CARADOC TREE CARE

3 Oaks Drive, Church Stretton, Shropshire, SY6 7AY

Te [redacted]

11th March 2021

Tree Inspection Report fo
Church Stretton Town Cou

Remit

To carry out an aerial inspec[illegible] of [illegible] tree, previously inspected and tagged "517", in Rectory Wood, C[illegible] to [illegible] distal crown parts and branch unions. This follows storm damage and branch loss in October 2020.

Method

The tree was climbed to a height of approximately 12 metres using conventional, approved roped tree climbing techniques. Climbing above this height was not considered safe without the additional security of foot spikes as the next available branch unions for anchor points were seen to be wind-damaged and on the edge of the viable wood. The 12m vantage point afforded a much improved view of the distal crown parts. Climbing spikes are a destructive method, and were therefore not deemed suitable.

Notes Captured During Climb

Weather conditions: fine and dry.
What three words location: evidence.numeral.ticking
Dead hanging branch on Northerly limb at 10m height, which is itself almost entirely dead. Limb should either be reduced or removed, as the live wood is a strip of bark 100mm wide on a limb of approx. 450mm diameter.
Heartwood exposed appears dead, stable with no visible signs of active decay, but is progressively drying and shrinking. Cracks in the dead wood were probed to a maximum of 75mm depth.

Epicormic growth on the proximal (lower) parts of the tree may indicate adaptive growth, but can also indicate stress.
At 8m height tapping of live section of wood on southern side below old branch break wound produced hollow sound.
Decay pocket in main fork on South side at 10m height. 150mm x 150mm probed to 200mm depth. Facing upwards and full of wet rotten matter. Side walls of decay cavity probed and were slightly soft.
Lightning strike damage extends to the full height of the tree and has resulted in complete bark loss of 25% to 30% of the bark as a strip of exposed dead wood with adaptive growth along each edge. The dead wood has shrunk away from the live adaptive growth in a number of places up the tree.
Limb at 15m height has lost a branch on the southern side resulting in an extensive break-out wound that extends back to the main stem.
Above this there are signs of numerous small branch breaks (<100mm diameter) and some significant dead branches. Summer leaf growth shows this part of the tree to be vigorous.
Descending:
Decay cavity at knot hole (5m height on Southern side) 40mm x 40mm x 200mm deep. Sides stable.
At 2m height significant separation of live wood adaptive growth away from dead wood creating cavity 230mm deep.

Conclusion

The vigorous distal growth and apparent health of the tree creates a problem for this tree due to the lightning damage which has killed a significant strip of bark along the whole tree height. There are some small areas of active decay in the dead heartwood, and the separation of the dead inner heart from the live wood is worrying, as ultimately and inevitably this will happen throughout the tree. With the missing strip of live wood the cross section of the tree is a "C" as opposed to the "O" cross section of a hollow tree, causing a significant weakness to the structure.
As the tree continues to grow and add incremental increases in weight, the adaptive growth will struggle to keep up with the requirements for support, particularly as the tree as a whole has a significant lean to the south.
The tree will be vulnerable to further damage when fully in leaf, as last year's early Autumn storm showed. The steady deterioration of the heartwood could eventually result in catastrophic failure.

Recommendation

This tree is a significant landscape and ecological feature and important locally. Its retention in whatever form is desirable. Doing nothing could result in catastrophic failure by ductile fracture in the main stem, or significant branch loss from the distal crown with the potential for third party damage.
Options for mitigation are as follows:

- A significant crown reduction to "veteranise" the tree by reduction to 12m height.
- 20% Crown reduction and crown clean of small dead wood (<100mm diameter).

Gareth Jones BSc(Hons)
Tech.Arbor.A, LANTRA Professional Tree Inspection