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20/02/2017

Arboricultural report for Mr. David Chisholm:

14 Saint Hermans Road,
Hayling Island,
PO11 9NA

Reason for report commission:

The report is requested as an annex to a retrospective Planning Application, number PP-05677048. Havant Borough Council have conducted a site visit in association with Mr Jamie Gargett, the council's Arboricultural Officer.

This report provides information based upon a site and Visual Tree Inspection, conducted on a *Quercus robur*, English Oak tree. The root zone is showing evidence of compaction caused by the concrete foundations on which a shed/cabin been erected (the structure and concrete plinth are built and extend upon a pre-existing concrete foundation).

The tree is protected under a group Tree Preservation Order; the site visit took place on 14/02/2017.

Primarily this report is aimed at providing an independent appraisal of the tree, its health and its current situation in light of the recent replacement of the afore mentioned shed. Recommendations are made to help mitigate any of the consequences of the recent construction, which took place in October 2016.

Consideration is given to the fact that this visit has been made during the winter season and a further visit is recommended in the summer months to make a more detailed assessment of trees health/stress, further inspections may be required thereafter.

Location:

The tree in question is located at: 14 St Hermans Road, Hayling Island, PO119NA
Grid: SZ 73197 98646

Description of trees location: Set three meters South of the boundary of 14 St. Hermans Road, in rear gardens of a neighbouring property. Whom owns the tree is not clear to the client or consultant. Access to the tree itself was not possible.

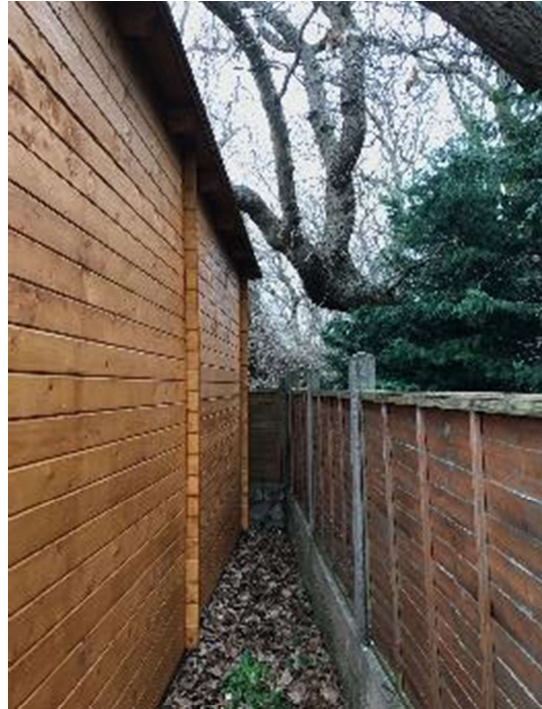
The tree (see images below):

The tree is part of a linear grouping of oaks, none of which are specimen trees and are in fact scrubby in form. The tree in question is rooted in a neighbouring property. The tree is roughly central to the line of Oaks which are growing on an East-West axis across a number of property boundaries.

Key observations:

1. A mature tree, which can be described as lacking true Oak form, the tree has failed to reach its full potential and would appear to be in early stages of decline.
2. Height is estimated at circa 15 meters and spread at circa 14 meters.
3. The tree belongs to a 3rd party to the rear of 14 Saint Hermans road.
4. The tree has a growth pattern towards the SW, most of the growth is towards 14 and 16 Saint Hermans Road. The heavy lean to the North could suggest extensive root growth to the South to counter the lean effect, the area to the south is mostly an area of lawn. However, as the tree is growing amongst other trees rooting will likely be competitive, so there may be feeder roots if not structural roots to the north.

5. The crown is showing signs of die back with patchy deadwood visible (further observations would need to be made when the tree is in leaf to confirm extent). It is estimated that between 10% and 15% of the canopy is showing evidence of dieback, with the primary area of concern being branches of small to medium diameter.
6. There has been a number of sheds and outbuilding sat upon the Root Protection Area for at least 10-15 years, 2 of which are based upon concrete or paving as a base.
7. The tree has a significant lean to the North of circa 30 degrees, off vertical. The tree has taken root into an old, low embankment (possibly an old track or boundary marker) and appears to have been growing this way for many decades. There is a possibility (unconfirmed) that trenching of roots growing to the North has occurred at some time in the past, as the bank on which the tree is rooted, appears to have been dug out at some stage.
8. Although measurements were not possible due to a lack of access the trees diameter at 1.5 meters is circa 125cm. The tree has an estimate age class of mature, approaching or over 100 years old.
9. There is an estimated 4 or 5 meters between the base of the stem and the shed of 14 saint Hermans Road.
10. The shed was only erected in October 2016 and as such it is unlikely the tree will have shown any adverse effects until this time.





The tree in question is rooted to the south and rear of the shed in the photo above

Survey results:

1. It is estimated (actual measurements were not possible, due to restriction of access) that the footprint of the new shed is currently occupying 20% of the Root Protection Area. The tree has been experiencing compaction in this area of the root zone for many years, due to the previous shed. As well as compaction, the RPA will also be experiencing a degree of rain shadow and thus have limited access to water.
2. It has been highlighted by HBC that there is a possibility of other trees being affected by compaction due to the shed: without more detailed investigations it is not possible to be certain, but the impacts of the shed on other trees would appear limited.
3. The concrete base:
 - a. Constructed over, and encompassing a pre-existing concrete platform.
 - b. No pile foundations were constructed, so the potential for root damage is low. Whether footings were dug and how deep the slab is, is unclear. How much, if any damage was caused to the roots during construction could not be accurately assessed.
 - c. The old base was circa 2/5th of the current base structure and occupied the NW portion of the new enlarged base.
 - d. The base structure is 4.5 x 6 meters.
 - e. The pre-existing base was in place for over 10 years and was circa 2 x 3 meters.
 - f. Average crown spread is circa 12m x 14m = 168 meters' square, the shed occupies 4.5 x 6 = 27 meters' square, roughly 15% of the total Root area (to drip line).
4. The Implications of breaking up the concrete base, could in reality be more damaging than leaving the structure in place and monitoring the health of the tree. There are already signs of declining health, but a further assessment (when the tree is in leaf) would be required to make a more comprehensive assessment. Concerns with breaking up the structure:
 - a. Damage or further damage to roots
 - b. Benefits would potentially be minimal.
5. There is evidence of very limited recent pruning, a discarded, cut branch was evident, as was a single pruning wound in the canopy the branch diameter was less than 50mm.



Photos showing the old shed on its concrete base and the new larger shed.



Further images showing significant areas of dead wood in the canopy and other areas of compaction locally.

Recommendations and mitigation:

- There should be no further tree maintenance work without consultation and relevant consent of the owners and HBC. Should overhanging branches require pruning, this, with consent would be perceived as reasonable, unless works are exempt, in which case pre-works notice should be given by HBC.
- Mr Chisholm, must also avoid any further actions that could wound or cause further stress to the tree.
- All efforts should be made to avoid all further compaction.
- The owners should take care maintaining the garden to avoid strimmer or mower damage.
- The tree would benefit from a maintenance schedule to include mulching and watering. This would require the owners, rather than Mr. Chisholm to take the required actions.
- A further assessment of the tree should take place when the tree is in leaf, Oaks can be late into leaf so July or August 2017 would be reasonable.

- g. An Air spade assessment of RPA which is still accessible would be useful to judge root health. However, consideration should be given to this action as further damage could occur during the operation.
- h. The planting of a successor tree would be a proactive and well received action, and would go some way to compensate for any amenity loss.

Conclusions:

The tree focal to this report is experiencing compaction/damage to within the RPA, however the extent of that compaction and the fact that the tree is an oak and hardy, often tolerant of such stress, would suggest that the compaction may not have a significantly adverse effect on the tree. Further monitoring of the tree(s) health would be advisable over time to ensure the prediction is correct. The owners of the tree and Mr. Chisholm should consider the recommendations above and where possible do what is necessary to help maintain the tree in good health.

Nick Beale
20/2/2017