CAPITAL ASSET VALUATION FOR AMENITY TREES (CAVAT) CALCULATION Rev:0,

with regard to two trees at:

Marlhill Copse,
Southampton,

for:

Gareth Narbed.

Job no. MJC-20-0135

18th June 2020.

Mark Carter
FICFor. MRICS M.Arbor.A Dip. Arb. (RFS),
Managing Director,
MJC Tree Services Limited,
39 School Road,
West Wellow,
ROMSEY,
Hampshire,
SO51 6AR.
(01794) 322 712.
mjc@mjctreeservices.co.uk

Institute of Chartered Foresters

Arboricultural Association Professional Member

RICS

QTRA Licensed User

Contents

1.0 Instruction

1.1 Mark Carter of MJC Tree Services Limited have been instructed by Gareth Narbed to make a CAVAT calculation in respect of two trees at Marlhill Copse, using the trunk diameter measurements for these trees as recorded in the Tree Surveys' report ref: Report SPH/SN/VTA-20/03.02 dated 17th March 2020.

2.0 Qualifications and Caveats

2.1 I am a:

- Fellow of the Institute of Chartered Foresters:
- Chartered Arboriculturist:
- Chartered Surveyor:
- Registered Consultant of the Institute of Chartered Foresters:
- Professional Member of the Arboricultural Association:
- LANTRA qualified Professional Tree Inspector.

I also hold the Royal Forestry Society's Professional Diploma in Arboriculture and have over 25 years experience in UK arboriculture. A full CV and CPD record is available as a .pdf file upon request to the above office.

2.1.1 I have received no specific training in the use of the Capital Asset Valuation for Amenity Trees (CAVAT) system. However, I have received training in the Council of Tree and Landscape Appraisers (CTLA) valuation methods. The CTLA trunk formula method uses a similar process of calculation to that used by CAVAT, so I am familiar with the basic methodology of CAVAT. In addition to this prior experience, the CAVAT tables, users guides and calculation spreadsheets are available on the London Tree Officers Association (LTOA) website, and I downloaded and studied these prior to making the CAVAT valuations.

2.2 I carried out a preliminary visual assessment of the trees only as at the time of my site visit access to the trees was impeded by tree surgery works. The trees were viewed from the surrounding woodland as far as was possible, and also from the nearby public highways, and a pair of binoculars was used when viewing the trees from the public highway. The trunk diameter measurements used have been taken from the Tree Surveys' report ref: Report SPH/SN/VTA-20/03.02 dated 17th March 2020.

2.3 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees should be checked on a regular basis, preferably at least once every eighteen months. The conclusions and recommendations in this report are based only on the observations made by the author during the tree survey.

2.4 This report is for the sole use of the above named client and refers only to those trees identified within. It may not be reproduced in whole or in part, or sold, lent, hired out or divulged to any third party not directly involved in the subject matter, without our consent. Use by any other person(s) in attempting to apply its contents for any purpose other than stated in this report renders the report invalid for that purpose.

2.5 This report is supplied subject to our terms and conditions in force at the time of our instruction by the client.

3.0 Introduction

3.1 My site visit was carried out on the 12th June 2020 and was conducted in the company of Gareth Narbed.

3.2 The trees in question were identified to me by Gareth Narbed and he informed me that an application has been made to fell these trees on health and safety grounds.

3.3 The trees in question are numbered T120 and T124. These numbers refer to the numbers indicated in the plan forming Appendix 1 of this report that was supplied by Richard Buxton.

4.0 The Trees.

4.1 The locations of the surveyed trees are illustrated in the location plan forming Appendix 1 of this report.

4.2 The trees in question are both Monterey Pine *Pinus radiata* and would be classed as mature specimens as defined in British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

4.3 The trees are located close to the boundary of a woodland with domestic dwellings and gardens on one side, and a permissive footpath on the woodland side.

5.0 The Calculations

5.1 A £ figure for each tree was individually calculated using the full CAVAT method spreadsheet and in accordance with the full CAVAT method user guide, both downloaded from the LTOA website.

5.2 The results of the individual tree valuations are provided in the spreadsheet print outs forming Appendix 2 of this report.

5.3 In carrying out the calculations, the following factors were considered for each tree N.B. the references to value used below are used because this term is used in the CAVAT calculation tables and guidance notes.

5.3.1 At step 1 of the calculation the basic value for both trees was calculated using the recorded trunk diameter measurements, and the unit value contained in the spreadsheet down loaded from, and referred to in the LTOA website.

5.3.2 At step 2 of the calculation The National Community Tree Index (CTI) figure used for both trees was taken from the table downloaded from the LTOA website.

5.3.3 At step 3 of the calculation the location value of both trees was adjusted to 75%. The CAVAT full users guide states the following in this regard:
"*The second operation is to consider the relative accessibility to the public of the tree in its particular location. Most publicly owned trees will be not be discounted in value for a lack of accessibility; however the operation allows CAVAT to be applied to trees on private land, for example to TPO trees, or to trees in more remote public areas. Where a tree does not retain 100% of its value it may be discounted by up to 60%.*"
Both trees are located on private land and can only be directly accessed from a permissive footpath, which is not a public footpath. Therefore they are not publicly owned or fully publicly accessible, so this factor must be reflected in the valuation by reducing the location value. The minimum reduction in the location value allowed in the CAVAT spreadsheet is 25% i.e. 75% of the value calculated thus far, so I have applied this minimum 25% reduction.

5.3.4 At steps 4 and 5 of the calculation the functional value of both trees was reduced at part 2 by the minimum 10%, although this reduction could also have legitimately been made at part 1. A reduction in both parts was not considered reasonable.

5.3.4.1 Both trees had thinner crowns than would normally be expected in healthy trees of their age and species, and this is most likely the result of Red Band Needle Blight, a fungal disease of the foliage. The CAVAT full users guide states the following in regard of part 1 of the functional value:
"*1) Crown completeness.*
The value is reduced proportionately if:

- *The crown has been reduced by pruning and the tree has not fully recovered; or*
- *the crown has been reduced by natural causes, e.g. storm damage or disease, and the tree has not fully recovered; or*
- *the crown has failed to develop normally, e.g. because of root restriction, shading or grafting, and is smaller than would be expected from the stem size;*
- *the crown is thin.*

This is irrespective of the nature of the causative factors and whether they harm the tree's appearance."
Therefore the thin crown present in both trees could be accounted for with the minimum 10% reduction allowed at this stage in the CAVAT spreadsheet.

5.3.4.2 The CAVAT full users guide states the following in regard of part 2 of the functional value:
"*2) Condition.*
If the tree is in functionally poor condition, including disfigurement by disease obvious to the public, the value is reduced proportionately. Such conditions would include:

- *Leaf or shoot disease;*
- *root disease, clearly affecting vitality;*
- *canker, or severe trunk lesions;*
- *fire damage.*"

Therefore the thin crown present in both trees could be accounted for with the minimum 10% reduction allowed at this stage in the CAVAT spreadsheet because it is caused by a leaf disease.

5.3.4.3 To account for a single condition in a tree, in this case a thin crown, at both part 1 and part 2 of the functional value would, in my opinion, be a case of double counting, which would not be acceptable in any valuation process. Therefore I have applied the minimum 10% reduction in functional value allowed in the CAVAT spreadsheet at only one of the two sub parts of that valuation. It makes no difference to the final calculated value whether the 10% reduction is applied at part 1 or part 2.

5.3.5 At step 6 of the valuation process special factor adjustments are considered.

5.3.5.1 The CAVAT full users guide states the following in regard to increases in value in response to positive attributes:
"*The value may be increased to take account of species characteristics that increase benefit to the community. Special factor adjustment should be used sparingly; there may be up to a maximum of 4 special factors and a maximum adjustment of 40%; (generally 10% for each amenity factor, other than Veteran/Ancient Trees, for which 30%). For example:*

- *Townscape and visual importance:*
- *integral part of a designed landscape, including avenues or designed park or garden;*
- *contribution to the setting of an important place or building;*
- *in a school, or by its entrance;*
- *in a particularly prominent location, e.g. a town centre, or at the entrance of a major public building, etc; or*
- *part of a wider grouping giving character to the area, e.g. long-maintained street pollards.*

National or Local designations or connections:

- *in a Conservation Area, where the presence of trees has contributed to the designation;*
- *a locally designated tree, e.g. Landmark or Favourite Trees;*
- *a commemorative or memorial tree; or*
- *a tree known to be planted by a notable person.*"

The trees were located in a very publicly visible location and formed skyline features that were visible from numerous public locations. They were also clearly an historical boundary planting. For these reasons I have applied a 20% increase in value at this stage i.e. two positive factors.

5.3.5.2 The CAVAT full users guide states the following in regard to decreases in value in response to negative attributes: "*Conversely, the value may be reduced to take account of species characteristics that reduce the overall benefit to the community, being seriously inappropriate for the location, causing a problem or hazard and not effectively controlled by management. As for amenity factors reduction would normally be by 10% each, and to a maximum of 40% if the species has inappropriate species characteristics for the location causing obstruction or inconvenience, for example:*

- *a weeping or low spreading habit in a narrow footpath;*
- *obstruction, e.g. vigorous spiny suckers across a footway;*
- *major surface roots damaging the footpath;*
- *large, squashy fruit in hard surfaced area;*
- *honeydew drip e.g. in a dedicated car park or playground;*
- *a pronounced lean, causing a potential obstruction;*
- *detracts visually from its context, for example, a visually intrusive species in an otherwise consistent avenue, or an exotic species in a setting of native trees.*"

The trees were clearly a dominant and potentially overbearing presence for the neighbouring domestic properties, and the occasional and natural dropping of cones could result in the breakage of glass panes in a green house if such a structure was present under the crown. Therefore the trees do pose a potential risk of harm to the neighbouring persons and properties and it is reasonable to anticipate a degree of conflict between the trees and the residents of the neighbouring properties. In order to reflect this issue I have applied a 10% reduction in value at this stage i.e. one negative factor.

5.3.6 At step 7 of the calculation, the life expectancy of both trees was considered and set at between 10 and 20 years. Both trees were mature specimens, and a nearby tree of the same species and similar age had been suffering from branch breakage for some time, indicating that it was approaching the end of its life. It is not uncommon for trees of this species to experience branch breakage and general decline for many years before they finally die. However, given the location of these trees next to and overhanging domestic properties, it is reasonable to assume that when they start to experience branch breakage on any significant scale they will be felled for reasons of health and safety, thereby shortening their life expectancy in comparison to the maximum length of time they might be expected to survive. In balancing these life expectancy influencing factors, I believe it is reasonable to anticipate a life expectancy of both trees of at least 10 years, but no more than 20. However, no one has a 'crystal ball' that can accurately predict the life expectancy of any tree.

5.4 No CAVAT calculation has been carried out for nearby tree no. T119 as this tree needs to be felled for current reasons of health and safety and such a tree would score a £0. valuation using the CAVAT full method.

6.0 Conclusions

6.1 The individual tree claculations are provided at Appendices 2 and 3 of this report.

6.2 The CAVAT calculation for tree no. T120 is £132,205.

6.3 The CAVAT calculation for tree no. T124 is £134,247.

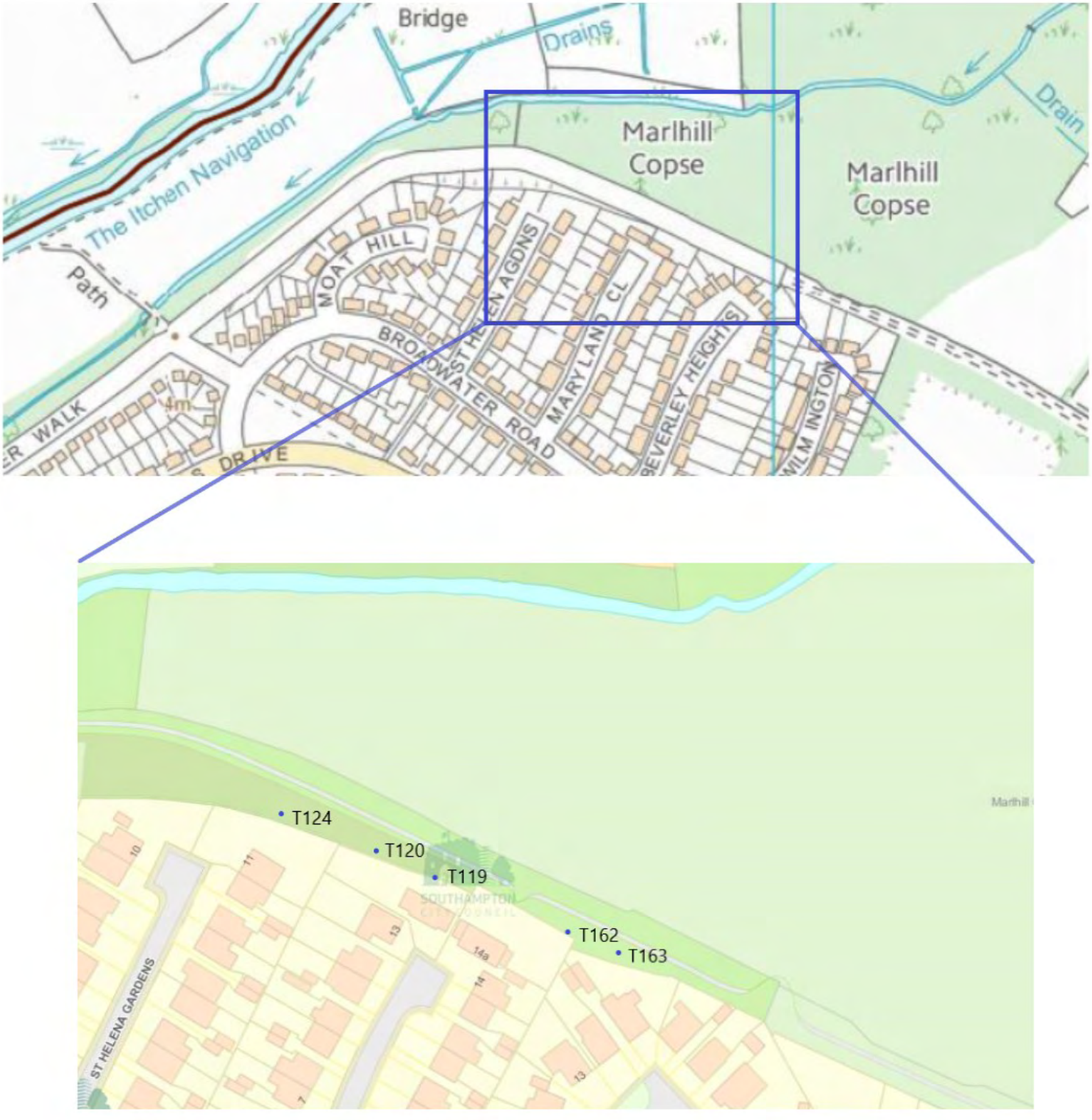
6.4 I consider the above to be a fair and reasonable full method CAVAT valuation of these trees.

Mark Carter
FICFor. MRICS M.Arbor.A Dip.Arb(RFS)

7.0 Appendices

Appendix 1 – Location plan

March 2020 - Marlhill Copse
TPO application - Tree Positions



Appendix 2 – Valuation spreadsheet printouts

Appendix 2A – Tree no. T120

CAVAT

SPREADSHEET TO CALCULATE VALUE OF INDIVIDUAL TREE STOCK (FULL METHOD)

Created by Alexandra Sleet and Phillip Handley

Only enter data in the pale-green boxes

CAVAT	Quantities you measure / look up		Calculated Values
Step 1: Basic Value			
Measured Trunk Diameter	130.00		
Unit Value Factor	16.26		
Basic Value			£215,822.70
Step 2: CTI Value			
Community Tree Index (CTI) Factor	150		
Community Tree Index (CTI) Value			£323,734.05
Step 3: Location Value			
Location Factor	75		
Location Value			£242,800.54
Step 4: Functional Crown Value part 1			
Structural Factor	100		
Structural Value			£242,800.54
Step 5: Functional Crown Value part 2			
Functional Crown Factor	90		
Functional Crown Value			£218,520.49
Step 6: Amenity Value			
Positive Attributes Factor	20		
Negative Attributes Factor	-10		
Amenity Value		110	£240,372.54
Step 7: Full Value			
Life Expectancy Factor	10 - <20		
FINAL VALUE			£132,205

Appendix 2B – Tree no. T124

CAVAT

SPREADSHEET TO CALCULATE VALUE OF INDIVIDUAL TREE STOCK (FULL METHOD)

Created by Alexandra Sleet and Phillip Handley

Only enter data in the pale-green boxes

CAVAT	Quantities you measure / look up		Calculated Values
Step 1: Basic Value			
Measured Trunk Diameter	131.00		
Unit Value Factor	16.26		
Basic Value			£219,155.82
Step 2: CTI Value			
Community Tree Index (CTI) Factor	150		
Community Tree Index (CTI) Value			£328,733.73
Step 3: Location Value			
Location Factor	75		
Location Value			£246,550.30
Step 4: Functional Crown Value part 1			
Structural Factor	100		
Structural Value			£246,550.30
Step 5: Functional Crown Value part 2			
Functional Crown Factor	90		
Functional Crown Value			£221,895.27
Step 6: Amenity Value			
Positive Attributes Factor	20		
Negative Attributes Factor	-10		
Amenity Value		110	£244,084.80
Step 7: Full Value			
Life Expectancy Factor	10 - <20		
FINAL VALUE			£134,247

Appendix 4 - References

BS5837:2012 = British Standard 5837:2012 ‘Trees in relation to design, demolition and construction – Recommendations’.