TREE VALUATIONS IN THE CITY OF MELBOURNE

Where a public tree removal is approved by Council's arborist in relation to a development, the associated cost of the tree and its removal shall be paid by the property owner or representative prior to the removal.

The costs associated with removal of a public tree include:

A – Removal Costs	Amounting to the fees incurred by Council for physically removing the tree
B – Amenity Value	Calculated in accordance with Council's Amenity Formula.
C – Ecological Services Value	Calculated in accordance with the i-Tree valuation tool
D – Reinstatement Costs	Calculated in accordance with the greening required to replace the loss to the landscape incurred by the removal.

A - REMOVAL COSTS

Costs will be based on the current costs of tree removal. It includes the physical removal of the tree and the stump.

B - AMENITY COSTS

The following formula has been prepared to assist with calculating the monetary amenity value of a City of Melbourne tree. When young trees with a 6cm trunk diameter or less will be replaced by another tree, there will be no amenity value charge. The Amenity Value Formula used by the City of Melbourne was derived from the formula (by Dr.Peter Yau, 1990) of the Maurer-Hoffman Formula.

The basic monetary value of the tree was taken from the internationally accepted table of values devised by the American Council of Tree and Landscape Appraisers and the International Society of Arboriculture, which in the base year 1988 was $US27 per square inch trunk basal area. When converted to a value corresponding to centimeters in trunk diameter at breast height (DBH) the Basic Monetary Value table, updated in 2012 to reflect more current monetary values.

Value (V) = Basic Value ($) x Species (S) x Aesthetics (A) x Locality (L) x Condition (C)

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Read through the following formula definitions to calculate the tree amenity value

Basic Value ($) 2013

The basic monetary value of a tree is determined by matching the trunk diameter at breast height (DBH) with its corresponding base value:

DBH cm	Base Value	DBH cm	Base Value	DBH cm	Base Value
6	$ 309.92	**50**	$21,522.33	**100**	$ 86,089.33
8	$ 550.98	**55**	$26,042.03	**105**	$ 94,913.49
10	$ 860.89	**60**	$30,992.16	**110**	$104,168.09
15	$ 1,937.00	**65**	$36,372.74	**115**	$113,853.14
20	$ 3,443.57	**70**	$42,183.77	**120**	$123,968.63
25	$ 5,380.58	**75**	$48,425.25	**125**	$134,514.58
30	$ 7,748.04	**80**	$55,097.17	**130**	$145,490.97
35	$10,545.94	**85**	$62,199.54	**135**	$156,897.81
40	$13,774.29	**90**	$69,732.35	**140**	$168,735.09
45	$17,433.09	**95**	$77,695.62	**145**	$181,002.82
				Base Value	

Species Factor (S)

A tree is assessed according to its known natural life span and its rate of growth in a particular environment. For example, a long-lived tree will be scored higher than a short-lived tree. Significant features to the tree will also modify how the tree is scored. Judgment regarding species factor must be made by a qualified Arborist.

Group	Characteristics	Example Species	Score
1	• trees of short life span (less than 50 years) • fast growth rate	*Prunus, Acacia, Virgillia, Laburnum*	**0.5**
2	• trees of short life span (less than 50 years) • slow growth rate	*Malus, Crataegus, Eugenia, Waterhousia, Pyrus*	**0.6**
3	• trees of medium life span (50 -150 years) • fast growth rate	*Populus, Liquidamber, Eucalyptus, Corymbia, Angophora, Grevillea, Melaleuca, Michelia, Salix, Casaurina, Hakea, Celtis, Acmena*	**0.7**

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Group	Characteristics	Example Species	Score
4	• trees of medium life span (50 - 150 years) • slow growth rate	*Brachychiton, Fraxinus, Gleditsia, Jacaranda, Shinus, Phoenix, Melia, Robinia, Lophostemon, Liriodendron, Agonis, Meterosideros, Syzygium*	**0.8**
5	• trees of long life span (more than 150 years) • fast growth rate	*Cupressus, Platanus, Ficus, Pinus*	**0.9**
6	• trees of long life span (more than 150 years) • slow growth rate	*Ulmus, Quercus, Sequoia, Ginko, Araucaria*	**1.0**
Modifiers	• Environmental Weeds • dangerous (poor branch attachment) • undesirable characteristics (e.g. allergenic)	*Salix, Fraxinus rotundifolia*, *Pittosporum undulatum*	**-0.1**
	• a rare species in the locality • a special precious cultivated variety • a 'significant tree' registered by the National Trust • has special historical or other significance		**+0.1**
	**Trees named are supplied only as examples in Melbourne conditions*	**Species Factor (S)**	

Aesthetics (A)

The aesthetic value of a tree is determined by the impact on the landscape if the tree were removed. This category is closely tied to the locality factor (L).

Aesthetic Factor	Score
Contributes little to the landscape	**0.5**
One of a group of close plantings	**0.6**
Wide plantings	**0.7**
Irregular spacing between trees; regular spacing one side	**0.8**
Street or pathway plantings, regular spacing both sides	**0.9**
Solitary feature specimen tree	**1.0**
Aesthetics (A)	

Locality (L)

The locality factor is determined by the tree's geographical situation. Trees in a Capital City main street or boulevard score highest because of the stressful growing environment in which the tree has to survive. As the location becomes more rural, the significance of the tree diminishes.

Locality Factor	Score
In undeveloped bushland or open forest	**0.5**
In country areas and country roads	**1.0**
In outer suburb areas and residential streets	**1.5**
In inner city suburbs	**1.75**
In City Park or Reserve; significant street near City Centre	**2.0**
In City Garden, City Square, Mall or City Centre secondary street	**2.25**
City Centre Main Street, Principal Boulevard	**2.5**
Locality (L)	

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Tree Condition (C)

The tree condition value is determined by the corresponding total score of the assessment criteria.

Assessment Criteria	Criteria Condition	Score
Trunk	• solid and sound • sections of bark damaged/missing • extensive decay, hollow trunk	**5** **3** **1**
Growth	• >15cm twig elongation this season • 5-15cm twig elongation • <5cm twig elongation	**3** **2** **1**
Structure	• healthy, stable and sound • some deadwood and dead limbs • extensive dieback and deadwood	**5** **3** **1**
Pests and Diseases	• no pest/disease infestation • minor symptoms of infestation • advanced symptoms of infestation	**3** **2** **1**
Canopy Development	• full balance canopy • full but unbalanced, lop-sided • unbalanced and lacking full canopy	**5** **3** **1**
Life Expectancy	• >50 years • 10-50 years • <10 years	**5** **3** **1**
	Total Score	

TOTAL SCORE	TREE CONDITION	RATING
6-9	very poor	0.2
10-13	poor	0.4
14-18	fair	0.6
19-22	good	0.8
23-26	excellent	1.0

Tree Condition Rating (C)	

C – ECOLOGICAL SERVICES VALUE

The ecological benefits a tree provides will be calculated in accordance with the i-Tree valuation tool. This is peer-reviewed software from the USDA Forest Service that enables urban forest analysis and assessment and has been adapted for Australian conditions.

D – REINSTATEMENT COSTS

The level of reinstatement required will be determined by Council and will take into consideration the location, the significance, the biodiversity provision and the amenity of the tree. Reinstatement costs will also include a 24-month tree establishment fee and any treatment or Water Sensitive Urban Design (WSUD) measure deemed to be required to establish suitable replacement trees.

For further information please contact the City of Melbourne on 03 9658 9658
or email: trees@melbourne.vic.gov.au

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