

10th August 2021

Attn: Sam Gibson Cadence Sydney Office Level 1, 10 Mallett Street Camperdown NSW 2050

Re: Kingswood TAFE - Addendum to Arboricultural Impact Assessment Report – Rev A, dated 10.12.2021

Background

This Addendum was prepared for Cadence and provides information on several additional trees not included in the TreeiQ Arboricultural Impact Assessment Report, dated 10.012.20 which was prepared in relation to the proposed Institute of Applied Technology project. TreeiQ have received updated plans which include a proposed loading zone, cycle path, road demolition and modification of the Gate 2 campus entry off O'Connell Street. This Addendum addresses a number of trees which are located within these areas and is based on the review of the Site Demolition Plan (dated 23.07.2021, Rev D) and Partial Landscape Demolition Plan (note dated) only. This Addendum should be read in conjunction with the December 2020 Report.

TreeiQ visited the site on the 4th August 2021 to undertake a Visual Tree Assessment¹ (VTA) of the additional trees. Refer to Appendix 2 (Tree Assessment Schedule).

Discussion

The supplied plan shows the proposed Institute of Applied Technology building and surrounds will require the additional removal of Trees 31, 32 and 52-48. Of these, Trees 49 and 52 have been allocated a Retention Value of *Consider for Retention*. However, Tree 49 has a short a short Useful Life Expectancy (ULE) of 5-15 years as it is in fair health and structural condition. Trees 31, 32, 47, 50 and 51 have been allocated a Retention Value of *Consider for Removal*.

The supplied plan shows that as part of the modification of the Gate 2 entry, Trees 99-101, 103-108 and 110 are proposed for removal. Of these, Trees 99-101, 103-106, 108 and 110 have been allocated a Retention Value of *Consider for Retention*. However, Trees 99, 105 and 106 have a short a short ULE of 5-15 years due to a reduced health or the presence of structural defects. Tree 107 has been allocated a Retention Value of *Consider for Removal*.

Tree 114 does not appear to be impacted by the works however it is in poor health with a transient ULE of <5 years. It is recommended that this tree is also removed as part of the proposed development works.

The supplied plan shows the proposed cycle path connecting the Institute of Applied Technology site to the Great Western Highway runs through the Tree Protection Zone (TPZ) areas of Trees 13, 92 and 93. These trees have a ULE of 15-40 years and have been allocated a Retention Value of *Consider for Retention*.

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¹ Mattheck & Breloer (2003)

The extent of encroachment from the proposed cycle path represents *Major Encroachments* as defined by *Australian Standard 4970 (2009) Protection of Trees on Development Sites* (AS-4970). A *Major Encroachment* has the potential to impact the trees and reduce their ULE. Therefore, the alignment of the northern end of the cycle path should be slightly adjusted so that the cycle path is outside of the TPZ areas of Trees 13, 92 and 93 to minimise adverse impacts. The establishment of tree protection measures will be required to protect the trees from indirect construction related damage as part of the development works.

The supplied plan shows a section of access road is to be demolished to the south of the Institute of Applied Technology site. The works fall within the TPZ area of Tree 72. This tree has a ULE of 15-40 years and has been allocated a Retention Value of *Consider for Retention*.

As the works are proposed within the tree's Structural Root Zone (SRZ), the extent of works represents a *Major Encroachment* as defined by AS-4970. The SRZ is defined by AS-4970 as the minimum area required for the stability of the tree. Therefore, road demolition works should avoid damaging any woody roots. The establishment of tree protection measures will be required to protect Tree 72 and other adjacent trees from indirect construction related damage as part of the development works.

Trees 102, 109 and 111-113 and 115 are not directly impacted by the proposed works. However, the establishment of tree protection measures and the use of tree sensitive methods will be required where works fall within the TPZ areas.

Conclusions

The supplied plan shows the updated works will require the removal of an additional seventeen (17) trees. These are Trees 31, 32, 47, 49, 50, 51, 52, 99-101, 103-108 and 110. Therefore, in total the proposed Institute of Applied Technology for Construction development will require the removal of forty-seven (47) trees. Of these:

- Twenty-one (21) trees have been allocated a Retention Value of *Consider for Retention* (Trees 49, 52, 54, 55, 58, 59, 61, 62, 63, 77, 79, 84, 99, 100, 101, 103-106, 108 & 110
- Twenty-three (23) trees have been allocated a Retention Value of *Consider for Removal* (Tree 29-32, 34-36, 47, 50, 51, 53, 56, 60, 64-66, 78, 80, 82, 85, 87, 88 & 107
- Three (3) trees have been allocated a Retention Value of *Priority for Removal* (Trees 57, 81 and 83)

Recommendations

In conjunction with the tree protection measures outlined within the December 2020 Report, the following tree protection measures should be established and tree sensitive methods should be utilized to minimize adverse impacts:

- The cycle path should be relocated outside of the TPZ areas of Trees 13, 92 and 93
- Prior to installing the cycle path, install TPZ fencing at the perimeter of the TPZ areas of Trees 13, 92 and
 93
- Prior to undertaking demolition of the road, install TPZ fencing at the perimeter of the TPZ areas of Trees 71, 72 and 94-98 with fencing set back within the TPZ of Tree 72 to allow for demolition access

- The existing asphalt road surface within the TPZ area of Tree 72 should be carefully removed using a compact excavator guided by a spotter. The excavator should work from the pavement surface at all times and the asphalt surface carefully lifted to avoid disturbance of the underlying soil profile. The underlying subbase layer should be retained in situ to avoid root disturbance
- Prior to undertaking modification of the Gate 2 campus entry, install TPZ fencing at the perimeter of the TPZ areas of Trees 102, 109, 111-113 and 115 with fencing setback as required to allow for development access
- Works within unfenced TPZ areas should be supervised by the Project Arborist. The pruning of roots
 >25mm diameter should be undertaken only where approved by the Project Arborist
- Tree 114 does not appear to be impacted by the works however it is in poor health with a transient ULE of <5 years and should be removed
- A replacement tree should be installed for each tree removed as part of the works. New trees should be grown and supplied in accordance with Australian Standard 2303 (2018) Tree Stock for Landscape Use.

Please do not hesitate to contact me if require any additional information or have any questions.

Yours sincerely

BSc (hons.) Arboriculture
HN Dip. Arboriculture
N Dip. Horticulture

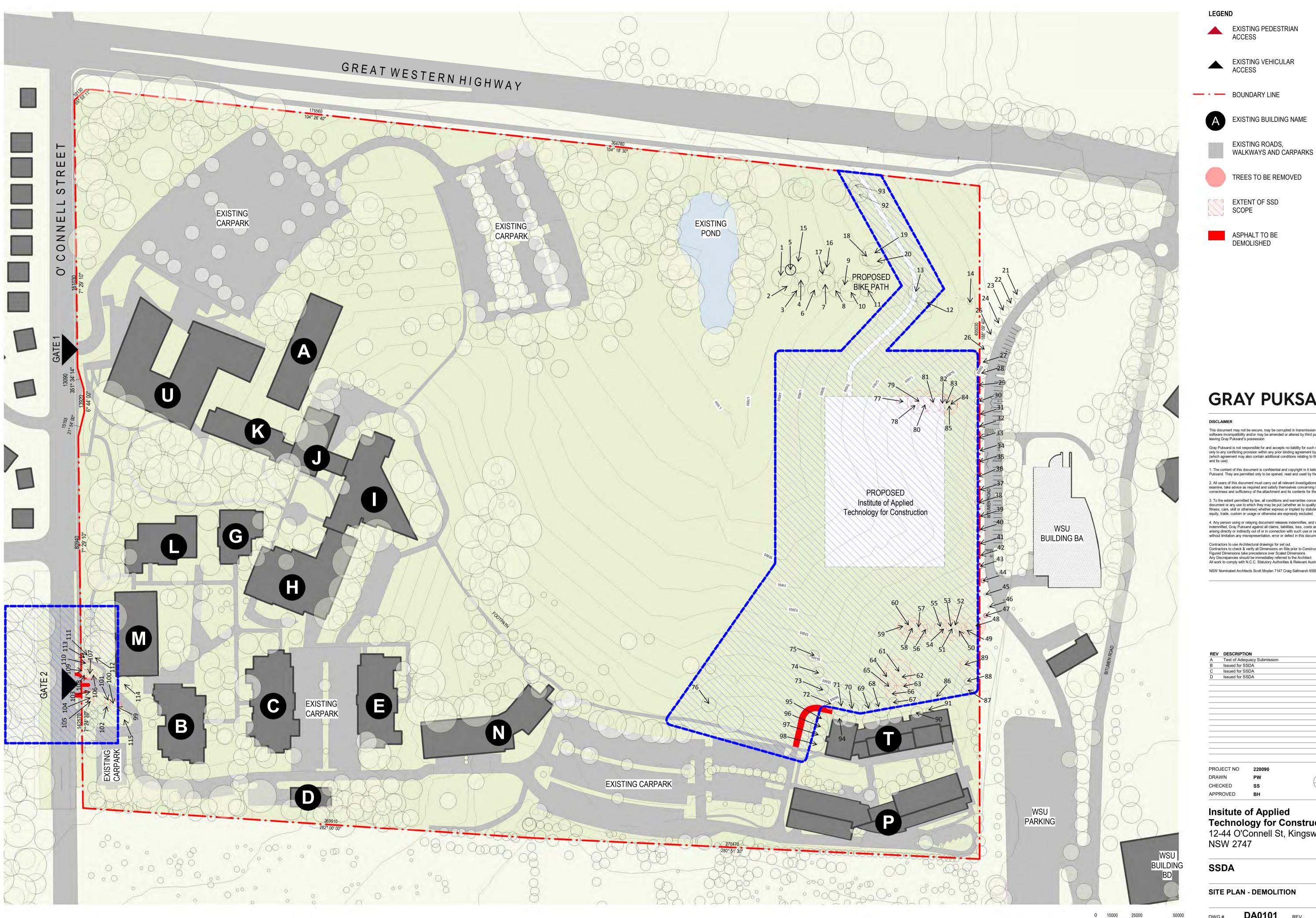
Dip. Hort (Landscape Design)

Martin Peacock



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p. 0404 424 264 | f. 02 9012 0924 po box 146 summer hill 2130 info@treeiQ.com.au abn 62 139 088 832



EXISTING PEDESTRIAN

EXISTING BUILDING NAME

EXISTING ROADS, WALKWAYS AND CARPARKS

TREES TO BE REMOVED

EXTENT OF SSD

GRAY PUKSAND

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Contractors to use Architectural drawings for set out.

Contractors to check & verify all Dimensions on Site prior to Construction/Fabrication.

Figured Dimensions take precedence over Scaled Dimensions.

Any Discrepancies should be immediatley referred to the Architect.

All work to comply with N.C.C. Statutory Authorities & Relevant Australian Standards.

NSW Nominated Architects Scott Moylan 7147 Craig Saltmarsh 6569

Insitute of Applied Technology for Construction 12-44 O'Connell St, Kingswood

SITE PLAN - DEMOLITION

SCALE @ A1 As indicated

DA0101 REV

Appendix 2 - Tree Assessment Schedule

Append	Appendix 2 – Tree Assessment Schedule												
Tree No.	Species	Combined DBH (mm)	Height (m)	Crown Spread	Health	Structural Condition	Comments	Age Class	ULE (years)	Landscape Significance	Retention Value	Radial SRZ (m)	Radial TPZ (m)
92	Corymbia maculata (Spotted Gum)	475	14	5	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.5	5.7
93	Corymbia maculata (Spotted Gum)	500	14	5	Good	Fair	Partially suppressed. Co-dominant inclusions, minor. Wound(s), early signs of decay. Parasitic plant(s) within crown. Adaptive growth. Localised borer in lower trunk.	Mature	15-40	Moderate	Consider for Retention	2.6	6.0
94	Platanus x acerifolia (London Plane Tree)	400	10	5	Fair	Fair	Small (<25mmø) epicormic growth in high volumes. Mechanical damage to exposed surface roots. Wound(s), early signs of decay. Phototrophic lean, slight.	Mature	5-15	Moderate	Consider for Retention	2.3	4.8
95	Fraxinus americana (American Ash)	256.173769	5	3	Good	Good	Partially suppressed.	Mature	15-40	Low	Consider for Removal	1.9	3.1
96	Fraxinus americana (American Ash)	282.842712	5	3	Good	Good	Partially suppressed.	Mature	15-40	Low	Consider for Removal	2.0	3.4
97	Fraxinus americana (American Ash)	346.410162	5	3	Good	Good	Partially suppressed.	Mature	15-40	Low	Consider for Removal	2.2	4.2
98	Fraxinus americana (American Ash)	368.272997	5	3	Good	Good	Partially suppressed.	Mature	15-40	Low	Consider for Removal	2.3	4.4

Tree No.	Species	Combined DBH (mm)	Height (m)	Crown Spread	Health	Structural Condition	Comments	Age Class	ULE (years)	Landscape Significance	Retention Value	Radial SRZ (m)	Radial TPZ (m)
99	Eucalyptus saligna (Sydney Blue Gum)	300	16	5	Good	Fair	Partially suppressed. Wound(s), advanced stages of decay. Trunk cavity(s), minor. Adaptive growth. Borer.	Mature	5-15	Moderate	Consider for Retention	2.1	3.6
100	Casuarina cunninghamiana (River She Oak)	425	12	3	Good	Good	Partially suppressed. Wound(s), advanced stages of decay.	Mature	15-40	Moderate	Consider for Retention	2.4	5.1
101	Casuarina cunninghamiana (River She Oak)	400	12	3	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.3	4.8
102	Casuarina cunninghamiana (River She Oak)	250	11	2	Good	Good	Small (<25mmø) & medium (25-75mmø) deadwood in low volumes. Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	1.9	3.0
103	Casuarina cunninghamiana (River She Oak)	425	10	4	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.4	5.1
104	Casuarina cunninghamiana (River She Oak)	300	12	3	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.1	3.6
105	Casuarina cunninghamiana (River She Oak)	275	11	3	Fair	Good	Crown density 50-75%. Small (<25mmø) deadwood in moderate volumes. Partially suppressed.	Mature	5-15	Moderate	Consider for Retention	2.0	3.3
106	Casuarina cunninghamiana (River She Oak)	496.235831	15	4	Good	Fair	Partially suppressed. Co-dominant inclusions, major.	Mature	5-15	Moderate	Consider for Retention	2.6	6.0

Tree No.	Species	Combined DBH (mm)	Height (m)	Crown Spread	Health	Structural Condition	Comments	Age Class	ULE (years)	Landscape Significance	Retention Value	Radial SRZ (m)	Radial TPZ (m)
107	Casuarina cunninghamiana (River She Oak)	300	9	3	Good	Good	Heavily suppressed. Poor form.	Mature	5-15	Low	Consider for Removal	2.1	3.6
108	Casuarina cunninghamiana (River She Oak)	300	11	3	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.1	3.6
109	Casuarina cunninghamiana (River She Oak)	300	13	4	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.1	3.6
110	Casuarina cunninghamiana (River She Oak)	300	13	2	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.1	3.6
111	Casuarina cunninghamiana (River She Oak)	350	14	4	Good	Good	Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.2	4.2
112	Casuarina cunninghamiana (River She Oak)	400	17	3	Good	Good	Partially suppressed. Wound(s), early signs of decay.	Mature	15-40	Moderate	Consider for Retention	2.3	4.8
113	Casuarina cunninghamiana (River She Oak)	350	14	3	Good	Good	Crown density 75-95%. Partially suppressed.	Mature	15-40	Moderate	Consider for Retention	2.2	4.2
114	Casuarina cunninghamiana (River She Oak)	625	17	4	Poor	Good	Crown density 0-25%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes.	Mature	<5	Moderate	Priority for Removal	2.8	7.5

Tree No.	Species	Combined DBH (mm)	Height (m)	Crown Spread	Health	Structural Condition	Comments	Age Class	ULE (years)	Landscape Significance	Retention Value	Radial SRZ (m)	Radial TPZ (m)
115	Eucalyptus tereticornis (Forest Red Gum)	325	7	5	Good	Good	Crown density 75-95%. Small (<25mmø) & medium (25-75mmø) deadwood in low volumes. Wound(s), various stages of decay.	Mature	15-40	Moderate	Consider for Retention	2.1	3.9

Appendix 3 Plates







