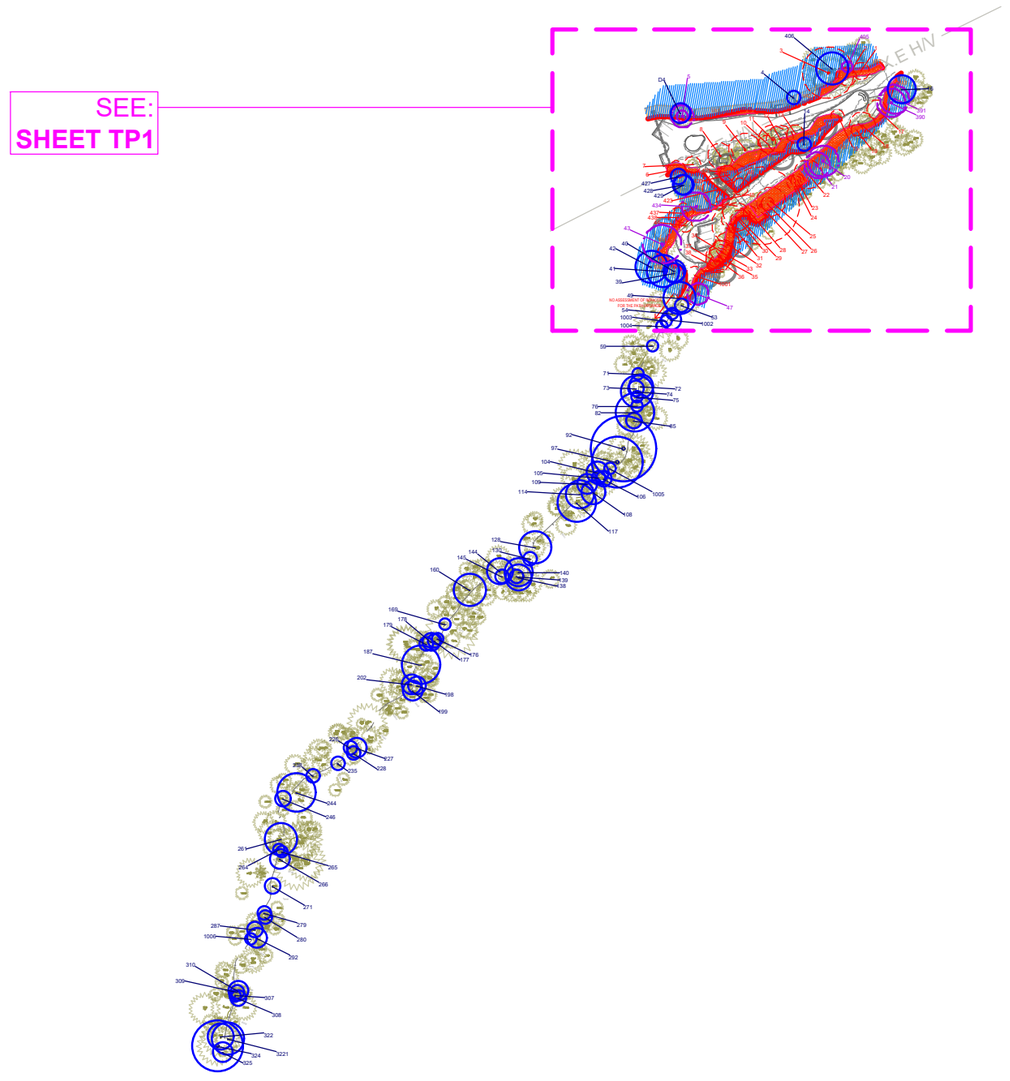
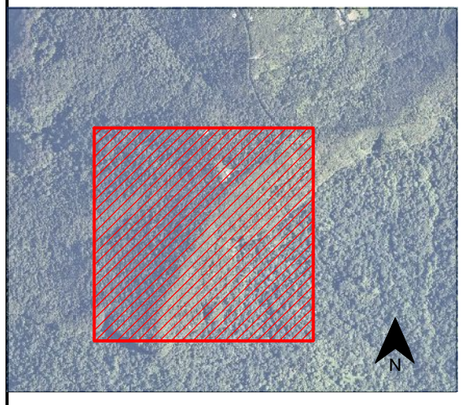
TREE PROTECTION PLAN

BEST OF ALL LOOKOUT CAR PARK UPGRADE
SPRINGBROOK NP
WSP
JULY 2025





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QLD 4073

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PROJECT
SPRINGBROOK NP
BEST OF ALL LOOKOUT
2025-006

TITLE
COVER SHEET

DRAWN	DATE 31/07/2025	AUTHORISED FOR ISSUE	
DRAWING CHECK	DATE 31/07/2025	Jeremy Young	
CLIENT WSP		CONTACT JOHN LUTWYCHE	
ASSESSED BY JY	DATE JULY 2025	SCALE NTS	ORIG. SIZE A3
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ARBORICULTURAL IMPACT ASSESSMENT

Arboricultural Impact Assessment and Tree Protection Specifications

Site: Springbrook National Park, Best of All Lookout Car Park Upgrade
Proposed Works: Civil Development and car park upgrade.
Impacts:

- The highest risk is associated with earthworks around trees, resulting in root severance and soil compaction.
- There is a high risk of compaction if construction access is not restricted
- There is a minor risk of crown damage during construction.

Trees Removal: **40** are proposed for removal; Trees that will be adversely impacted by the design or cause a significant risk issue if retained. Tree removal may be reduced during detailed design through alterations in the design.

Trees Retained with Impacts: **9 Trees;** This assessment believes these trees can be retained; however, the actual impacts of works within the TPZ of the trees cannot be determined until a detailed site assessment has occurred and construction methodology has been determined.

Arboricultural Control Measures:

1. Retained trees will be isolated from construction by Tree Protection Fencing, as shown on the Tree Protection Plan (TPP). The area within the fencing is to be considered a Tree Protection Zone (TPZ).
2. There must be no machinery access into the fenced TPZ.
3. Construction Access must be restricted to outside the TPZ.
4. The Project Arborist is to be on site for ALL Excavation works adjacent trees shown as retained with Impacts
5. The contractor's methodology for all works within the Tree Protection Zones (TPZ) must be approved by the Project Arborist before works commence. Construction methodology has the potential to adversely impact trees.

Tree Protection Strategies

To ensure the control measures are implemented, the following strategies must be put in place. These are the minimum requirements. The Project Arborist may instruct further protection as a result of construction methodology, environmental factors and any non-conformance issues. The General Tree Protection Guidelines and Notes provide a guide as to the possible further tree protection strategies that may be required.

The key elements of these strategies are:

1. Engage a Project Arborist (PA) to monitor tree protection and oversee any works adjacent to or encroaching within the TPZs, as shown in the TPP.
2. Tree Protection Fencing must be installed before work commences on site. The PA is to provide an inspection certificate to the Project Manager before work begins. Fencing locations shown on the TPP are a guide and will be confirmed on-site by the PA during setting out. Tree protection fencing is to delineate the Tree Protection Area and restrict access without the approval of the Project Arborist.
3. All fencing must be signed as "Tree Protection Fencing, No Access."
4. Machinery size, positioning and work methodology must consider tree canopies. The PA may direct trunk and branch protection to be installed to mitigate the risk of impact if necessary.
5. The TPZ is to be fenced with a minimum of 1.2m fencing (refer to detail) and is considered an absolute exclusion zone for all personnel, plant and any operations unless authorised by the PA.
6. Ongoing inspections, with frequency to be determined based on construction adjacent to trees to be retained and inspections at the Minimum Arboricultural Hold Points (refer to table) are to be carried out to confirm compliance with the Tree Protection Strategies. Ongoing assessment is required to provide certification after the project in accordance with *AS 4970-2025 Protection of Trees on Development Sites.*
7. Provide watering or irrigation of TPA at the direction of the PA, if deemed necessary. Watered root zones of trees limit the impacts of root damage. The volume and timing of water application will vary based on the climatic conditions at the time of development and the adjacent development disturbance. The aim is to maintain soil moisture at field capacity. The initial water volume is to be 200L per tree per week.
8. The PA must be on-site for specific excavation and other works as noted on TPP and AIA Report (See Hold Points). ***The Project Arborist's role is to review the proposed methodology before any works commence on site and provide comments and recommendations to limit the impact of works on the retained trees.***
9. The exhaust of vehicles left running, such as cranes and delivery trucks, must not point into the canopy of a retained tree to limit foliage damage.
10. Within the identified and fenced Tree Protection Zones, there must be no excavation, changes in levels, storage of materials or any construction activities without prior involvement and approval of the Project Arborist.

By installing Tree Protection Fencing as set out on the TPP and adhering to the tree protection specified in this document, the retained trees will be isolated from construction. Implementation of the Minimum Arboricultural Hold Points is vital to achieving sustainable tree retention.

Minimum Arboricultural Hold Points

Hold Point	Point	Action
	Final Design Phase	
1	Final Design (It is recommended the PA is engaged by client for final detailed design assessment)	• Arboricultural involvement in assessing the impact of detailed design on the existing trees. • Review construction methodology and consider site access. • Review and advise on design changes to increase tree retention.
	Tender Phase	
2	Tender Assessment (It is recommended the PA is engaged by client for tender assessment)	• Assessment of proposed demolition & construction methodology in relation to tree protection. • Resolve any conflict that may arise between the Tree Protection Plan and the proposed demolition & construction requirements.
	Demolition & Construction Phase	
3	Prestart (PA may be engaged by either client or contractor subject to contractual preferences)	• Confirm access restrictions to the Tree Protection Areas. • Confirm Tree Protection Fencing requirements. • Discuss any conflicts between the Tree Protection Plan and the proposed construction requirements. • Check that all permits and approvals are in place. Copies of all permits and approvals are provided to the Project Arborist.
4	Tree Protection Fence (TPF) Establishment	• Project Arborist will mark out the Tree Protection Fencing location. • Resolve any conflict that may arise between the Tree Protection Plan and the proposed demolition & construction requirements. • Project Arborist to confirm Tree Protection Fencing signage is in place.
5	Access required into TPZs for any reason	• Project Arborist to assess the impacts on trees from the proposed access. • Project Arborist to determine the control measures that are required to protect trees. • Project Arborist to provide written confirmation of access and protection measures before access is permitted.
6	Before the removal of Tree Protection Fencing	• Project Arborist to assess any further works and determine the potential for adverse impacts to tree health or structure. • Project Arborist confirmation is required before fencing is removed.
7	Completion of works	• Project Arborist to provide a complete report and summary of tree protection implementation

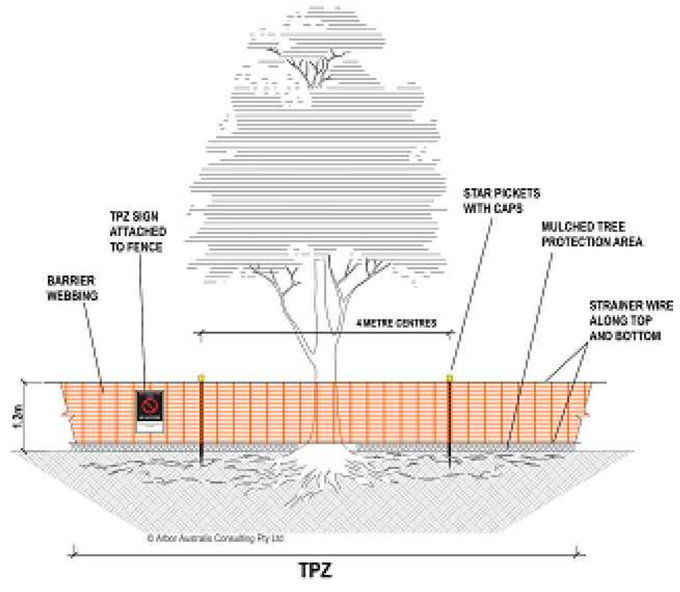
Assumptions & Limitations

AAC has made the following assumptions and stated limitations regarding this project; further assumptions and limitations that may have arisen have been stated within the report:

- Certain tree data, including species identification and detail survey, has been provided by others; it is assumed that this information is accurate.
- Changes to tree health and structure may have occurred since the time of the survey due to environmental factors.
- Tree retention and removal are based on the 90% detailed design footprint. Site access for demolition & construction, along with its impacts on the existing trees, must be considered in both the final design and the assessment of the construction methodology proposed by the construction tenderers.
- This report is based on the documents provided to AAC, discussions with the project design team, data reviewed on-site and previous experience. Any changes to the proposed design will alter potential impacts on the trees, rendering the AIA, data table and TPP inaccurate.
- This report assumes that the areas identified as Tree Protection Zones (TPZ) within the Tree Protection Plan (TPP) can be isolated from construction without encroachment. Access within TPZs may be facilitated under Project Arborist (PA) supervision subject to a review of work methodology.
- This report makes assumptions about construction methodologies for the works. These assumptions are based on previous experience. The assumptions primarily relate to the fact that no access will be required into the designated TPZs.
- Tree management recommendations are based on this assessment. Further tree assessment is recommended at 12-month intervals or post extreme weather events to ensure duty of care compliance.
- Measurements have been scaled off the drawings provided where no written measurement was indicated.
- During the proposed works (including any demolition), site access will occur outside the proposed Tree Protection Zones (TPZs).
- It is assumed that the (PA) will be involved during demolition & construction. This is to provide advice, help resolve potential adverse impacts, direct construction crews working around trees, and confirm and document tree protection measures.
- Trees usually indicate internal anomalies through external biomechanics. However, external indicators may not always be present, especially with the limitations of a ground based VTA.
- This assessment is ground based only and is thus limited in assessing aerial aspects of trees.
- This assessment is not a risk assessment. It is intended to assess the impacts of the proposed works.
- It is assumed that all aspects and components of this AIA and TPP will be implemented in their totality.

* *Tree Protection Zone is the area of isolation intended for tree protection. This area is modified from the Notional Root Zone (NRZ) as set out in AS 4970 - 2025 to suit the site and the species.*

Tree Protection Fencing



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PROJECT: SPRINGBROOK NP
BEST OF ALL LOOKOUT
2025-006

TITLE: ARBORICULTURAL IMPACT ASSESSMENT

DRAWN: DL	DATE: 31/07/2025	AUTHORISED FOR ISSUE: Jeremy Young	
DRAWING CHECK: JY	DATE: 31/07/2025		
CLIENT: WSP		CONTACT: JOHN LUTWYCHE	
ASSESSED BY: JY	DATE: JULY 2025	SCALE: NTS	ORG. SIZE: A3
PROJECT NUMBER / SHEET: 2025-006 | SP1		ISSUE: B	

GENERAL TREE PROTECTION GUIDELINES AND NOTES

General Tree Protection Guidelines and Notes

Tree Protection Plan (TPP)
The TPP sets out a guide to installing Tree Protections. This may be modified on-site or as issues arise during construction by the Project Arborist.

Project Arborist
In accordance with *AS 4970 - 2025 Protection of Trees on Development Sites,* the Project Arborist (AQF level 5) is to be engaged to oversee work in relation to tree protection.

Review of Construction Methodology & Machinery
The Tree Protection Specifications and Tree Protection Plan must be reviewed by the Project Arborist once construction methodology and machinery selection has been confirmed. Machinery selection must be able to access work areas without impacting tree canopies and must be approved by the Project Arborist prior to the commencement of works.

The proposed construction methodology or design may require adjustment under the direction of the Project Arborist to address potential unforeseen impacts on trees. The construction methodology must consider tree canopy form in regard to machinery size. Machinery must not contact the crown of trees to be retained. No pruning of tree canopies for machinery access is permitted unless approved otherwise by the Project Arborist.

Marking
The Project Arborist will clearly identify any tree to be removed before the commencement of any clearing works. The Project Arborist is to be on-site for the commencement of tree removal to ensure tree protection is in place.

Tree Removal
Tree removal methodology must not damage retained trees. The tree removal methodology must be approved by the Project Arborist prior to removal.

Tree Protection Areas (TPA)
TPAs are identified for the protection of the tree roots and the crown from damage during construction. Within these areas there must be **no** storage of materials, filling, excavation, services, machinery access, and construction path or any activity that is not approved by the Project Arborist. TPA signage must state "Tree Protection Area - No Access" and include the Project Arborist's contact details. Refer to the hatched areas shown on the Tree Protection Plan for the locations of TPAs.

Tree Protection Fencing (TPF)
Unless otherwise approved by the Project Arborist, the TPF will be installed in accordance with the details and locations shown on the Tree Protection Plan. Fencing will be as per the preferred fencing detail. Tree Protection Fencing locations shown on the TPP are indicative only. Locations to be confirmed on site by Project Arborist at site set out.

Access Within the TPZs
Proposed works within the identified TPZs that require machinery access may require (at Project Arborist discretion) ground protection and trunk protection (refer to example detail). Ground protection is determined by machinery selection and is restricted to light machinery only.

Landscape Works in in TPZs
Any proposed soft landscape works (including turf) within a TPZ must be carried out by hand and the approved by the Project Arborist.

Preparation of any planting of areas within the TPZ must not be left exposed for more than 24 hours without a mulch layer to protect against moisture loss.

Roots
In any location on site, where it is necessary to cut tree roots in excess of 50 mm diameter, obtain approval from the Superintendent and Project Arborist prior to commencement. Use methods that do not unduly disturb the remaining root system. It is recommended at that all root pruning is carried out by the Project Arborist.

Erosion and Sediment Control
Excavation required for typical erosion and sediment control fencing within close proximity to retainable trees will have an adverse impact on the tree's root system.

A no-excavation alternative has been proposed and is highly recommended within the TPZ of any retained trees. Refer to the Tree Protection Details sheet for indicative erosion and sediment control methods. Refer to the Tree Protection Details Sheet for further information.

Harmful Materials
Do not store or place harmful materials under or near trees. Prevent wind-blown materials such as cement from contacting and damaging trees and plants.

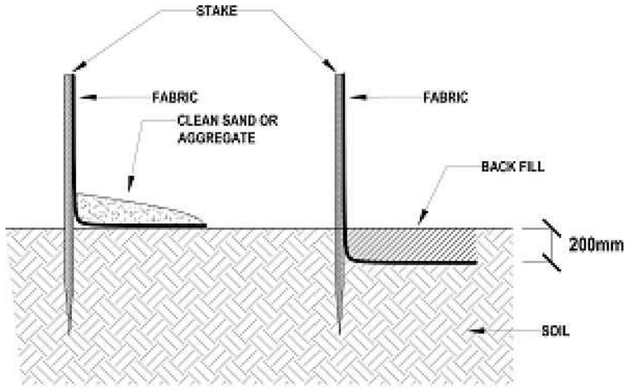
Compacted Ground
Do not compact the ground under trees unless approved by the Superintendent and Project Arborist. Do not stockpile materials within the drip line. Do not permit contractors', employees' or subcontractors' vehicles and machinery to be parked within the drip line. Do not permit vehicles or equipment to utilise the TPA as a trafficable area. If compaction (of areas within the drip line but not occupied by the Works) occurs, notify the Superintendent and Project Arborist, seek instructions. If access over the TPA is required, the Project Arborist may direct ground protection methods to be utilised.

Remedial Tree Pruning
Retained trees must be inspected for pruning works by Project Arborist after tree removal works. If it is necessary to perform any work on trees to be retained. All pruning work must comply with *AS 4373 - 2007 Pruning of amenity trees.*

Remedial Plant Health Care
In the event of any damage to trees above or below ground, an assessment by the Project Arborist and a remedial works program is required. This shall be provided to the Superintendent for approval prior to any works being completed. Any repair work must be carried out by an AQF level 5 Arborist.

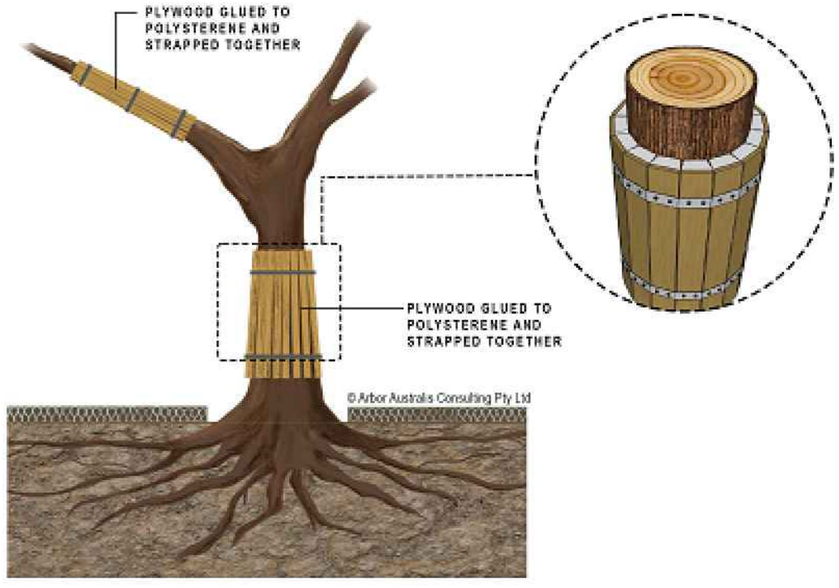
Mulching
Any area within or directly adjacent to the TPA that has been disturbed will require mulching with chipped forest mulch to a depth of 100mm. The Project Arborist will monitor the mulch levels throughout the project and may request that they are topped up.

Soil Moisture
The Project Arborist will monitor soil moisture levels. During construction, supplementary watering may be required to maintain tree health. The need for watering will depend on climatic conditions, tree species and the level of disturbance that changes the soil moisture levels around the trees. The need for watering of trees adjacent to work areas will be determined by the PA to ensure soil moisture is maintained as field capacity.



Suggested Sediment Control Method

Example of Ground Protection Utilising Track Mats



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PROJECT
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BEST OF ALL LOOKOUT
2025-006

TITLE
GENERAL TREE PROTECTION GUIDELINES AND NOTES

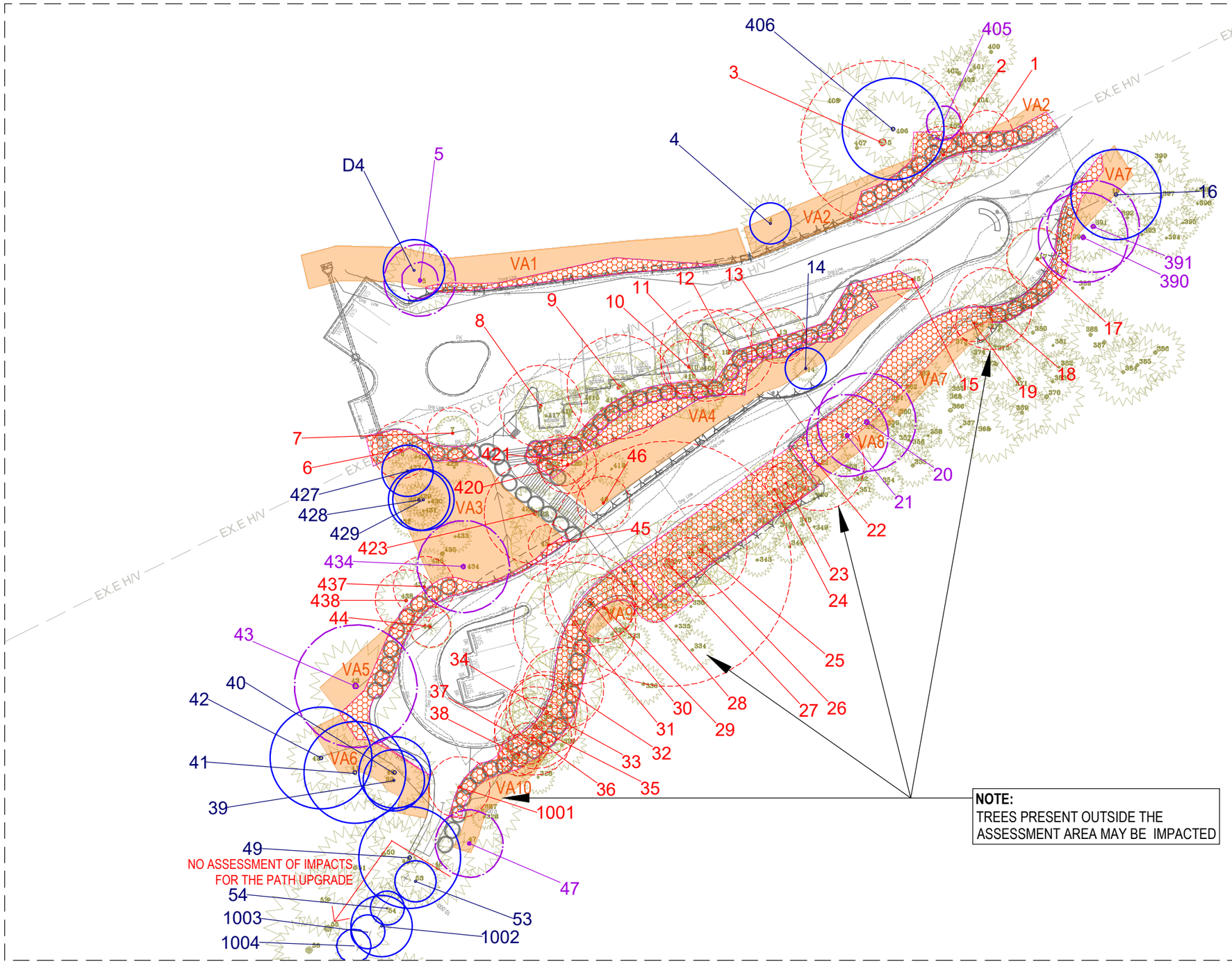
DRAWN DL	DATE 31/07/2025	AUTHORISED FOR ISSUE Jeremy Young	
DRAWING CHECK JY	DATE 31/07/2025		
CLIENT WSP		CONTACT JOHN LUTWYCHE	
ASSESSED BY JY	DATE JULY 2025	SCALE NTS	ORIG. SIZE A3
PROJECT NUMBER / SHEET 2025-006 | SP2		N	ISSUE B

TREE REMOVAL PLAN 1 OF 1

Legend

	Trees to be Retained Tree Protection Zone AS 4970 - 2025
	Trees to be Retained with Impacts
	Trees to be Removed Tree removal methodology must not damage retained trees. Project Arborist is to approve methodology prior to removal.
VA#	**Vegetation Area to be Retained**
	Vegetation Area to be Remove

NOTE:
- TREES NUMBERED 1000 ONWARDS ARE GPS ONLY, ALL OTHERS ARE BASED ON THE SURVEY PROVIDED
- TREES SPECIES HAVE BEEN PROVIDE BASED ON PREVIOUS ECOLOGICAL REPORT.



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TREE REMOVAL PLAN 1

DRAWN	DATE 31/07/2025	AUTHORISED FOR ISSUE	Jeremy Young
DRAWING CHECK JY	DATE 31/07/2025		
CLIENT WSP		CONTACT JOHN LUTWYCHE	
ASSESSED BY JY	DATE JULY 2025	SCALE 1:500	ORIG. SIZE A3
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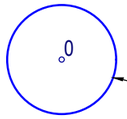
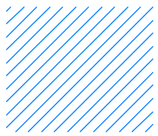
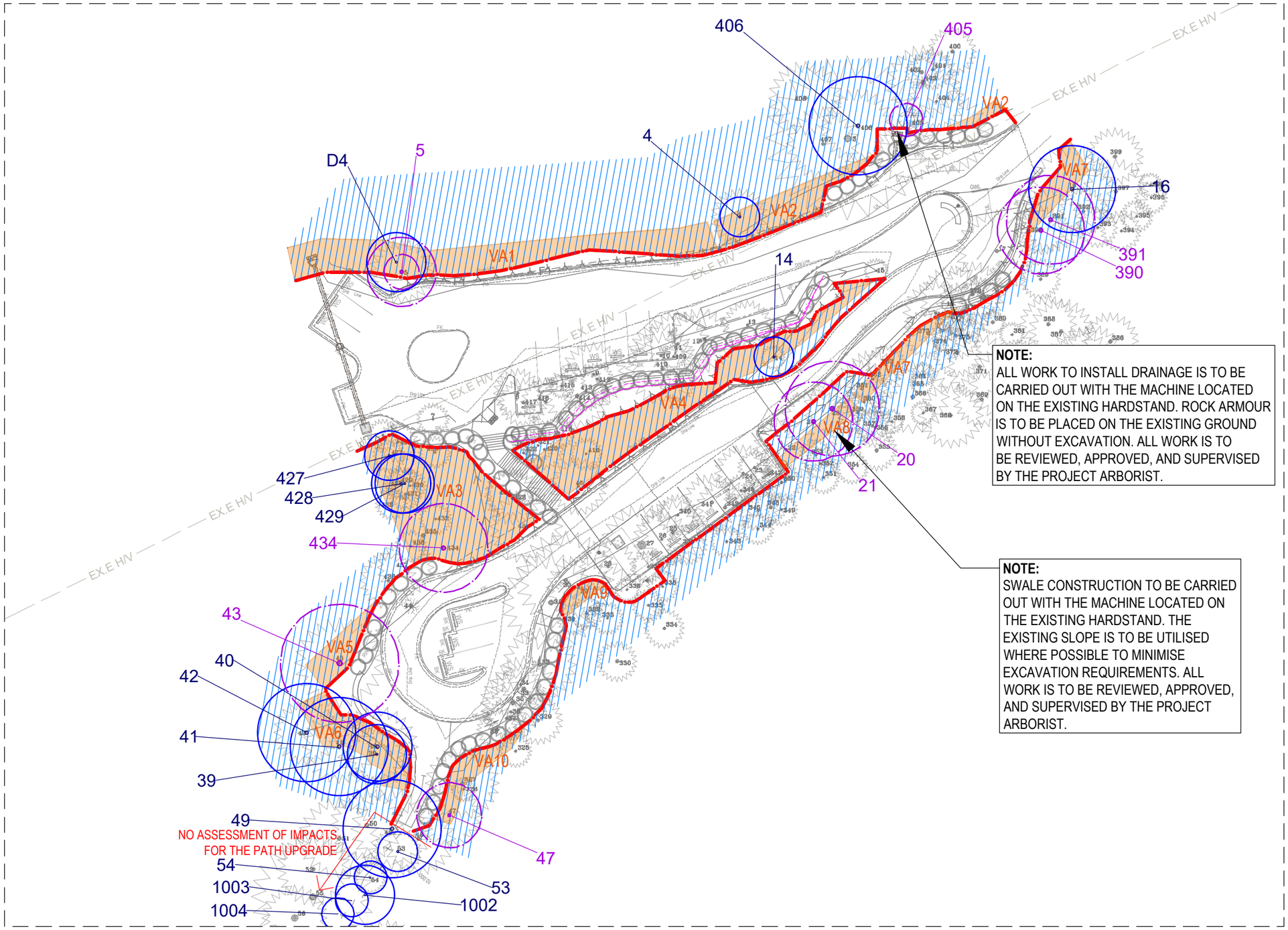
TREE PROTECTION PLAN 1 OF 1

Legend

	**Trees to be Retained** Tree Protection Zone AS 4970 - 2025
	**Trees to be Retained with Impacts**
	**Tree Protection Fencing** Tree Protection Fencing to be installed prior to commencement of construction. No construction access past this line. Locations shown are indicative only. To be confirmed on site by Project Arborist at set out.
	**Tree Protection Areas (TPA)** No construction access unless approved by the Project Arborist.
VA#	**Vegetation Area to be Retained**

NOTE:
- TREES NUMBERED 1000 ONWARDS ARE GPS ONLY, ALL OTHERS ARE BASED ON THE SURVEY PROVIDED
- TREES SPECIES HAVE BEEN PROVIDE BASED ON PREVIOUS ECOLOGICAL REPORT.



NOTE:
ALL WORK TO INSTALL DRAINAGE IS TO BE CARRIED OUT WITH THE MACHINE LOCATED ON THE EXISTING HARDSTAND. ROCK ARMOUR IS TO BE PLACED ON THE EXISTING GROUND WITHOUT EXCAVATION. ALL WORK IS TO BE REVIEWED, APPROVED, AND SUPERVISED BY THE PROJECT ARBORIST.

NOTE:
SWALE CONSTRUCTION TO BE CARRIED OUT WITH THE MACHINE LOCATED ON THE EXISTING HARDSTAND. THE EXISTING SLOPE IS TO BE UTILISED WHERE POSSIBLE TO MINIMISE EXCAVATION REQUIREMENTS. ALL WORK IS TO BE REVIEWED, APPROVED, AND SUPERVISED BY THE PROJECT ARBORIST.

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ASSESSED BY JY	DATE JULY 2025	SCALE 1:500	ORIG. SIZE A3
PROJECT NUMBER / SHEET 2025-006 | TP1		N	ISSUE B

TREE DATA TABLE 1 OF 1

Tree Assessment												Actions			
Tree ID	*Botanic Name*	Tree Height (m)	Crown Width (m)	DSH (mm)	SRZ radius from trunk (m)	NRZ radius from trunk (m)	Tree Health	Health Comment	Tree Structure	Structure Comment	Comments	Remedail Works	Design Impact Reasoning	Status	Reinspection (years)
1	*Duboisia myoporoides*	16	12	260	1.9	3.1	Fair	Typical	Good	Asymmetric Crown Form			Design	Remove	N/A
2	*Duboisia myoporoides*	14	8	280	1.9	3.4	Fair	Typical	Fair	Asymmetric Crown Form			Design	Remove	N/A
3	*Duboisia myoporoides*	20	20	800	3.0	9.6	Fair	Typical	Fair	Typical	Failed in storm	Remove	Failed	Remove	N/A
4	*Acacia melanoxylon*	6	7	200	1.7	2.4	Fair	Typical	Good	Typical			N/A	Retain	1
5	*Acacia melanoxylon*	14	12	350	2.1	4.2	Good	Typical	Good	Typical			Design	Retain with Impacts	1
6	*Callicoma serratifolia*	9	8	280	1.9	3.4	Fair	Crown Decline	Fair	Asymmetric Crown Form			Design	Remove	N/A
7	*Syzygium ingens*	8	5	250	1.8	3.0	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
8	*Callicoma serratifolia*	14	10	400	2.3	4.8	Good	Typical	Fair	Multi-stemmed at base	Clump of trees, possibel coppice		Design	Remove	N/A
9	*Callicoma serratifolia*	11	9	510	2.5	6.1	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
10	*Callicoma serratifolia*	14	7	270	1.9	3.2	Good	Typical	Fair	Asymmetric Crown Form			Design	Remove	N/A
11	*Callicoma serratifolia*	10	7	450	2.4	5.4	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
12	*Callicoma serratifolia*	14	8	420	2.3	5.0	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
13	*Duboisia myoporoides*	11	7	270	1.9	3.2	Fair	Typical	Good	Asymmetric Crown Form			Design	Remove	N/A
14	*Orites excelsa*	8	4	200	1.7	2.4	Good	Typical	Good	Multi-stemmed			N/A	Retain	1
15	*Ackama paniculosa*	9	5	200	1.7	2.4	Good	Typical	Fair	Multi-stemmed			Design	Remove	N/A
16	*Duboisia myoporoides*	14	12	440	2.3	5.3	Good	Typical	Fair	Asymmetric Crown Form	Vine in crown		N/A	Retain	1
17	*Acacia melanoxylon*	14	10	300	2.0	3.6	Fair	Typical	Poor	Asymmetric Crown Form	Vine in crown		Design	Remove	N/A
18	*Duboisia myoporoides x 2*	16	10	400	2.3	4.8	Poor	Crown Decline	Fair	Typical			Design	Remove	N/A
19	*Cinnamomum oliveri*	13	8	180	1.6	2.2	Good	Typical	Fair	Typical			Design	Remove	N/A
20	*Callicoma serratifolia*	13	12	480	2.4	5.8	Good	Typical	Fair	Multi-stemmed at base			Design	Retain with Impacts	1
21	*Callicoma serratifolia*	12	10	400	2.3	4.8	Good	Typical	Fair	Multi-stemmed at base			Design	Retain with Impacts	1
22	*Callicoma serratifolia*	15	14	450	2.4	5.4	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
23	*Callicoma serratifolia*	13	7	200	1.7	2.4	Good	Typical	Fair	Asymmetric Crown Form			Design	Remove	N/A
24	*Callicoma serratifolia*	13	12	220	1.8	2.6	Good	Typical	Fair	Asymmetric Crown Form			Design	Remove	N/A
25	*Callicoma serratifolia*	15	12	450	2.4	5.4	Good	Typical	Poor	Trunk Cavity	Poor form		Design	Remove	N/A
26	*Callicoma serratifolia*	14	7	200	1.7	2.4	Good	Typical	Fair	Typical			Design	Remove	N/A
27	*Callicoma serratifolia*	13	14	1200	3.6	14.4	Fair	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
28	*Callicoma serratifolia*	11	7	200	1.7	2.4	Fair	Typical	Fair	Typical			Design	Remove	N/A
29	*Dead Stag*	14	6	300	2.0	3.6	Dead	Dead	Dead	Typical			Design	Remove	N/A
30	*Callicoma serratifolia*	12	12	450	2.4	5.4	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
31	*Callicoma serratifolia*	14	12	600	2.7	7.2	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
32	*Syzygium ingens*	14	9	400	2.3	4.8	Good	Typical	Fair	Typical			Design	Remove	N/A
33	*Syzygium ingens*	15	9	400	2.3	4.8	Good	Typical	Fair	Typical			Design	Remove	N/A
34	*Duboisia myoporoides*	11	8	330	2.1	4.0	Good	Typical	Fair	Typical			Design	Remove	N/A
35	*Cryptocarya meisneriana*	15	10	400	2.3	4.8	Good	Typical	Fair	Multi-stemmed at base	Vine in crown		Design	Remove	N/A
36	*Doryphora sassafras*	13	7	380	2.2	4.6	Fair	Typical	Fair	Multi-stemmed at base	Vine in crown		Design	Remove	N/A
37	*Endiandra muelleri*	8	5	200	1.7	2.4	Good	Typical	Fair	Typical			Design	Remove	N/A
38	*Syzygium ingens*	9	3	200	1.7	2.4	Fair	Typical	Fair	Crown Failure			Design	Remove	N/A
39	*Callicoma serratifolia*	14	10	300	2.0	3.6	Good	Typical	Fair	Multi-stemmed at base			N/A	Retain	1
40	*Callicoma serratifolia*	15	14	350	2.1	4.2	Good	Typical	Fair	Multi-stemmed at base			N/A	Retain	1
41	*Syzygium ingens*	16	12	500	2.5	6.0	Good	Typical	Good	Typical			N/A	Retain	1
42	*Syzygium ingens*	18	15	500	2.5	6.0	Good	Typical	Good	Typical			N/A	Retain	1
43	*Callicoma serratifolia x 2*	8	11	600	2.7	7.2	Fair	Typical	Fair	Multi-stemmed at base			Design	Retain with Impacts	1
44	*Callicoma serratifolia*	7	5	200	1.7	2.4	Dead	Dead	Fair	Typical			Design	Remove	N/A
45	*Dead Stag*	9	9	200	1.7	2.4	Fair	Typical	Fair	Typical			Dead Tree	Remove	N/A
46	*Orites excelsa*	13	93	260	1.9	3.1	Good	Typical	Fair	Typical			Design	Remove	N/A
47	*Doryphora sassafras*	18	8	330	2.1	4.0	Good	Typical	Fair	Typical			Design	Retain with Impacts	1
49	*Unkown Species*	20	10	500	2.5	6.0	Fair	Typical	Fair	Typical			N/A	Retain	1
53	*Unkown Species*	16	6	200	1.7	2.4	Fair	Typical	Fair	Typical			N/A	Retain	1
54	*Cyathea species*	8	4	100	1.5	2.0	Fair	Typical	Fair	Typical			N/A	Retain	1
390	*Duboisia myoporoides*	17	10	440	2.3	5.3	Fair	Typical	Fair	Vine in canopy			Design	Retain with Impacts	1
391	*Syzygium ingens*	17	12	450	2.4	5.4	Fair	Typical	Fair	Typical			Design	Retain with Impacts	1
405	*Rhodomyrtus psidioides*	3	2	50	1.5	2.0	Fair	Typical	Fair	Typical			Design	Retain with Impacts	1
406	*Duboisia myoporoides*	21	15	500	2.5	6.0	Fair	Typical	Fair	Vine in canopy			N/A	Retain	1
420	*Doryphora sassafras*	11	7	280	1.9	3.4	Good	Typical	Good	Typical			Design	Remove	N/A
421	*Doryphora sassafras*	12	7	250	1.8	3.0	Good	Typical	Good	Typical			Design	Remove	N/A
423	*Duboisia myoporoides*	13	12	500	2.5	6.0	Fair	Typical	Fair	Typical			Design	Remove	N/A
427	*Orites excelsa*	9	6	250	1.8	3.0	Fair	Typical	Fair	Multi-stemmed			N/A	Retain	1
428	*Cryptocarya meisneriana*	15	10	300	2.0	3.6	Good	Typical	Fair	Asymmetric Crown Form			N/A	Retain	1
429	*Cryptocarya meisneriana*	15	10	300	2.0	3.6	Good	Typical	Fair	Typical			N/A	Retain	1
434	*Rhodomyrtus psidioides*	12	10	450	2.4	5.4	Fair	Typical	Fair	Multi-stemmed at base			Design	Retain with Impacts	1
437	*Dead Stag*	10	5	300	2.0	3.6	Dead	Dead	Poor	Typical			Design	Remove	N/A
438	*Callicoma serratifolia*	12	10	300	2.0	3.6	Good	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
1001	*Callicoma serratifolia*	11	6	300	2.0	3.6	Fair	Typical	Fair	Multi-stemmed at base			Design	Remove	N/A
D4	*Callicoma serratifolia*	12	12	300	2.0	3.6	Fair	Typical	Fair	Asymmetric Crown Form			N/A	Retain	1

ARBOR AUSTRALIS CONSULTING

Arbor Australis Consulting
2/17 Bluestone Cct
Seventeen Mile Rocks
QLD 4073

ISSUE	DESCRIPTION	DATE	DRAWN	AUTH.
A	30% DD ISSUE	10/04/2025	DL	JY
B	90% DD ISSUE	31/07/2025	DL	JY

NOTES: This tree assessment has been done by Arbor Australis Consulting. Verify the location of all services and easements prior to the commencement of works. Any aerial imagery utilised has been provided by nearmap.com.

PROJECT: SPRINGBROOK NP
BEST OF ALL LOOKOUT
2025-006

TITLE: TREE DATA TABLE 1

DRAWN: DL	DATE: 31/07/2025	AUTHORISED FOR ISSUE: Jeremy Young	
DRAWING CHECK: JY	DATE: 31/07/2025		
CLIENT: WSP		CONTACT: JOHN LUTWYCHE	
ASSESSED BY: JY	DATE: JULY 2025	SCALE: NTS	ORIG. SIZE: A3
PROJECT NUMBER / SHEET: 2025-006 | TD1			ISSUE: B

VEGETATION AREA TABLE & TREE DATA DEFINITIONS

Vegetation Areas

Area Number	Site	Species Mix	Estimated Stem Count	Average Height	Averag eDBH	Assessment Comment
1	BOA	Mix of native species	65	5	70	Understory vegetation is denser on the edge of the carparks
2	BOA	Mix of native species	28	6	70	Understory vegetation is denser on the edge of the carparks
3	BOA	Mix of native species	45	6	90	Dense understorey
4	BOA	Mix of native species	120	8	80	Understory vegetation is denser on the edge of carparks
5	BOA	Mix of native species	6	5	150	Dense understorey vegetation
6	BOA	Mix of native species	40	10	120	Dense understorey vegetation
7	BOA	Mix of native species	100	6	70	Understory vegetation is denser on the edge of the road
8	BOA	Mix of native species	40	4	70	Understory vegetation is denser on the edge of the road
9	BOA	Mix of native species	30	6	70	Understory vegetation is denser on the edge of the road
10	BOA	Mix of native species	30	5	70	Understory vegetation is denser on the edge of the road

Definitions

Tree ID	Each tree has been given an individual number for identification purposes. This number will remain assigned to this tree from this point on. Inclusion of more trees in the future will be numbered from the next available sequential number.		
Botanic Name	Botanical name of the trees to species level. NOTE: Species have been copied from the previous ecological report		
Native/Exotic	Either a native tree specimen or not native specimen (exotic), or tree origin unknown		
Tree Height	An estimated or measured height from the ground to the highest point of the canopy.		
Crown Width	An average estimated or measured distance from one side of the canopy to another.		
DSH	Diameter at Standard Height: A measured or estimated measurement of the trunk diameter at 1.4m from the ground, in accordance with AS 4970: 2025 Protection of trees on development sites		
SRZ	Structural Root Zone, critical root zone area required for the protection of a tree, measured in metres as radial distance from the trunk, in accordance with AS 4970: 2025 Protection of trees on development sites.		
NRZ	Notional Root Zone, recommended root zone protection area for tree sustainabilty measured in metres as a x12 radial distance from the trunk, in accordance with AS 4970: 2025 Protection of trees on development sites		
TPZ	Tree Protection Zone, Modified tree protection area for tree sustainabilty, incorporating combined NRZ and considering numerous inputs such as soils and tree species, in accordance with AS 4970: 2009 Protection of trees on development sites		
Tree Health	This represents the assessment of the tree foliage size, colour and canopy density. Factors such as species and time of year must be considered when making the assessment and then allocation to the appropriate category.	Good	Leaf size, colour and canopy density is good for the tree species and time of year. The canopy has no dead tips and little dead wood within the canopy.
		Fair	Leaf size is slightly under sized and may be a lighter shade than would be expected of the species for the time of year.
		Declining	The canopy exhibits distinct thinning and dead tips to the branch structure. At this stage, the decline is recent and the dead wood is still sound in structure.
		Poor	The canopy exhibits distinct thinning and dead tips to the branch structure. It is thinner in canopy density than a healthy example of the species. At this stage, the decline is recent and the dead wood is becoming brittle suggesting the decline in health has been present for more than one growing season.
		Dead	The canopy has died with no evidence of live buds or growth points. Branch structure is brittle and there is no indication of epicormic stress growth.
Health Comment	Further detail on tree health observations		
Structure	The physical structure in the lower zone of the trunk from the ground to the first main unions.	Good	Single trunk with good and even taper. No visual signs of defects or poor unions of bifurcated trunks.
		Fair	Single or bifurcated trunk with some visual faults of a minor nature. These faults will require no immediate action however may need to be monitored in the future.
		Poor	Trunk with visible faults that will require remedial action within the reinspection time frame. These may include poor form, trunk wounds, trunk cavities and included bifurcations.
		Hazardous	Visible faults that will cause a failure in the near future. Faults of this nature are likely to be recommended for removal.
		Dead	Loose, dead bark and no signs of live tissue.
Structure Comment	Further detail on tree structure observations.		
Reinspection	The period the assessment that the trees require reinspection. This will vary from site to site and tree to tree based on the tree and the site conditions. Reinspection period is indicated in years and should be considered the minimum inspection period for duty of care.		
Remedail Works	A description of works required to adress strucutre observaions made at the time of assessment		
Design Impact Reasoning	Determined principal impacts on tree		
Status	Assessment of impacts to tree health and structure and a determination of long term sustatinabiltiy wihtin the design.	Retain	Proposed design has no or limited impact on tree ehalthor strucuture
		Remove	The proposed design is in direct confilect or has imapcts that preclude the tree form retention
		Retain with Impacts	Tree health and structure will be adversely impacted by the proposed works; however, trees are to be retained with an acceptance by the owner that tree failure and death are possible outcomes.
Other Notes & Line Items	Trees assessment is carried out as a visual ground based assessment. (VTA). VTA is based on Mattheck, C. and Breloer, H. (1994) and Lonsdale, D. (1999).		
	Tree removal is based on AAC's interpretation the impacts of development, civil, and construction works.		

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PROJECT
SPRINGBROOK NP
BEST OF ALL LOOKOUT
2025-006

TITLE
VEGETATION AREA TABLE &
TREE DATA DEFINITIONS

DRAWN DL	DATE 31/07/2025	AUTHORISED FOR ISSUE Jeremy Young	
DRAWING CHECK JY	DATE 31/07/2025		
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ASSESSED BY JY	DATE JULY 2025	SCALE NTS	ORG. SIZE A3
PROJECT NUMBER / SHEET 2025-006 | TD3		ISSUE B	