

Arboricultural Report:

*Evaluation of Trees at Templemere Estate, Oatlands
Drive, Weybridge, Surrey*

Produced for:

Templemere Residents' Society

Prepared by:

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Our Ref:

APA/AP/2013/115

Date:

27th April 2013

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Limitations:

My assessments are based on professional experience and expert observation at the time of the site visit. No liability can be assumed to rest with AP Arboriculture should site conditions or features alter after my inspection.

This report is for the exclusive use of the client and those directly involved in the management of the trees at Templemere Estate. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the express consent of APArboriculture

Report supplied electronically as pdf document

1.0 Instructions and Scope

- 1.1 I have been instructed by Mr A Boulter of Templemere Residents' Society to provide an evaluation of the trees within the Templemere Estate and to provide recommendations on appropriate works.
- 1.2 This evaluation, in addition to other arboricultural works that have been commissioned by Templemere Residents' Society (including tree climbing inspections by Mr P Warrener of Branch Management), will assist in ensuring that the Society is fulfilling its legal duty of care (in-so-far as tree inspection is concerned) under the Occupiers' Liability Acts 1957 and 1984.
- 1.3 The scope of the survey and report has been agreed as follows:
- Inspection of the trees from ground level using accepted Visual Tree Assessment (VTA) techniques
 - Assessment of the structural integrity of one of the trees (Cedar T7) using a Resistograph F400 decay detection drill
 - Recommendations on appropriate works
- 1.4 An assessment of any structural damage occurring as a result of any works being carried out on the trees (e.g. by heave of the soil following tree removal) is also beyond the scope of this report.

2.0 Tree Survey Method

- 2.1 The trees within the site were surveyed from ground level on 27th April 2012. Visual Tree Assessment was used, along with a steel probe and sounding mallet.
- 2.2 A Resistograph F400 Decay Detection Drill was also used. The drill measures the torque required to turn a 3mm diameter drill bit and helps provide an indication of internal cavities and/or decay. The results can be interpreted by the experienced arboriculturist and used in conjunction with other diagnostic methods to assess whether the tree is likely to have become unsafe and whether any works will be necessary.

2.3 The heights and crown spreads of the trees (N-E-S-W) were estimated as the accuracy of these measurements is generally not critical to the decision making process when recommending necessary tree works.

2.4 The diameters of the trees were measured using a diameter tape at 1.5m above ground level.

2.5 Photographs were taken using a digital camera.

3.0 Legal Status

3.1 It is understood from the client that the trees are covered by a Tree Preservation Order made by Elmbridge Borough Council. The consent of the Council will therefore be required for the carrying out of any works on the trees (or authorisation for works to be carried out under an exemption to the usual requirements of the legislation).

4.0 Description of Site

4.1 The site comprises a residential estate, situated off the north-western side of Oatlands Drive in Weybridge. A plan showing the site and the locations of the trees is attached at Appendix 2.

5.0 Appraisal of Trees

5.1 The key details of the trees are shown in the Tree Survey Schedule at Appendix 1.

5.2 In terms of the potential for the trees to cause damage/injury were they to fail (typically referred to as the 'target rating'), this is high. All of the surveyed trees have residential dwellings, roads and paths within falling distance.

5.3 The trees have all been regularly maintained and have relatively open crowns with very little dead wood.

5.4 A brief précis of the survey notes in relation to the surveyed trees is as follows:

Cedars T1, T2, T3 & T5:

These trees are all healthy, mature Cedars which have been well maintained and which exhibit no features of particular concern from a health and safety perspective.

T1



T2



T3



T5



Cedar T4:

This mature Cedar is in good health, but has a higher failure potential than the above trees owing to the fact that the main stem divides into multiple stems at a height of approximately 9m. There is included bark between the stems, which can predispose trees to failure if they are subjected to heavy wind loadings. It is understood that a large stem on the eastern side of the tree failed approximately two and a half years ago after a climbing inspection had revealed some cracking. A limb on the western side of the crown has been cabled. Although the cable is of a specification not now recommended (bolts have been inserted into the tree rather than non-invasive slings being used), the cable is under tension and appears from the ground to be in good condition.



Main stem divides into multiple stems at height of 9m approx. Tree has relatively high failure potential

Douglas Fir T6:

This tree is a healthy mature Douglas Fir which exhibits no features of particular concern from a health and safety perspective.



Cedar T7

Although essentially healthy in the crown, this tree sustained significant damage in the storms of 1987 and 1990 and has consequently been heavily topped. It is twin-stemmed near ground level, with a main north-eastern stem and a subsidiary south-western stem.

There is an open cavity at the base of the tree on the southern side, with an aperture diameter of approximately 10cm. This was probed with a steel probe to a depth of over 45cm.



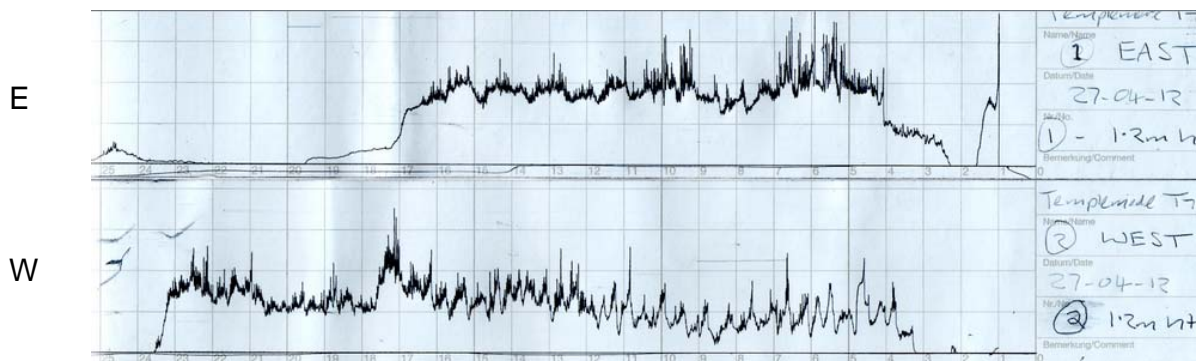
Open cavity at base on southern side – probed to 45cm+

There are the remnants of fungal sporophores (fruiting bodies) on the main stem at heights of 0.5 and 1.5m on the eastern side. The sporophores were too degraded for the fungus to be identified with certainty on site.

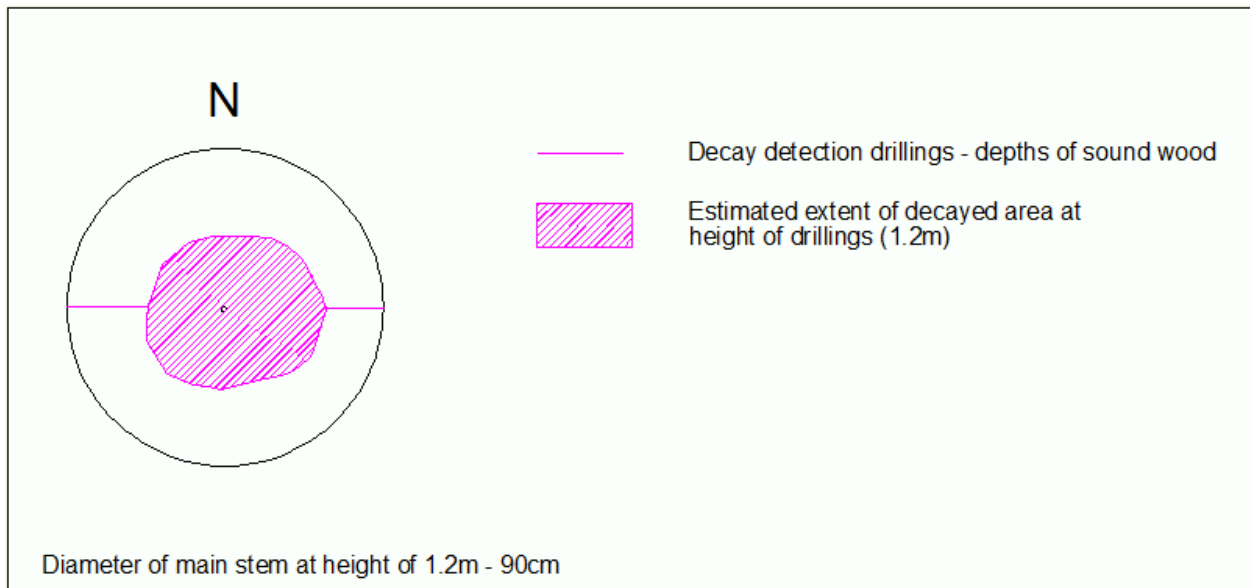


Remnants of fungal sporophores on main stem (east side) at heights of 0.5 and 1.5m

Two Resistograph drillings were undertaken in the main stem at a height of 1.2m on the eastern and western sides (one on the side of the sporophores and one on the opposite side). The resulting traces are as follows:



The traces show that the depth of sound wood on the eastern side of the main stem at a height of 1.2m is 16cm and that the depth of sound wood on the western side is 23cm. Given that the stem diameter at the height of drilling is 90cm, an illustration of the likely pattern and extent of the decayed area is shown below:



In addition to the cavity at the base of the main stem and the area of decay in the lower stem, there are Woodpecker holes in the subsidiary stem at a height of 6m on the south-western side and 9m on the southern side. There is an area of decay associated with the hole at 6m height.

Subsidiary stem of T7 showing Woodpecker holes and areas of decay



6.0 Conclusions and Recommendations

- 6.1 No works are recommended at the present time in relation to Cedars T1, T2, T3, T4 and T5 or Douglas Fir T6.
- 6.2 With regard to Cedar T7, removal of this tree is recommended on grounds of safety. The tree has a cavity at the base, decay in the main stem and Woodpecker holes with associated decay in the subsidiary stem. Furthermore, a report by Mr P Warrener of Branch Management on 1st March 2010 (following a climbing inspection) noted that there is decay at the top of the tree (where it was topped following storm damage). Large lateral branches arise from the main stem adjacent to the decayed area and, were the tree to be retained, there would be an increasing risk of these large branches failing as the decay progresses. The main stem of the tree is leaning mildly towards the adjacent dwellings (to the south) and failure would have the potential to cause substantial damage/injury. Overall, this tree is considered to be unacceptably hazardous and it is not felt that any reasonable pruning works could be employed to satisfactorily address this issue.
- 6.3 A summary of the recommended works is given below:

Trees	Recommended Works
Cedars T1-T5 & Douglas Fir T6	<i>No works recommended</i>
Cedar T7	<i>Remove on grounds of safety</i>

- 6.4 It is understood that climbing inspections of the trees are performed on the trees at biennial intervals by Mr P Warrener of Branch Management and that they are to be climbed again in the near future (with the exception of T7 which is to be removed). If any features of concern are encountered during the climbing inspections, it is recommended that APArboriculture be notified with a view to re-assessing the tree(s) in question

6.5 In terms of timescales, it is recommended that Cedar T7 be removed immediately/ as soon as possible (Priority 1). It is further recommended that the remaining trees be fully assessed again by a suitably qualified and experienced arboricultural consultant in two year's time (from the date of this report) or after extreme weather events/reports of tree failure or features of concern.

7.0 Wildlife Legislation Issues

7.1 It is an offence under current UK and European wildlife legislation to disturb nesting birds or bats.

7.2 There is a possibility that bats will be encountered when removing Cedar T7 as there are Woodpecker holes in the subsidiary stem (which are often used as roosting sites by bats)

7.3 It is recommended that the contractor carrying out the works be aware of the signs of bat activity and maintain a high level of vigilance in this regard. Should bats be found or their presence suspected, APArboriculture will be happy to liaise with English Nature and other associated organisations as necessary. The presence of bats will not prevent the works being carried out as there is an over-riding safety issue. It may, however, be necessary to carry out the works in a certain manner so as to minimise disturbance to the bats and to implement mitigation measures (such as placing bat boxes in nearby trees).

Appendix 1

Tree Survey Schedule and Key



Tree Ref.	Common Name	Height	Crown Spread	Age Class	Stem Diameter	Vigour	Structural Condition	Landscape Value	Notes and Observations
T 1	Cedar	19	10 11 9	Mature	Large	Normal	Fair	High	Healthy tree with no visible decay or defects; multiple pruning wounds to 40cm diameter approx. on stem and main scaffold branches with some exposed areas of heartwood; exact diameter at 1.5m above ground level 107cm
No. of trees:	1		9						
Recommended Works:		No works recommended						Priority:	N/A
T 2	Cedar	21	9 8 10	Mature	Large	Normal	Fair	High	Healthy tree with no visible decay or defects; scattered pruning wounds to 30cm diameter approx. on stem and main scaffold branches with some exposed areas of heartwood; crown reduced in past and some height reduction carried out; exact diameter at 1.5m above ground level 140cm
No. of trees:	1		8						
Recommended Works:		No works recommended						Priority:	N/A
T 3	Cedar	22	8 10 9	Mature	Large	Normal	Good	High	Healthy tree with no visible decay or defects; scattered pruning wounds to 30cm diameter approx. on stem and main scaffold branches with some exposed areas of heartwood; some light crown reduction and thinning works carried out in past; cracking of concrete surfacing around tree; exact diameter at 1.5m above ground level 104cm
No. of trees:	1		9						
Recommended Works:		No works recommended						Priority:	N/A
T 4	Cedar	20	12 10 10	Mature	Large	Normal	Fair	High	Healthy tree with no visible decay; multi-stemmed at 9m ht with included bark; scattered pruning wounds to 30cm diameter approx; cabled limb on west side (cable under tension); stem on east side failed approx. 2.5 years ago; tree has relatively high failure potential; exact diameter at 1.5m above ground level 147cm
No. of trees:	1		10						
Recommended Works:		No works recommended						Priority:	N/A



Tree Ref.	Common Name	Height	Crown Spread	Age Class	Stem Diameter	Vigour	Structural Condition	Landscape Value	Notes and Observations
T5	Cedar	18	8 11 10	Mature	Large	Normal	Fair	High	Healthy tree with no visible decay or defects; scattered pruning wounds to 20cm diameter approx. on stem and main scaffold branches - mostly well occluded; exact diameter at 1.5m above ground level 113cm
No. of trees:	1		11						
Recommended Works:		No works recommended						Priority:	N/A
T6	Douglas Fir	27	8 7 7	Mature	Large	Normal	Good	High	Healthy tree with no visible decay or defects; well occluded pruning wounds on stem; exact diameter at 1.5m above ground level 120cm
No. of trees:	1		7						
Recommended Works:		No works recommended						Priority:	N/A
T7	Cedar	18	7 10 9	Mature	Large	Normal	Poor	High	Twin-stemmed at base - sw main stem & ne subsidiary stem; storm damaged in 1987 & 1990; sporophores e side main stem at 0.5 & 1.5m ht; cavity s side main stem at base; woodpecker holes 6 & 9m ht in subsidiary stem with decay; Resistograph revealed substantial decayed area in main stem 1.2m ht: main stem diameter 94cm
No. of trees:	1		9						
Recommended Works:		Remove						Priority:	1

Total no. of trees: 7

Key to Tree Survey Schedule – Hazard Evaluation

Tree Ref. – Consecutive numbering. T = Individual Tree: G = Tree Group: H = Hedge

Common Name – Most commonly used English name for tree

Height – Height of tree in metres (estimated)

Crown Spread – Radial crown spread in metres at the four cardinal points (N E S W)

Age Class – Young, Middle-Aged, Mature, Over-Mature

Stem Diameter – Measured at 1.5m above ground for single stemmed trees or just above root flare for multi stemmed trees. Small (up to 200mm), Medium (200 to 500mm), Large (over 500mm)

Vigour – An indication of the physiological health of the tree. Normal, Moderate, Poor, Dead

Structural Condition – Good, Fair, Poor

Landscape Value – High, Medium, Low

Priority ratings for implementation of recommended works:

1 – Immediately

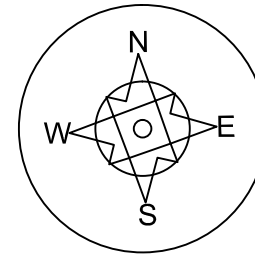
2 – Within 2 months

3 – Within 6 months

Reinspection – time to next inspection from date of report

Appendix 2

Tree Location Plan



INDICATIVE



Surveyed Tree



Tree Recommended for Removal

Trees plotted by eye with sufficient accuracy to aid identification

PLAN DESCRIPTION

Tree Location Plan

SITE

Templemere Estate
Oatlands Drive
Weybridge

SCALE

Not to scale

DATE

27.04.2013

DRAWN BY

AP

DRAWING NUMBER

TPP/APA/AP/2012/115

REV

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