

Site Visit
Date:
22/08/2023

Resistograph Report

For

Vivid Housing Limited



At

**No.133,
Woodlands Way,
Bursledon,
Hampshire, SO31 8LG**



A trading name of RG Consultancy Limited

**Prepared by
Richard Daubeney
Our Ref 0823-RD
22nd of August 2023**

Scope of Works

The English Oak tree T2 is located within the boundaries of Vivid Housing Associations Residential Land have been inspected using industry recognised system of Visual Tree Assessment (VTA). The English Oak tree has been assessed for risk, taking into account features such as general health, vigour, condition of the trunk, branches and foliage, buttress roots, the presence of decay fungi and other indicators of health status and mechanical defects which may affect structural stability.

The English Oak within this report have been inspected from ground level. In addition, the tree T2 has been drilled using a Resistograph. This seeks to measure the internal wood properties around the area of drilling. All drilling was undertaken from ground level.

To carry out Resistograph tests on tree number T2 within the rear garden of 133, Woodlands Way. The English Oak tree have previously been identified for holding gross defects investigating for structural soundness and decay mapping.

Statutory Protection

Given our checks with the Local planning authority, we can confirm that the tree T2 within this site is subject to statutory protection by means of Tree Preservation Order and but is not located within a Conservation area for Eastleigh Borough Council.

Before any tree works are carried out the presence of Tree Preservation Orders (TPO) or Conservation Area status should be established with the Local Planning Authority and permission from neighbours if trees are outside the curtilage of the property obtained. All tree works should be carried out by qualified, trained and fully insured operators in accordance with BS 3998: 2010 'Recommendations to Tree Works'. In the event the trees are to be removed we can source suitably qualified contractors to quote for the works.

Observations

The mature English Oak tree located on the site have not previously been subjected to tree inspection as part of a management program. The English Oak tree is located in rear garden within the lawn area. The tree had a historic reduction carried out to the crown. It was noted a large tear out wound located at 7m above ground level. Likely a historic secondary stem which tore out at that point which caused the large wound. The crown is weighted to one side due to the loss of the stem tear out. It was noted at ground level that there might have been markings of fungus brackets located close to ground level around the Northwest side of stem, due to the distinct colouring to the bark, but without the evidence of the fungus this is not confirmed on the day of the inspection.

The tree surveyed has a number of years of safe life remaining and problems of a physical nature are not anticipated within the foreseeable future (10-20yrs). However, trees are dynamic structures and regular inspection to evaluate tree condition and structural stability is recommended, especially where poor or declining health is suspected. Signs of dieback or fungal fruiting bodies should be investigated by a qualified Arboriculturist. If the larger trees close to the property remain regular inspections are required.

Conclusion

T2 English Oak held no gross defect upon resistograph inspection with a T/R ratio of over the industry recommended 30% point. Based on the readings provided it would suggest that the likelihood of failure at test point is not significant. However, following the readings taken from the resistograph, it showed that there is a small column of decay within the stem to the Northwest side, but not significant at this time, there are good areas of reaction wood within the remaining areas of the stem.

Following the above results including the observations of the large tear out wound and stem cavity, it would be therefore be advisable to crown reduce by 3m all round, subject to outcome of a climbing inspection for the cavity and tear out wound. Once the crown reduction is completed this will help to reduce the end loading to the canopy spread reducing the pressure to the stem particularly where the wounds/cavity are located, I would recommend a further inspection 3 years from the date of this report to ensure there are no further changes to the tree's health and condition.

Please see the article written by David Lonsdale (Principles of tree hazard Assessment and Management 1999) which highlights the decay within trees.

Chapter 3 Decay: its development in trees.

"Decay is one of the more important causes of hazards, as it commonly occurs in many tree species and can weaken wood enough to increase the chance of mechanical failure. Failure can occur even in the absence of decay and of other recognizable defects. Given extreme conditions. Equally, the mere presence of decay does not necessarily make failure more likely than it would be otherwise. In many instances, decay is not extensive enough to comprise the safety factor of the tree. Even if the mechanical characteristics of the tree have been affected, its safety factor may have been largely or wholly maintained by compensatory development of new wood around the affected zone"

Please see further details below:

- Tree table
- Tree pictures
- Resistograph data
- Tree location map

All works to date has be undertaken within the requirements of the tree table works schedule.



Richard Daubeney
Arboricultural Consultant
22nd of August 2023

Tree Table

Tree No.	Tree Species	Hgt (m)	Past Management	Age Class	Risk Target	TPO	Defects	Works	Work Priority
T2 Tag N/A	English Oak	17m	No significant recent management	Mature	High (Inspect again in 2026)	TPO 368A-E Eastleigh Borough Council. Botanical Name: <i>Quercus robur</i>	No gross defect noted. Minor basal decay to Northwest side, Slight hollow sound when tapped to that side. Possible location of fruiting bracket at ground level to Northwest side due to colouring on stem. Multiple pruning wounds on stem. One cavity at 5m to North side with internal decay noted. Historic large stem tear out wound at 7m to Southeast side, with internal decay. Crown deadwood present. Crown weighted towards the West due likely due to historic stem tear out.	Climbing inspection required to check on status of cavities and tear out wound. If found to be not significant, then proceed to Crown Reduce by 3m all round. Tree works to BS3998 (2010) No pruning wounds to exceed 50mm in dia. Remove deadwood throughout canopy.	Urgent

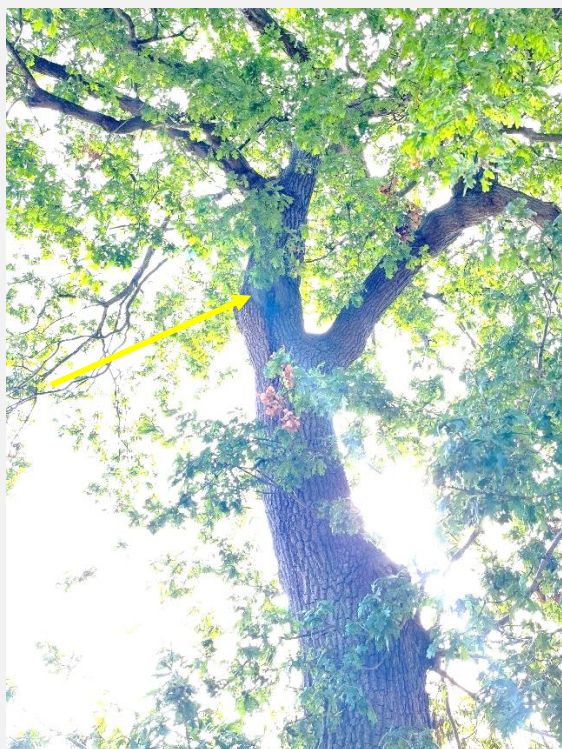
Photographs



T2 Looking to Southeast.



T2 Extensive tear out wound to Southeast side.



T2 Looking South towards cavity on stem.

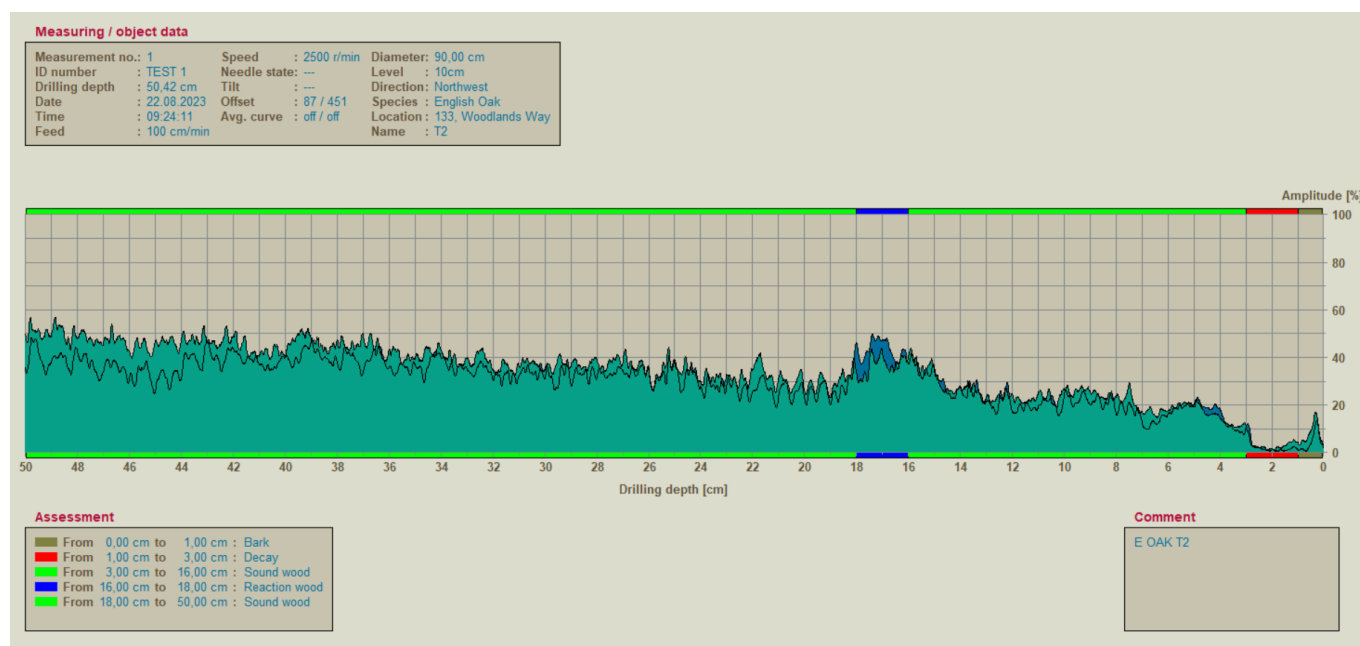


T2 Looking South.

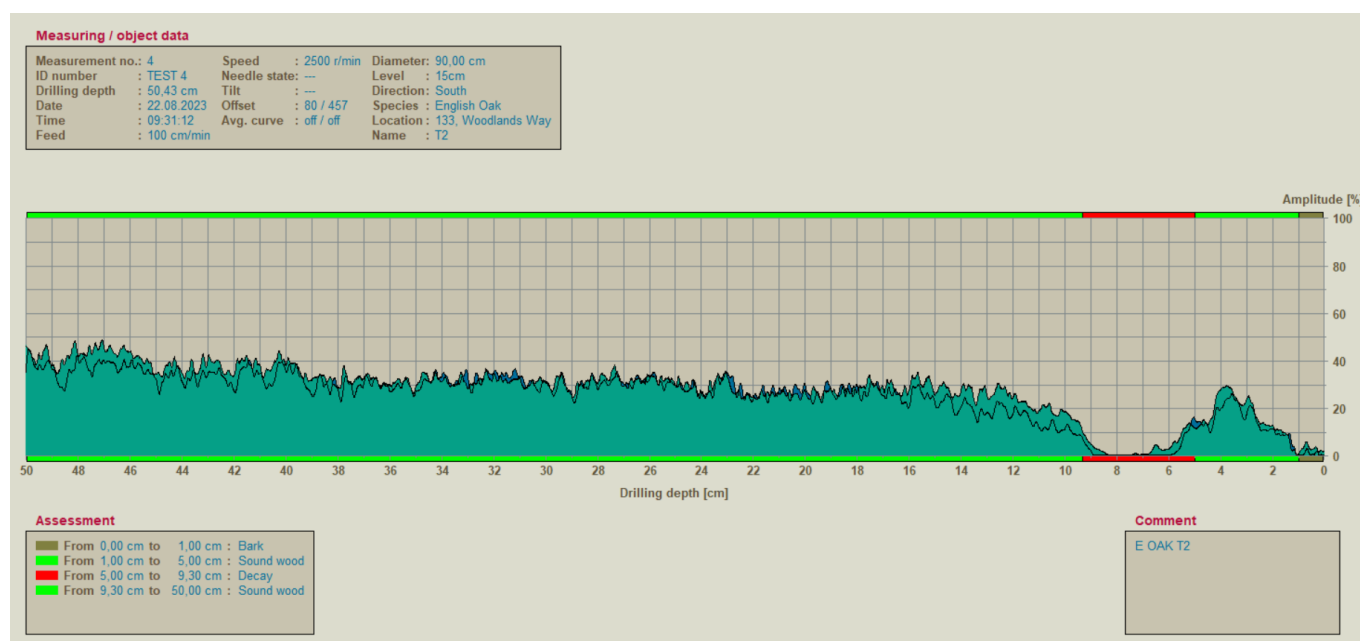
Resistograph Readings

The recommendations of the tree surveyed have been implicated due to the tree location and the significance of defects noted at the time of inspection. It is important that all recommendations are implemented within the time span specified within the tree table. Please note we have carried multiple readings of the tree, these will be stored on our system, we have displayed three readings from the tree below.

T2, Measurement 1



T2, Measurement 2



T1, Measurement 3

