2018

Coles Car Park Alfred St. Tree Retention Survey



Prepared for: Jacob Vittorio,

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1. Brief

I have been asked by Jacob Vittorio of the City of Port Philip to conduct a tree survey of all trees located in and around Coles Carpark. The survey is for the purpose of a proposed development. I have been asked to provide basic tree data, retention value, calculate Tree Protection Zone (TPZ) radius, Structural Root Zone (SRZ) radius and Useful Life Expectancy (ULE).

2. Methodology

- John Petrie visited the site on 11/10/2018;
- Trees were visually inspected from the ground only;
- Photos were taken using a Samsung Galaxy S7;
- A diameter tape was used to measure diameter at breast height (DBH) and diameter at root buttress (DARB);
- Height and width were estimated;
- Conclusions on health, structure and Useful Life Expectancy (ULE) are based on the descriptors in the appendix 1;
- Conclusions on retention value have been based on TreeAZ[®] in Appendix 2 (version 10.10-anz) Barrell Tree Consulting UK

3. Site Description

The car park is located between Alfred St. on North Nelson St. on East. It is a busy urban car park covered in bitumen. All trees are planted native or indigenous Eucalyptus species, no remnant trees are on site. Trees along Alfred St. and Nelson St. are planted in a garden bed with no mulch or irrigation present. Trees planted inside the car park have been planted in small tree wells with many trees lifting the concrete and bitumen surrounding them. Exposed and damaged roots can be seen on many trees.

4. Site Plan



Figure 1 Nearmap of carpark

5. Tree Data Table:

No	Botanical Name	Common Name	Origin	DBH (cm)	DARB (cm)	Height width	Health	Structure	Tree A/Z Rating	TPZ (m)	SRZ (m)	ULE	Comments
1	Eucalyptus globulus	Southern Blue Gum	Native	43	56	9 x 9	Fair	Fair	A2	5.2	2.6	Medium	Deadwood, located beside storm water drain tree shows good response to pruning
2	Eucalyptus globulus	Southern Blue Gum	Native	43	54	9 x 10	Fair	Poor	Z5	5.2	2.6	Medium	Large scar on leader co-dominant branches
3	Eucalyptus leucoxylon	Yellow Gum	Native	14	16	6 x 4	Fair	Poor	Z1	2	1.5	Long	
4	Eucalyptus globulus	Southern Blue Gum	Native	44	51	9 x 9	Fair	Fair	Z1	5.3	2.5	Long	Deadwood, canopy thinning
5	Eucalyptus globulus	Southern Blue Gum	Native	68	79	10 x 10	Fair	Fair	A2	8.2	3	Long	Sparse canopy. Deadwood
6	Eucalyptus leucoxylon	Yellow Gum	Native	43	48	13 x 13	Fair	Poor	Z5	5.2	2.4	Long	History of branch failure, Large tare-out on N.E. side
7	Eucalyptus leucoxylon	Yellow Gum	Native	24	30	10 x 7	Fair	Fair	Z1	2.9	2	Long	Deadwood.
8	Eucalyptus conferruminata	Bald Island Marlock	Native	54	54	8 x 14	Fair	Fair	A2	6.5	2.6	Long	Deadwood. Old brick pit at base of tree
9	Eucalyptus globulus	Southern Blue Gum	Native	61	71	10 x 12	Fair	Poor	Z5	7.3	2.9	Medium	Deadwood, girdling root, Large wound on center leader
10	Eucalyptus leucoxylon	Yellow Gum	Native	22	27	9 x 8	Fair	Poor	Z5	2.6	1.9	Medium	Extreme lean over road, crossing branches damage from passing traffic
11	Eucalyptus globulus	Southern Blue Gum	Native	62	74	12 x 10	Poor	Fair	A2	7.4	2.9	Medium	Deadwood, canopy thinning History of failure
12	Eucalyptus leucoxylon 'rosea'	Dwarf Yellow Gum	Native	17	20	5 x 7	Fair	Fair	Z1	2	1.7	Long	
13	Eucalyptus leucoxylon	Yellow Gum	Native	47	55	13 x 10	Fair	Fair	A2	5.6	2.6	Long	co-dominant branches
14	Eucalyptus melliodora	Yellow Box	Indigenous	26	31	8 x 9	Fair	Fair	Z1	3.1	2	Long	DBH taken @ 1 m sparse canopy deadwood

No	Botanical Name	Common Name	Origin	DBH (cm)	DARB (cm)	Height width	Health	Structure	Tree A/Z Rating	TPZ (m)	SRZ (m)	ULE	Comments
15	Eucalyptus leucoxylon	Yellow Gum	Native	38	48	10 x 10	Fair	Fair	Z5	4.6	2.4	Long	Small deadwood, history of branch failures
16	Eucalyptus leucoxylon	Yellow Gum	Native	31	37	12 x 8	Fair	Fair	Z5	3.7	2.2	Long	History of branch failure, portion of canopy missing
17	Eucalyptus globulus	Southern Blue Gum	Native	89	108	12 x 11	Fair	Fair	A2	10.7	3.4	Long	Deadwood.
18		Dead Tree				5 x 2	Dead	Poor	Z4	N/A	1.5	Remove	Dead. No hollows. Remove tree.
19	Eucalyptus mannifera	Brittle Gum	Native	46	58	10 x 11	Fair	Fair	A2	5.5	2.6	Long	Deadwood, large exposed roots with some damage
20	Eucalyptus leucoxylon	Yellow Gum	Native	36	43	11 x 10	Fair	Fair	Z1	4.3	2.3	Long	
21	Eucalyptus melliodora	Yellow Box	Indigenous	43	47	10 x 10	Fair	Fair	Z1	5.2	2.4	Long	Small deadwood in canopy
22	Eucalyptus leucoxylon	Yellow Gum	Native	32	36	10 x 9	Fair	Fair	Z5	3.8	2.2	Long	Co-dominant union in crown with compression fork, prune
23	Eucalyptus leucoxylon	Yellow Gum	Native	18	22	7 x 5	Fair	Fair	Z1	2.2	1.8	Long	
24	Eucalyptus mannifera	Brittle Gum	Native	30	37	8 x 8	Poor	Fair	Z1	3.6	2.2	Long	Deadwood.
25	Eucalyptus mannifera	Brittle Gum	Native	41	46	10 x 9	Fair	Fair	Z1	4.9	2.4	Long	Deadwood.
26	Eucalyptus camuldensis	Red Gum	Indigenous	72	83	11 x 12	Fair	Fair	A2	8.6	3.1	Long	

6. Discussion

6.1 Trees worthy of material constraint

Only 8 trees were given an A2 rating. Category A trees are Important trees suitable for retention for more than 10 years and worthy of being a material constraint. A2 refers to minor defects that could be addressed by remedial care and/or work to adjacent trees (Barrell Tree Consulting UK, 2011).

6.2 Trees unworthy of material constraint

18 trees have been given a Z rating. Category Z trees are unimportant trees not worthy of being a material constraint. 10 trees have a Z1 rating, Z1 refers to young or insignificant small trees, i.e. below the local size threshold for legal protection, etc. 1 tree is rated Z4; dead, dying, diseased or declining. 7 trees are rated Z5 which refers to reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc. (Barrell Tree Consulting UK, 2011).

Removal of these trees is not necessarily recommended. Based on size and condition alone they are not considered worthy of design alterations and could be easily replaced after works have been completed. However, consideration should be given to the maturity and ascetics of the Z1 and Z5 trees due to their ULE.

6.3 Tree Protection zones

Once the decision has been made on which trees are to be retained, consideration must be given to tree protection. Eucalyptus species in general are only moderately tolerant of root disturbance and intolerant of changes in gradient (Matheny & Clarke, 1998). Trees on development sites can be protected by installation of tree protection zones. Tree protection zones have been calculated according to AS4970-2009 Protection of Trees on Development Sites. These figures can be found for all trees in the tree data table and also in Appendix 3 photographic tree data.

6.4 Structural Root Zones

Have been calculated in accordance with AS4970-2009 Protection of Trees on Development Sites and are supplied in the tree data table. A structural Root Zone is a theoretical volume of soil and roots necessary to keep a tree stable in the ground.

7. References

Australian Standard (4970 2009). Protection of Trees on Development Sites, Standards Australia, Homebrush, NSW.

Matheny N. and Clarke J.R. (1998). Trees and Development, International Society of Arboriculture, USA.

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8. Appendix 1

8.1 TREE DESCRIPTOR

HEALTH

Good Foliage of tree is entire, with good colour, very little sign of pathogens and of good density. Growth indicators are good i.e. Extension growth of twigs and wound wood development. Minimal or no canopy die back (deadwood).

Fair Tree is showing one or more of the following symptoms;

< 25% dead wood, minor canopy die back, foliage generally with good colour though some imperfections may be present. Minor pathogen damage present, with growth indicators such as leaf size, canopy density and twig extension growth typical for the species in this location.

Poor Tree is showing one or more of the following symptoms of tree decline; > 25% deadwood, canopy die back is observable, discoloured or distorted leaves. Pathogens present, stress symptoms are observable as reduced leaf size, extension growth and canopy density.

Dead or dying Tree is in severe decline; > 55% deadwood, very little foliage, possibly epicormic shoots, minimal extension growth.

STRUCTURE

Good Trunk and scaffold branches show good taper and attachment with minor or no structural defects. Tree is a good example of the species with a well-developed form showing no obvious root problems or pests and diseases.

Fair Tree shows some minor structural defects or minor damage to trunk e.g. bark missing, there could be cavities present. Minimal, damage to structural roots. Tree could be seen as typical for this species.

Poor There are major structural defects, damage to trunk or bark missing. Co-dominant stems could be present or poor structure with likely points of failure. Girdling, or damaged roots obvious. Tree is structurally problematic.

Hazardous Tree is an immediate hazard with potential to fail, this should be rectified as soon as possible.

USEFUL LIFE EXPEECTANCY – ULE.

LONG ULE Trees that appears to be retainable with an acceptable level of risk for more than 40 years.

Structurally sound trees located in positions that can accommodate future growth.

Storm damaged or defective trees that could be made suitable for retention in the long term by remedial tree surgery.

Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long-term retention.

MEDIUM ULE Trees that appear to be retainable with an acceptable level of risk for 15 to 40 years.

Trees that may only live between 15 and 40 years.

Trees that may live for more than 40 years but would be removed to allow the safe development of more suitable individuals.

Trees that may live for more than 40 years but would be removed during the course of normal management for safety and nuisance reasons.

Storm damage or defective trees that can be made suitable for retention in the medium term by remedial work.

SHORT ULE Trees that appear to be retainable with an acceptable level of risk for 5 to 15 years.

Trees that may live for 5 to 15 years.

Trees that may live for more than 15 years but would be removed to allow the safe development of more suitable individuals.

Trees that may live for more than 15 years but would be removed during the course of normal management for safety and nuisance reasons.

Storm damaged or defective trees that require substantial remedial work to make safe and are only suitable for retention in the short term.

REMOVE Trees with a high level of risk that would need removal within the next 5 years.

Dead trees.

Dying or suppressed and declining trees through disease or inhospitable conditions.

Dangerous trees through instability or recent loss of adjacent trees.

Dangerous trees through structural defects including cavities, decay, included bark, wounds or poor form.

Damaged trees that are considered unsafe to retain.

Trees that will become dangerous after removal of other trees for the above reasons.

9. Appendix 2

9.1 TreeAZ Categories (Version 10.04-ANZ)

CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be selfexplanatory. They must be read in conjunction with the most current explanations published at <u>www.TreeAZ.com</u>.

9.2 Category Z: Unimportant trees not worthy of being a material constraint

Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species

Z1 Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc.

Z2 Too close to a building, i.e. exempt from legal protection because of proximity, etc.

Z3 Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc. High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure

Z4 Dead, dying, diseased or declining

Z5 Severe damage and/or structural defects where a high risk of failure cannot

Z6 be satisfactorily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc. Instability, i.e. poor anchorage, increased exposure, etc. Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people

Z7 Excessive, severe and intolerable inconvenience to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. dominance, debris, interference, etc.

Z8 Excessive, severe and intolerable damage to property to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. severe structural damage to surfacing and buildings, etc. Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population

Z9 Severe damage and/or structural defects where a high risk of failure can be temporarily

Z10 reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable to adverse weather conditions, etc. Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings, poor architectural framework, etc.

Z11 Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression, etc.

Z12 Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance, etc.

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

9.3 Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint

A1 No significant defects and could be retained with minimal remedial care

A2 Minor defects that could be addressed by remedial care and/or work to adjacent trees

A3 Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years

A4 Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

10. Appendix 3

10.1 Photographic tree data

No.	1		
Botanical Name	Eucalyptus globulus		
Common Name	Southern Blue Gum		
DBH (cm)	43	Origin	Native
DARB (cm)	56	Health	Fair
Height width	9 x 9	Structure	Fair
Tree A/Z	A2	ULE	Medium
TPZ (m)	5.2		
SRZ	2.6	Comments	Deadwood ir shows good
10% of TPZ area (m²)	3.5		

No.	

2

-	
Botanical Name	Eucalyptus globulus
Common Name	Southern Blue Gum
DBH (cm)	43
DARB (cm)	54
Height width	9 x 10
Tree A/Z	Z5
TPZ (m)	5.2
SRZ	2.6
10% of TPZ area (m²)	3.5

Origin	Native
Health	Fair
Structure	Poor
ULE	Medium



Comments

Large scar on leader co-dominant branches

Ne	3			
No.	3			
Botanical	Eucalyptus			
Name	leucoxylon			
Common Name	Yellow Gum			
DBH (cm)	14	Origin	Native	
DARB (cm)	16	Health	Fair	
Height width	6 x 4	Structure	Poor	
Tree A/Z	Z1	ULE	Long	
TPZ (m)	2			
SRZ	1.5	Comments		
10% of TPZ area (m²)	1.4			

No.	4		
tanical Ime	Eucalyptus globulus		
Common Name	Southern Blue Gum		
OBH (cm)	44	Origin	Origin Native
DARB (cm)	51	Health	Health Fair
Height width	9 x 9	Structure	Structure Fair
Tree A/Z	Z1	ULE	ULE Long
TPZ (m)	5.3		
SRZ	2.5	Comments	Comments Deadwood,
10% of TPZ area (m²)	3.6		

No.	5		
Botanical Name	Eucalyptus globulus		
Common Name	Southern Blue Gum		
DBH (cm)	68	Origin	Native
DARB (cm)	79	Health	Fair
Height width	10 x 10	Structure	Fair
Tree A/Z	A2	ULE	Long
TPZ (m)	8.2		
SRZ	3	Comments	Sparse cano
10% of TPZ area (m²)	5.6		

No.	6			
Botanical Name	Eucalyptus leucoxylon			
Common Name	Yellow Gum			
DBH (cm)	43	Origin	Native	
DARB (cm)	48	Health	Fair	
Height width	13 x 13	Structure	Poor	
Tree A/Z	Z5	ULE	Long	
TPZ (m)	5.2			
SRZ	2.4	Comments	History of bra	anch failure, Large t
10% of TPZ area (m²)	3.5			

No.	7		
Botanical Name	Eucalyptus leucoxylon		
Common Name	Yellow Gum		
DBH (cm)	24	Origin	Native
DARB (cm)	30	Health	Fair
Height width	10 x 7	Structure	Fair
Tree A/Z	Z1	ULE	Long
TPZ (m)	2.9		
SRZ	2	Comments	Deadwood.
10% of TPZ area (m²)	2		



No.	8			R. A.
Botanical Name	Eucalyptus conferruminata			
Common Name	Bald Island Marlock			AN AS A
OBH (cm)	54	Origin	Native	
DARB (cm)	54	Health	Fair	
Height width	8 x 14	Structure	Fair	
ree A/Z	A2	ULE	Long	
PZ (m)	6.5			-
RZ	2.6	Comments	Deadwood. O	ld brick pit at base of tree
.0% of TPZ area (m²)	4.4			

No.	9		
Botanical Name	Eucalyptus globulus		
Common Name	Southern Blue Gum		
OBH (cm)	61	Origin	Origin Native
DARB (cm)	71	Health	Health Fair
leight width	10 x 12	Structure	Structure Poor
Tree A/Z	Z5	ULE	ULE Medium
ſPZ (m)	7.3		
GRZ	2.9	Comments	Comments Deadwood leader
10% of TPZ area (m²)	5		

No.	10			
Botanical Name	Eucalyptus leucoxylon			-
Common Name	Yellow Gum			
DBH (cm)	22	Origin	Native	Native
DARB (cm)	27	Health	Fair	Fair
Height width	9 x 8	Structure	Poor	Poor
Tree A/Z	Z5	ULE	Medium	Medium
TPZ (m)	2.6			
SRZ	1.9	Comments		Extreme lean over road from passing traffic
10% of TPZ area (m²)	1.8		nom passi	

No.	11			States of
Botanical Name	Eucalyptus globulus			
Common Name	Southern Blue Gum			
DBH (cm)	62	Origin	Native	
DARB (cm)	74	Health	Poor	
Height width	12 x 10	Structure	Fair	
Tree A/Z	A2	ULE	Medium	
TPZ (m)	7.4			
SRZ	2.9	Comments	Deadwood, can	opy thinning History of failure
10% of TPZ area (m²)	5.1			

No.	12			163
Botanical Name	Eucalyptus leucoxylon 'rosea'			
Common Name	Dwarf Yellow Gum			
DBH (cm)	17	Origin	Native	
DARB (cm)	20	Health	Fair	
Height width	5 x 7	Structure	Fair	
Tree A/Z	Z1	ULE	Long	
TPZ (m)	2			
SRZ	1.7	Comments		
10% of TPZ area (m²)	1.4			



No.	13			
Botanical Name	Eucalyptus leucoxylon			
Common Name	Yellow Gum			
DBH (cm)	47	Origin	Native	
DARB (cm)	55	Health	Fair	
Height width	13 x 10	Structure	Fair	
Tree A/Z	A2	ULE	Long	
TPZ (m)	5.6			
SRZ	2.6	Comments	co-dominant	: branches
10% of TPZ area (m²)	3.9			

No.	14		
Botanical	Eucalyptus		
Name	melliodora		
Common	Yellow Box		
Name			
DBH (cm)	26 @1m	Origin	Indigenous
DARB (cm)	31	Health	Fair
Height	8 x 9	Structure	Fair
width			
Tree A/Z	Z1	ULE	Long
TPZ (m)	3.1		
SRZ	2	Comments	Sparse canop
10% of TPZ	2.1		
area (m²)			
	2.1		

No.	15		
Botanical Name	Eucalyptus leucoxylon		
Common Name	Yellow Gum		
DBH (cm)	38	Origin	Native
DARB (cm)	48	Health	Fair
Height width	10 x 10	Structure	Fair
Tree A/Z	Z5	ULE	Long
TPZ (m)	4.6		
SRZ	2.4	Comments	Small de
10% of TPZ area (m²)	3.1		

No.	16		
lotanical Iame	Eucalyptus Ieucoxylon		
Common Name	Yellow Gum		
DBH (cm)	31	Origin	Origin Native
DARB (cm)	37	Health	Health Fair
Height width	12 x 8	Structure	Structure Fair
Free A/Z	Z5	ULE	ULE Long
ſPZ (m)	3.7		
SRZ	2.2	Comments	Comments History of bra
10% of TPZ area (m²)	2.6		

No.	17			
Botanical Name	Eucalyptus globulus			All
Common Name	Southern Blue Gum			
DBH (cm)	89	Origin	Native	
DARB (cm)	108	Health	Fair	
Height width	12 x 11	Structure	Fair	
Tree A/Z	A2	ULE	Long	
TPZ (m)	10.7			
SRZ	3.4	Comments	Deadwood.	
10% of TPZ area (m²)	7.3			

No.	18			
Botanical Name				Part of the second seco
Common Name	Dead			
DBH (cm)		Origin		
DARB (cm)		Health	Dead	
Height width	5 x 2	Structure	Poor	
Tree A/Z	Z4	ULE	Remove	
TPZ (m)				
SRZ	1.5	Comments	Dead. No hollo	ows. Remove tree.
10% of TPZ area (m²)				

No.	19		
NO.	19		
Botanical	Eucalyptus		
Name	mannifera		a barrante .
Common	Brittle Gum		
Name			
DBH (cm)	46	Origin	Native
DARB (cm)	58	Health	Fair
Height	10 x 11	Structure	Fair
width			
Tree A/Z	A2	ULE	Long
TPZ (m)	5.5		
SRZ	2.6	Comments	Deadwood, large exposed roots with some damage
10% of TPZ area (m²)	3.8		

No.	20			
Botanical Name	Eucalyptus leucoxylon			No. No.
Common Name	Yellow Gum			
DBH (cm)	36	Origin	Native	and the second
DARB (cm)	43	Health	Fair	
Height width	11 x 10	Structure	Fair	
Tree A/Z	Z1	ULE	Long	
TPZ (m)	4.3			
SRZ	2.3	Comments		
10% of TPZ area (m²)	3			

No.	21		
Botanical Name	Eucalyptus melliodora		
Common Name	Yellow Box		
DBH (cm)	43	Origin	Indigenous
DARB (cm)	47	Health	Fair
Height width	10 x 10	Structure	Fair
Tree A/Z	Z1	ULE	Long
TPZ (m)	5.2		
SRZ	2.4	Comments	Small deadwoo
10% of TPZ area (m²)	3.5		

No.	22			
Botanical Name	Eucalyptus leucoxylon			
Common Name	Yellow Gum			
DBH (cm)	32	Origin	Native	
DARB (cm)	36	Health	Fair	10
Height width	10 x 9	Structure	Fair	
Tree A/Z	Z5	ULE	Long	
TPZ (m)	3.8			
SRZ	2.2	Comments		ant union
10% of TPZ area (m ²)	2.6		prune	

No.	23			
Botanical Name	Eucalyptus leucoxylon			
Common Name	Yellow Gum			
DBH (cm)	18	Origin	Native	
DARB (cm)	22	Health	Fair	
Height width	7 x 5	Structure	Fair	
Tree A/Z	Z1	ULE	Long	
TPZ (m)	2.2			
SRZ	1.8	Comments		
10% of TPZ area (m²)	1.5			

No.	24	
Botanical Name	Eucalyptus mannifera	
Common Name	Brittle Gum	
DBH (cm)	30	Origin
DARB (cm)	37	Health
Height width	8 x 8	Structure
Tree A/Z	Z1	ULE
TPZ (m)	3.6	
SRZ	2.2	Comments
10% of TPZ area (m²)	2.5	

Origin	Native
Health	Poor
Structure	Fair
ULE	Long



Deadwood.

No.	25		
Botanical Name	Eucalyptus mannifera		
Common Name	Brittle Gum		
DBH (cm)	41	Origin	Native
DARB (cm)	46	Health	Fair
Height width	10 x 9	Structure	Fair
Tree A/Z	Z1	ULE	Long
TPZ (m)	4.9		
SRZ	2.4	Comments	Deadwood.
10% of TPZ area (m²)	3.4		



26 No. Botanical Eucalyptus Name camuldensis Common Red Gum Name DBH (cm) 72 Origin Indigenous DARB (cm) 83 Health Fair Height Structure Fair 11 x 12 width Tree A/Z A2 ULE Long TPZ (m) 8.6 SRZ 3.1 Comments 10% of TPZ 5.9 area (m²)

