

Resistograph Tree Report

For

Vivid Housing Limited



At

1-26

Bernie Turnstall Place,

Yonge Close,

Eastleigh,

Hampshire,

SO50 5PR



A trading name of RG Consultancy Ltd

**Prepared by
Richard Daubeney Our Ref 0724-RD
5th of July 2024**

1.0 Introduction.

- 1.1 Ruskins Tree Consultancy have been instructed by Vivid Housing Limited to undertake resistograph decay detection to Holm oak T4176 growing at No. 1-26, Bernie Turnstall Place, Eastleigh, Hampshire. The resistograph inspection was undertaken by Richard Daubeney who visited the site on 02/07/24.

2.0 The Benefits of Trees

- 2.1 Trees have many benefits are integral to natural ecosystems, providing a wide range of related benefits to humankind (ecosystem services), including mitigating the harmful effects of climate change. Trees are an important part of the economy, providing timber and non-timber forest products.
- 2.2 With urban trees these benefits can often be amplified with trees contributing to the landscape and character of an area, creating a sense of place with mature trees providing a link to the past. They help reduce the impacts of extreme weather by providing shade and intercepting rainfall, help reduce air pollution by removing particulates, help absorb CO₂ whilst providing habitat for wildlife and associated bio-diversity benefits.
- 2.3 Trees can also contribute to society by having a positive impact on health, reducing anti-social behaviour and having a positive impact on the quality and value of the built environment.
- 2.4 Their importance is recognised in national and local government policies, and many non- governmental organisations have policies dedicated to conserving trees and their biodiversity.

3.0 The risks from trees

- 3.1 The risk, per tree, of causing fatality is around one in 150 million for all trees in Britain or one in 10 million for those trees in, or adjacent to areas of public use. This is clearly significantly less than the 1 in 1 million thresholds that the Health and Safety Executive (HSE) considers 'broadly acceptable', within the Tolerability of Risk Framework.
- 3.2 The HSE have developed the Tolerability of Risk Framework which has been incorporated into the National Tree Safety Group (NTSG) guidance. Risks above 1/10,000 per annum are generally considered unacceptable when placed on the public. Risks between 1/10,000 and 1/1,000,000 per annum are tolerable, but consideration should be given to managing them 'as low as reasonably practicable' (ALARP), where it is cost effective to do so.
- 3.3 This risk therefore represents an extremely small proportion of the background risk that we commonly accept in our everyday lives, and the ongoing removal and general management of trees is probably the most important factor in keeping this figure at such a low level. However, there can be pressure to remove trees because of a perception of risk, which may be much greater than any actual risk a tree poses.
- 3.4 Trees are growing dynamic structures. No tree is ever absolutely safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.

4.0 Statutory Protection of Trees.

- 4.1 We have been informed that there is a Tree Preservation Order and no Conservation Area protection relating to this Holm oak tree T4176 at this site for Eastleigh Borough Council. (TPO 181-E)
- 4.2 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 obtained from the tree owners if required.
- 4.3 All tree works should be carried out by qualified, trained and fully insured operators in accordance with BS 3998: 2010 'Recommendations for Tree Works'.

5.0 Tree Inspections

- 5.1 To maintain trees in a reasonable condition and reduce the risk of personal injury to acceptable levels trees should be inspected by a suitably trained and competent person using the Basic or Professional Level tree surveying methodology, which can be undertaken by an arboriculturist as set out by LANTRA utilising visual tree assessment (VTA) methodology (Lonsdale 1999).
- 5.2 Where the visual tree assessment finds features that merit further inspection then the trees should be inspected using appropriate methodology. This might range from climbing inspections, root collar excavations to use of resistograph and/or tomographs to help determine the structural integrity of the wood within the tree. For the trees at this site our VTA identified issues that we considered should be assessed by use of a resistograph.
- 5.3 T4176 Holm oak tree has highlighted areas of sound wood present within the stem, despite the large cavity formation to the West side. The tree has put on moderate reaction wood surrounding the cavity. This is the trees response to mechanical loading around the cavity area of the tree. There is one of the readings No.6 to the Northwest side which focuses on the residual wood surrounding the cavity, this was shown to have small areas of decay present but not significant at this time. Although all the readings are not fully conclusive, this is due to the tension within the wood fibres and the hard wood nature of these species, however results do show overall a moderate sound wood within the readings taken. Further up in the tree are two cavities located on the stems, these are small in size. The cavities will need to be inspected to ensure both do not have significant defects. The tree has been reduced previously as part of the last testing to the tree carried out in 2021. T4176 Holm oak has put out good response growth from the previous pruning points all round. The tree is in a prominent position close to the boundary wall, with main road, public footpath, communal area and building all within striking distance of tree.

6.0 Conclusion

- 6.1 Following the results of T4176 Holm oak tree mentioned within this report, we now provide our conclusion.
- 6.2 The testing to T4176 Holm oak tree showed that there is still moderate sound holding wood within the stem despite the inconsistent readings given, The cavity has not significantly decreased the residual and live sound wood remaining within the stem when in comparison to the previous testing in 2021, however the concern is the cavities further up on the stems which require further investigation, and the current height and spread of the crown. The tree has put on good response growth since the last crown reduction, with the position of the tree being in an area of high risk, with this in mind, we advise that the T4176 Holm oak is to have the cavities on the stems inspected, if found not to be significant then proceed with crown reduction back to previous points of pruning. By doing so will ensure that the tree is kept to a compact shape, including minimising the risk to the immediate area around the tree. We recommend these tree works is carried out within 6 months from date of this report.
- 6.3 All works to date is to be undertaken within the requirements of the tree table works schedule. The trees listed in this report to be reinspected as outlined within the tree tables.



Richard Daubeney
Arboricultural Consultant
5th of July 2024

Tree Data

Tree No. Tree Tag.	Tree Species	Hgt (m)	Past Management	Age Class	Risk Target	Defects	Works	Work Priority
T4176 Tree tag: 1580	Holm oak	15-20m	Recent reduction to crown.	Mature	High/ reinspect in 2027	No Gross Defect Noted. Dense basal vegetation, unable to fully inspect. Cavity to West side, 1m above ground level. Depth is approx. 30cm. Multiple pruning wounds on main stem. Two small cavities located at 4m and 5m to the West side of stem. Historic reduction carried out to crown. Slightly asymmetric canopy.	Check cavities on stem at 4m for detailed investigation and report back on findings. If found not significant then proceed to crown reduce to previous point of reduction. (All tree works to be carried out to BS3998 2010) No pruning wounds to exceed 50mm in dia.	High within 6 months

Photographs

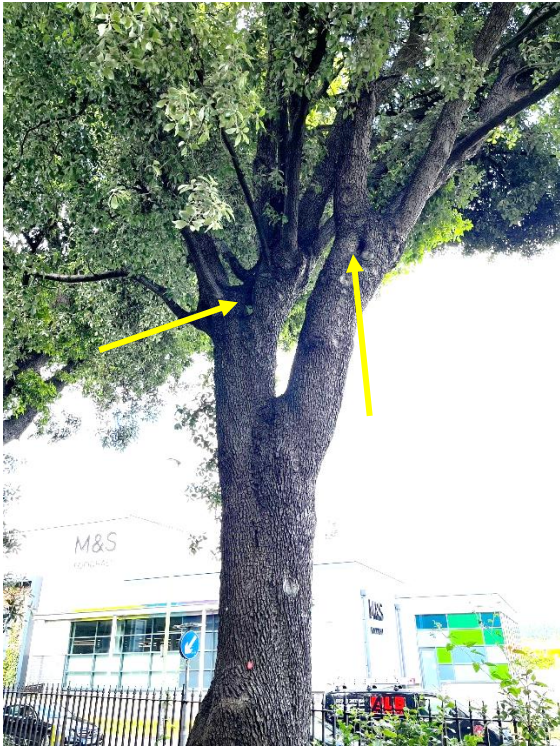
T4176 Holm oak looking Southeast towards Drill location No.5 and cavity on stem.



T4176 Holm oak tree looking to West towards drill location No. 4 and No.3



T4176 Holm oak tree looking east towards stem cavities

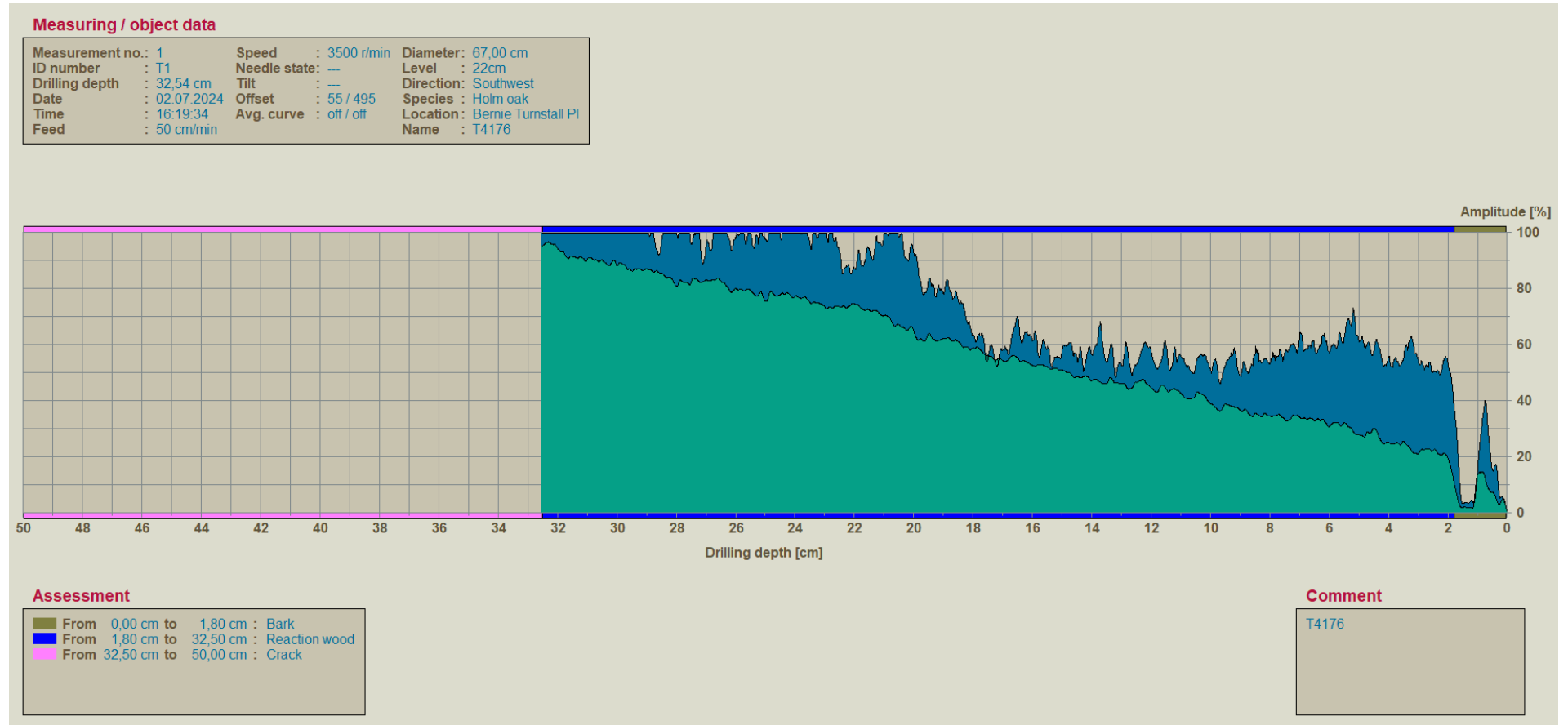


T4176 Holm oak tree Looking West

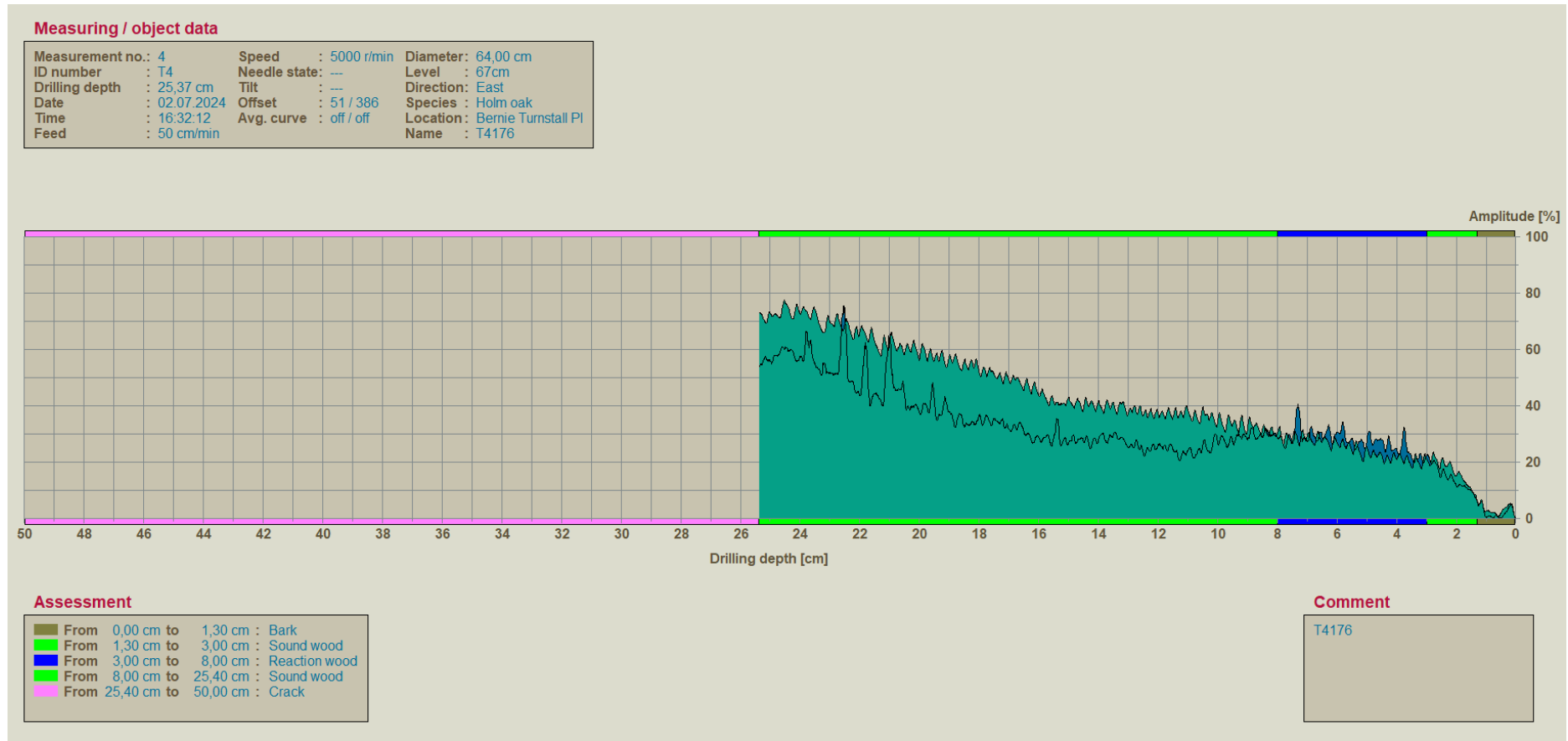


Resistograph Readings

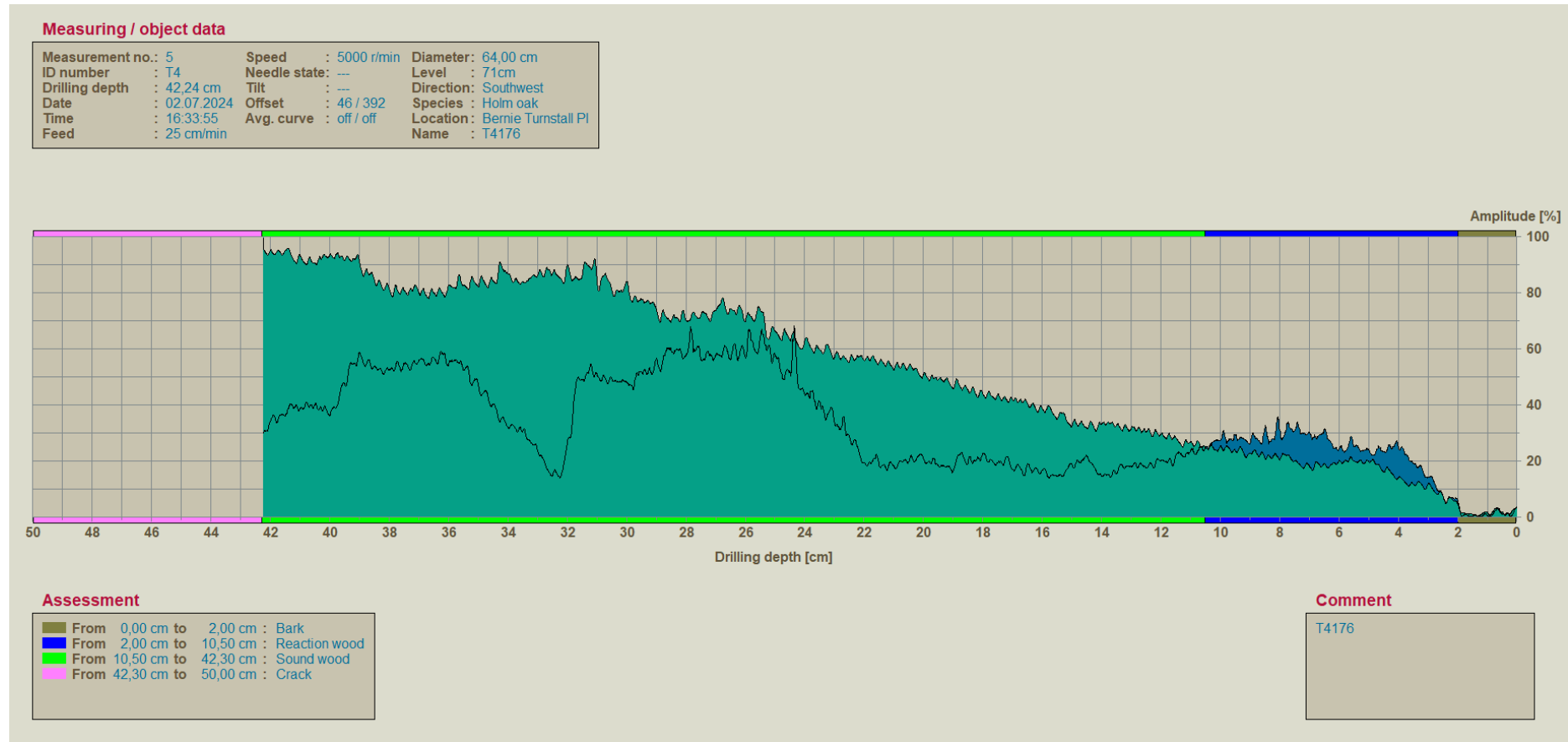
T4176 Holm oak measurement 1



T4176 Holm oak measurement 2



T4176 Holm oak measurement 3



Site Plan

