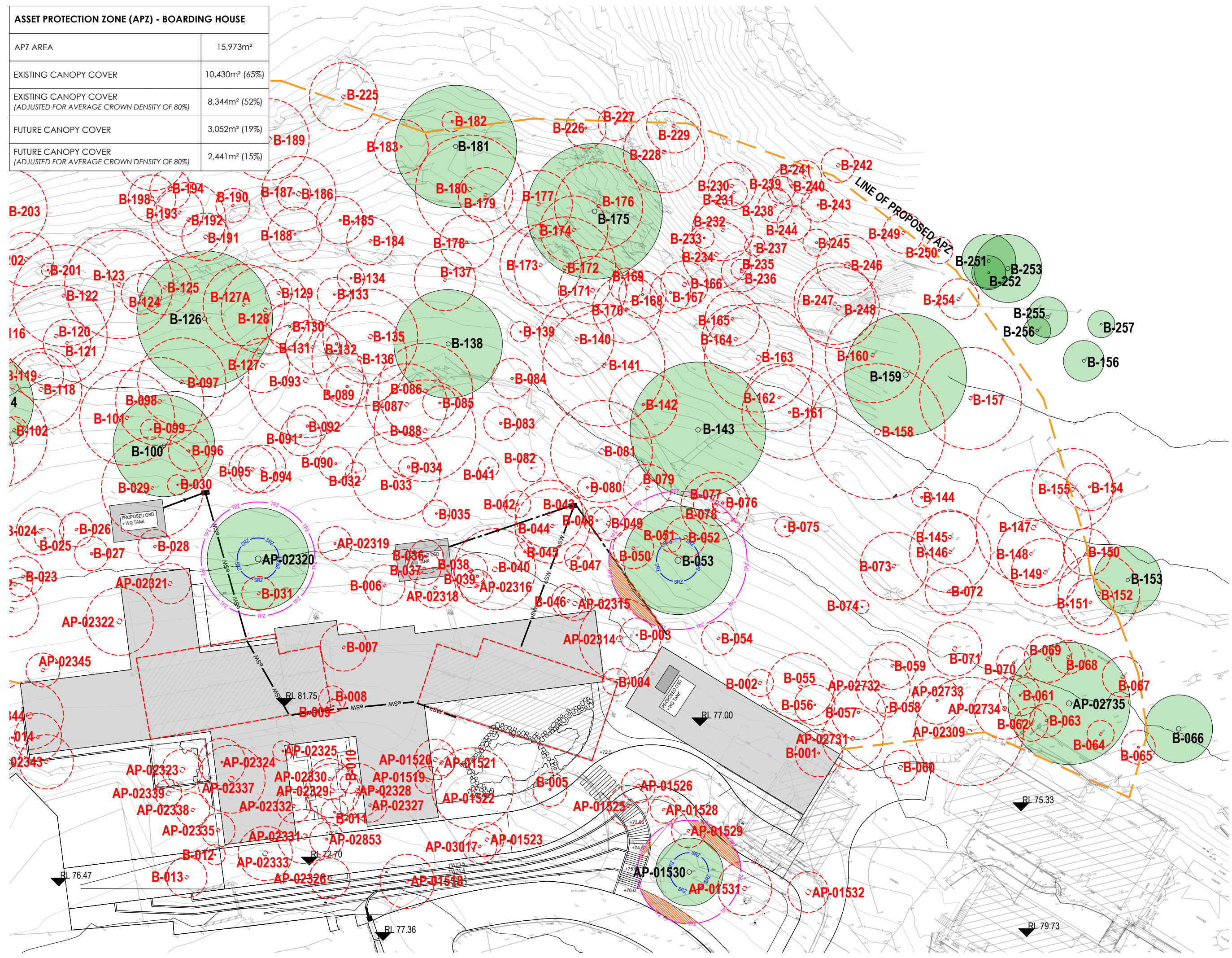
PRE - Preliminary CA - Council Approval T - Tender CON - Construction

PROPOSED MASTERPLAN
THE KING'S SCHOOL
NORTH PARRAMATTA

DRAWING TITLE
**TREE LOCATION PLAN:
BOARDING HOUSE
- DETAIL (PAGE 2 OF 2)**



Drawn : TP
Designed : TP
Project No. : F416
Bar Scale
1:500 @ A3
SHEET NUMBER F416_TLP_19 REVISION B



APPENDIX 15

IACA Significance of a Tree, Assessment Rating System (STARS)© (IACA 2010)©

In the development of this document IACA acknowledges the contribution and original concept of the Footprint Green Tree Significance & Retention Value Matrix, developed by Footprint Green Pty Ltd in June 2001.

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. However, rating the significance of a tree becomes subjective and difficult to ascertain in a consistent and repetitive fashion due to assessor bias. It is therefore necessary to have a rating system utilising structured qualitative criteria to assist in determining the retention value for a tree. To assist this process all definitions for terms used in the *Tree Significance - Assessment Criteria and Tree Retention Value - Priority Matrix*, are taken from the IACA Dictionary for Managing Trees in Urban Environments 2009.

This rating system will assist in the planning processes for proposed works, above and below ground where trees are to be retained on or adjacent a development site. The system uses a scale of *High*, *Medium* and *Low* significance in the landscape. Once the landscape significance of an individual tree has been defined, the retention value can be determined. An example of its use in an Arboricultural report is shown as Appendix A.

Tree Significance - Assessment Criteria



1. High Significance in landscape

- The tree is in good condition and good vigour;
- The tree has a form typical for the species;
- The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age;
- The tree is listed as a Heritage Item, Threatened Species or part of an Endangered ecological community or listed on Councils significant Tree Register;
- The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity;
- The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values;
- 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.

2. Medium Significance in landscape

- The tree is in fair-good condition and good or low vigour;
- The tree has form typical or atypical of the species;
- The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area
- The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street,
- The tree provides a fair contribution to the visual character and amenity of the local area,
- 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*.

3. Low Significance in landscape

- The tree is in fair-poor condition and good or low vigour;
- The tree has form atypical of the species;
- The tree is not visible or is partly visible from surrounding properties as obstructed by other vegetation or buildings,
- The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area,
- The tree is a young specimen which may or may not have reached dimension to be protected by local Tree Preservation orders or similar protection mechanisms and can easily be replaced with a suitable specimen,
- The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa *in situ* - tree is inappropriate to the site conditions,
- The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms,
- The tree has a wound or defect that has potential to become structurally unsound.

Environmental Pest / Noxious Weed Species

- The tree is an Environmental Pest Species due to its invasiveness or poisonous/ allergenic properties,
- The tree is a declared noxious weed by legislation.

Hazardous/Irreversible Decline

- The tree is structurally unsound and/or unstable and is considered potentially dangerous,
- The tree is dead, or is in irreversible decline, or has the potential to fail or collapse in full or part in the immediate to short term.

The tree is to have a minimum of three (3) criteria in a category to be classified in that group.

Note: The assessment criteria are for individual trees only, however, can be applied to a monocultural stand in its entirety e.g. hedge.

Table 1.0 Tree Retention Value - Priority Matrix.

		Significance				
		1. High	2. Medium	3. Low		
		Significance in Landscape	Significance in Landscape	Significance in Landscape	Environmental Pest / Noxious Weed Species	Hazardous / Irreversible Decline
Estimated Life Expectancy	1. Long >40 years					
	2. Medium 15-40 Years					
	3. Short <1-15 Years					
	Dead					

Legend for Matrix Assessment



	Priority for Retention (High) - These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard AS4970 <i>Protection of trees on development sites</i> . Tree sensitive construction measures must be implemented e.g. pier and beam etc if works are to proceed within the Tree Protection Zone.
	Consider for Retention (Medium) - These trees may be retained and protected. These are considered less critical; however their retention should remain priority with removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for Removal (Low) - 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.

USE OF THIS DOCUMENT AND REFERENCING

The IACA Significance of a Tree, Assessment Rating System (STARS) is free to use, but only in its entirety and must be cited as follows:

IACA, 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, Australia, www.iaca.org.au

REFERENCES

Australia ICOMOS Inc. 1999, *The Burra Charter – The Australian ICOMOS Charter for Places of Cultural Significance*, International Council of Monuments and Sites, www.icomos.org/australia

Draper BD and Richards PA 2009, *Dictionary for Managing Trees in Urban Environments*, Institute of Australian Consulting Arboriculturists (IACA), CSIRO Publishing, Collingwood, Victoria, Australia.

Footprint Green Pty Ltd 2001, *Footprint Green Tree Significance & Retention Value Matrix*, Avalon, NSW Australia, www.footprintgreen.com.au

IACA 2010, *IACA Significance of a Tree, Assessment Rating System (STARS)*, Institute of Australian Consulting Arboriculturists, www.iaca.org.au

The following example shows the IACA **Significance of a Tree, Assessment Rating System (STARS)** used in an Arboricultural report.

Tree Significance

Determined by using the Tree Significance - Assessment Criteria of the *IACA Significance of a Tree, Assessment Rating System (STARS)©* (IACA, 2010), Appendix B.

Trees 14, 16, 17/3, 19 and 20/4 are of high significance with the remaining majority of medium significance and a few of low significance. Tree 14 is significant as a prominent specimen and a food source for indigenous avian fauna. Tree 16 as a non-locally indigenous planting is of good form and prominent *in situ*; Tree 17/3 as a stand of 6 street trees along the Davey Street frontage screening views to and from the site and contiguous with trees in Victoria Park extending the aesthetic influence of the urban canopy to the site. Similarly for Trees 20/4 as street trees in Long Road and Tree 19 as an extant exotic planting as a senescent component of the original landscaping. The trees of low significance are recent plantings as fruit trees – Avocados, and 1 Cootamundra Wattle as a non-locally indigenous tree in irreversible decline and potentially structurally unsound.

Significance Scale

- 1 – High
- 2 – Medium
- 3 – Low

Significance Scale	1	2	3
Tree No. / Stand No.	14, 16, 17/3, 19, 20/4	1/1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12/2, 15, 18, 21/5	3, 13, 22

Tree Retention Value

Determined by using the Retention Value - Priority Matrix of the *IACA Significance of a Tree, Assessment Rating System (STARS)©* (IACA, 2010), Appendix B.

Retention Value

- High** – Priority for Retention
- Medium** – Consider for Retention
- Low** – Consider for Removal
- Remove** - Priority for Removal

Retention Value	High Priority for Retention	Medium Consider for Retention	Low Consider for Removal	Remove Priority for Removal
Tree No. / Stand No.	1/1, 5, 17/3*, 19	2, 4, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, 20/4*, 21/5	3, 12/2, 13,	22

* Trees located within the neighbouring property and should be retained and protected.

APPENDIX 16 - EXTRACT FROM AS4970 2009 PROTECTION OF TREES ON DEVELOPMENT SITES

Section 3, Determining the tree protection zones of the selected trees

3.1 Tree protection zone (TPZ)

"The tree protection zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. It is an area isolated from construction disturbance, so that the tree remains viable.

The TPZ incorporates the structural root zone (SRZ) (refer to Clause 3.3.5)."

3.2 Determining the TPZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

$$TPZ = DBH \times 12$$

where

DBH = trunk diameter measured at 1.4 m above ground

Radius is measured from the centre of the stem at ground level.

3.3.5 Structural root zone (SRZ)

"The SRZ is the area required for street stability. A larger area is required to maintain a viable tree. The SRZ only needs to be calculated when a major encroachment into a TPZ is proposed. Root investigation may provide more information on the extent of these roots."

Determining the SRZ

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

$$SRZ \text{ radius} = (D \times 50)^{0.42} \times 0.64$$

where

D = trunk diameter, in metres, measured above the root buttress.

Note: The SRZ for trees with trunk diameters less than 0.15 m will be 1.5 m (see Figure 1).

The curve can be expressed by the following formula:

$$R_{SRZ} = (D \times 50)^{0.42} \times 0.64$$

NOTES:

- 1 R_{SRZ} is the structural root zone radius.
- 2 D is the stem diameter measured immediately above root buttress.
- 3 The SRZ for trees less than 0.15 m diameter is 1.5 m.
- 4 The SRZ formula and graph do not apply to palms, other monocots, cycads and tree ferns.
- 5 This does not apply to trees with an asymmetrical root plate.

FIGURE 1 STRUCTURAL ROOT ZONE

