



July 2023
CBA11759 v1

Lakewood Tree Surgeons

ARBORICULTURAL REPORT

Site: 71 Lakewood Road
Chandlers Ford
SO53 5AE



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The Complete Arboricultural Consultancy



ARBORICULTURAL REPORT

Client: Paul Skiba – Lakewood Tree Surgeons
Site: 71 Lakewood Road, Chandlers Ford, SO53 5AE
Principal Consultant: Stefan Rose *BSc (Hons), Tech Cert ArborA, TechArborA*
Date: July 2023

1.0 INTRODUCTION

- 1.1 CBA Trees has been instructed by Paul Skiba of Lakewood Tree Surgeons to visually inspect a Beech and Oak tree growing within the rear garden at 71 Lakewood Road, Chandlers Ford, SO53 5AE that were detailed within a recent tree works application (see below), in relation to assessing the health of the trees and advising on future management of the trees as considered necessary for health and safety reasons as well as from a long-term tree retention perspective if appropriate.
- 1.2 Subsequent to this, CBA Trees has been instructed to provide a written report on the two trees following the tree works application decision.
- 1.3 A tree works application (ref: T/23/95092) was refused by Eastleigh Borough Council on 8th June 2023.
- 1 no. Beech (T1) - Fell due to large cavity at base with Ganoderma brackets present. The hollow is approximately 7ft tall from base of tree. The tree is very large and a failure would cause significant damage to surroundings.
 - 1 no. Oak (T2) - Fell due to large sections of deadwood in the canopy. Once deadwood is removed the tree will be an unbalanced, poor specimen. Also, the removal of a large Beech tree will leave this tree exposed to wind. As such recommending removal.

Reason for Refusal: The proposed 2 no. removals is considered unjustified. The works would thus result in an adverse impact upon the visual amenity, ecology and wildlife and screening of the surrounding area.

- 1.4 To assist in our assessment of the trees and enable a recommendation to be made, CBA carried out a site visit on 3rd July 2023.

1.5 The Tree Officer's report is as follows:

Assessment date: 18th and 30th May 2023

I attended site on both above dates, however, was unable to gain access.

The trees form part of a group within the rear of the property. The group can be seen from both Lakewood Road and Queens Road. Visually from the highway, trees appear in good health. They are considered to have moderate amenity value.

The Beech (T1) is a substantial tree. The applicant has requested to fell the tree due to a large cavity at the base with Ganoderma brackets present. From the highway the tree appears in good health and no concern has been raised by the applicant beyond that of a cavity. Images show the tree to have a cavity, which appears to be responding well, with good reaction wood present. Diagnostic information detailing the extent of the cavity has not been provided.

The Oak (T2) has some deadwood; however, this cannot be seen from the public realm and photographs do not indicate it to be extensive. It is acknowledged that there is an area of missing bark with some degradation of wood, however, the health of the canopy above this area has not been clearly shown by the applicant. Under Regulation 14(1) of The Town and Country Planning (Tree Preservation) (England) Regulations 2012 dead wood is exempt from the need to submit an application, therefore can be removed. Images show that the tree has ecological value, therefore input from an ecologist is recommended prior to undertaking any works.

The applicant has stated that they have fears the trees might break or fall. As outlined in Regulation 16(1) of The Town and Country Planning (Tree Preservation) (England) Regulations 2012 "written arboricultural advice or other diagnostic information from an appropriate expert" should be submitted with the application. This has not been supplied for either tree, therefore, the request to fell the trees is unjustified.

1.6 The Eastleigh Borough Council interactive map shows that at the time of the enquiry there is a Tree Preservation Order 250-E on site, but the site is not located within a Conservation Area.

1.7 **Photograph 1 and 2:** Showing the clear and obvious side access to the rear garden on both sides of the property



- 1.8 **Photograph 3:** Showing the group of trees containing the Beech and Oak from the driveway



- 1.9 **Photograph 4:** Showing the group of trees containing the Beech and Oak (beyond the property) opposite the driveway entrance on Lakewood Road



- 1.10 **Photograph 5:** Showing the group of trees containing the Beech and Oak from the driveway



1.11 **Photograph 6:** Showing the group of trees with the trunks of the Beech and Oak highlighted



Oak (T2)

Beech (T1)

- 1.12 **Photograph 7:** Showing the group of trees with the trunks of the Beech and Oak highlighted



Oak (T2) Beech (T1)

- 1.13 **Photograph 8:** Showing the group of trees (beyond the houses) from Gordon Road



2.0 TREE DETAILS

2.1 Tree 1:

The tree is a **Common Beech (*Fagus sylvatica*)** of a mature age class with a trunk diameter of 1100mm at 1.5m above ground level. The tree is over 20m tall and it forms part of an informal group of trees within several rear garden spaces. As part of the assessment a Microdrill was used to further assess the state of the trunk in terms of the internal wood tissue integrity at a given point (the line of the drill). The Microdrill can drill a small hole (1.5mm in diameter) to a depth of 400mm using a constant speed with an electric drill. The machine records the change in the resistance to the drilling rotation on a graph on a 1:1 ratio i.e. 1cm on the graph represents 1cm in the tree. The tree was drilled on the north, east, south and southwest sides at approximately 900mm above ground level. The resulting graphs are appended at CB1.

2.2 **Roots and lower trunk:**

There is a small amount of ivy growing on the trunk; which currently does not hindered the assessment of the lower trunk.

Buttress rooting is well formed, in particular on the western side of the trunk.

There is a significant open cavity on the western side of the trunk. This is open from ground level to a height of 2.1m and an opening width of 360mm. The open depth of the cavity is approximately 650mm.

The cavity extends vertically at least 800mm (extent of probe length) higher than the cavity opening, suggesting the minimum length of the cavity is at least 2.9m in height.

Within the cavity is a fungal fruiting body of *Ganoderma* fungal fruiting body which is growing approximately 900mm above ground level on the northern side of the opening. The decay fungi known as *Ganoderma Australe* is a decay fungus, *Principles of Tree Hazard Assessment and Management*, David Lonsdale, 2001 states:

“This decay in the early stages can produce localised selective delignification and this then develops so that the lignin almost totally degrees in the advanced decay stage.

The cellulose of the wood tissue can also be broken down to some extent.

The decay can produce an irregular shape of decay with zoning that is somewhat drier than functional sapwood and the decay extends upwards in a cone shape from the root system.

As with any fungus that causes root and butt decay in living trees, the decay can cause mechanical failure of the stem or root plate. However, partially decayed wood tissue retains considerable tensile strength and therefore it can take many years before a decayed zone within a tree becomes dangerously large in relation to the extent of sound wood”.

When tapped with a plastic headed mallet the resonance was of a hollowing sound on either side of the cavity extending round east and west for some 300-400mm with a more solid sound on the southern and eastern side suggesting that there is still sound wood on this side of the trunk.

2.3 **Photograph 9:** Showing the cavity at base of the Beech trunk on its west side



2.4 **Photograph 10:** Showing the fungal fruiting body in the cavity of the beech trunk



2.5 Trunk and structural branches:

There were no obvious defects of the form of the trunk and structural branches from ground level.

Old pruning wounds were present with the majority occluded over.

2.6 Crown:

The crown is slightly distorted due to natural growing conditions and surrounding trees.

Major deadwood was noted in the crown, this is typical of a tree of this size, age and growing conditions.

The colour of the leaves appeared to be good and considered normal for a tree of this age, size and growing conditions.

2.7 Tree 2:

The tree is a **Pedunculate Oak (*Querus robur*)** of a mature age class with a trunk diameter of 740mm at 1.5m above ground level. The tree is over 20m tall, and it forms part of an informal group of trees within several rear garden spaces.

2.8 Roots and lower trunk:

When tapped with a plastic headed mallet the resonance was solid indicating that at this time there is little decay in the lower trunk.

Buttress rooting is well formed.

2.9 Trunk and structural branches:

The trunk bifurcates (divides into two main structural trunks) at approximately 7.5m above ground level, the union appears to be sound and well formed.

The two structural trunks form the crown with the majority of structural branches within the crown being biased towards the southern side. Whilst bark necrosis is present on numerous branches, the larger more obvious area is on the base of the southern structural trunk on its upper side.

Old pruning wounds were present with the majority occluded over. Some of these had wildlife holes present suggesting that the pruning wounds whilst occluded have areas of decay within them.

There were also numerous wildlife holes that have been made within the trunk itself.

There are significant dead branches in the lower crown.

2.10 **Photograph 11:** Showing an example of the wildlife holes in the trunk of the Oak



2.11 **Crown:**

The crown is biased towards the south side and is naturally distorted due to group pressure.

The lower crown has significant amounts of large deadwood with the only live foliage being in the upper crown albeit the view of the crown is restricted by the surrounding trees.

The colour of the leaves appears to be good and considered normal for a tree of this age, size and growing conditions albeit that the live crown is high up and difficult to distinguish from the other surrounding Oaks.

There are also numerous wildlife holes that have been made within the crown.

Epicormic branches (advantageous buds beneath the bark that have burst into leaf) are growing on the trunks. This can often be a sign that the tree is under stress or is responding to stress and trying to produce more leaf coverage to in turn, produce more energy. It can also be in response to the tree starting to retrench and naturally growing smaller to reduce the loading on the tree.

2.12 **Photograph 12:** Showing the bark necrosis on the southern trunk of the Oak



2.13 **Photograph 13:** Showing an example of the bark necrosis on the Oak



3.0 CONCLUSIONS AND RECOMMENDATIONS

- 3.1 The purpose of a TPO is to ensure that trees worthy of protection are protected for the greater good of the immediate area. However, trees are living entities and have a life expectancy that can be cut short due to ill health as with the Beech and potentially the Oak. In this instance the owner is burdened with the cost of maintaining such trees. It is the responsibility of the LPA to consider all aspects, which includes the financial burden, the act of imposing a legal constraint on private persons for the benefit of others and the health of and amenity afford by the trees themselves.
- 3.2 The two trees grow internally within a group with several surrounding mixed species limiting the visual aspect of the two subject trees from a public place.
- 3.3 Tree 1, the Beech has a significant cavity at the base and a known decay fungus bracket present. Micro drill readings (appended at CB1) indicate that at the level drilled (approximately 900mm above ground level) that the tree has an approximate extent of 22-26cm of sound wood on the north, east and southern sides of the trunk and up to 34cm of sound wood when the trunk was drilled from a south-westerly direction.
- 3.4 There is a risk of sudden wind throw with inherent safety risks associated with a very large tree falling in an urban environment. The fungal fruiting body present on the northern side of the trunk will have reduced the trees resilience to wind loading. The UK has generally south westerly winds which would suggest if the tree were to fail it would fall north easterly. The Beech is tall enough that should it fall, it would reach the neighbouring house and there is not sufficient surrounding trees to be able to stop the tree falling in a northerly direction.
- 3.5 A failure of this tree would likely damage third party property and the surrounding trees. If retained, the tree will continue to require investment from the owner to meet their duty of care, which is an unfair burden on the owner as a direct result of the Tree Preservation Order, given that the eventual outcome will be that this tree will need to be removed due to the already present and established decay fungi at the base.
- 3.6 There are no control measures to cure or remove the decay from the tree; the tree will always have the decay and as the decay grows and spreads even further than it has already, it weakens the tree both physiologically and structurally. In line with current best practice (BS3998: Tree Work Recommendations) a maximum 30% crown volume reduction would only reduce the longest lateral branches by around 2m in length which, whilst leaving a crown that has plenty of shoots and foliage, would not significantly reduce the stress at the base of the stem nor the sail effect of the crown (which would be the purpose of a reduction). A reduction of more than the recommended amount would not be healthy for the tree, nor would it be in keeping with generally approved TPO applications; it would disfigure the tree to a point where the already low visual amenity of the particular tree is destroyed.
- 3.7 Crown reductions are costly and require cyclical maintenance of the regrowth, perhaps every 5 years, dependent upon how the tree responds (if it responds at all). This will pull energy resources away from compartmentalising or restricting the spread of decay to produce new foliage and compartmentalise the pruning wounds. The tree would remain a large tree and still be a threat to the occupiers, the public and third-party land.

- 3.8 Whilst the tree has the appearance of being healthy physiologically, structurally the tree is compromised to such an extent that the retention of the tree in our view is not viable or sustainable. With clear views of this tree from a public place being very limited and the structurally compromised trunk we would recommend that this tree is felled to at least a standing stump of approximately 5m in height to provide an ongoing wildlife habitat.
- 3.9 Tree 2, the Oak, now in leaf does appear to have a live crown, albeit limited. Our recommendation for this tree is that works to remove the major deadwood is undertaken and at the same time undertake a further assessment of the crown and the areas of bark necrosis and wildlife holes to further inform on the health of the tree.

Appendix

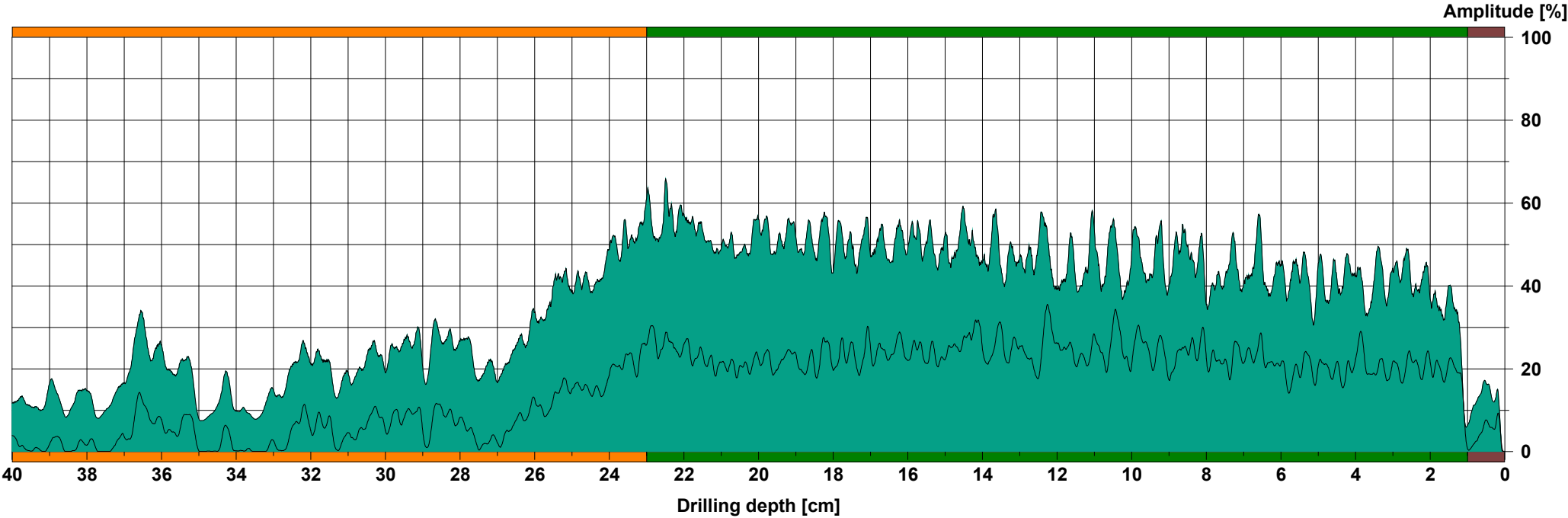
CB1	Micro drill results
CB2	Qualifications and Experience





Measuring / object data

Measurement no.:	2	Speed	: 2500 r/min	Diameter:	110.00 cm
ID number	: SS 1 3	Needle state:	---	Level	: 900mm
Drilling depth	: 40.00 cm	Tilt	: ---	Direction:	east
Date	: 03.07.2023	Offset	: 127 / 296	Species	: Beech
Time	: 13:52:54	Avg. curve	: off / off	Location	: 71 Lakewood Road
Feed	: 200 cm/min	Name	:		



Assessment

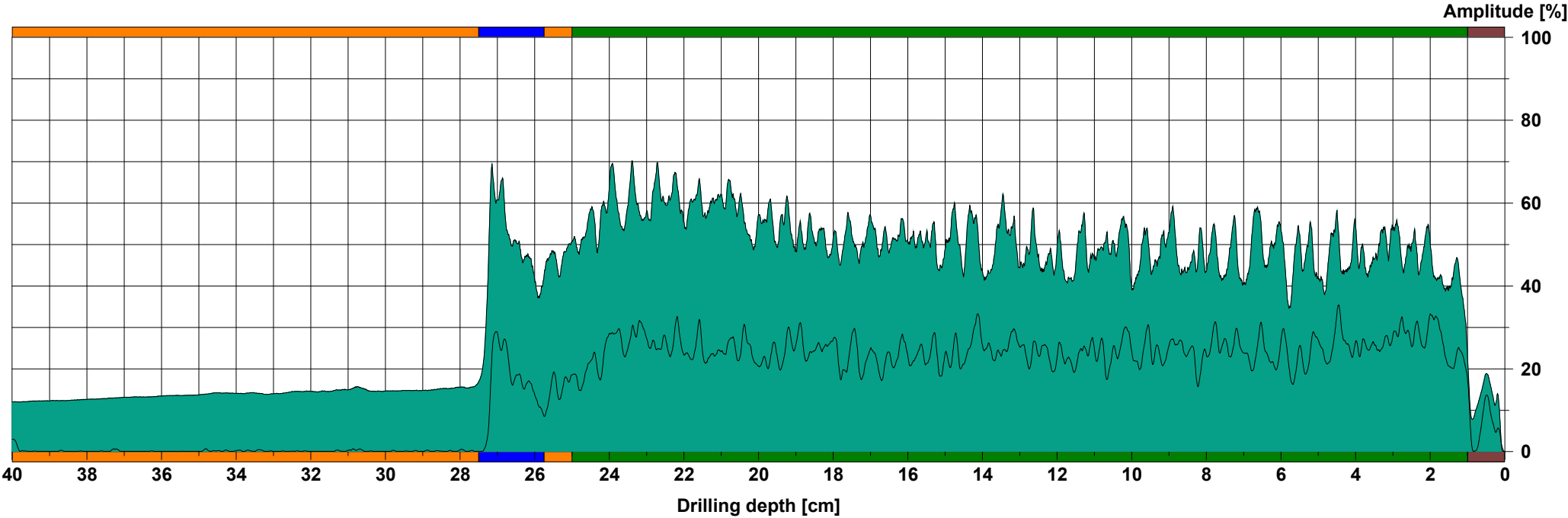
From	0.00 cm to	1.00 cm	: Bark
From	1.00 cm to	23.00 cm	: Sound Wood
From	23.00 cm to	40.00 cm	: Decay, Crack, Cavity

Comment

BEECH 90 W

Measuring / object data

Measurement no.:	1	Speed	: 2500 r/min	Diameter:	110.00 cm
ID number	: SS 1 3	Needle state:	---	Level	: 900mm
Drilling depth	: 40.00 cm	Tilt	: ---	Direction:	north
Date	: 03.07.2023	Offset	: 136 / 298	Species	: Beech
Time	: 13:51:39	Avg. curve	: off / off	Location:	71 Lakewood Road
Feed	: 200 cm/min	Name	:		



Assessment

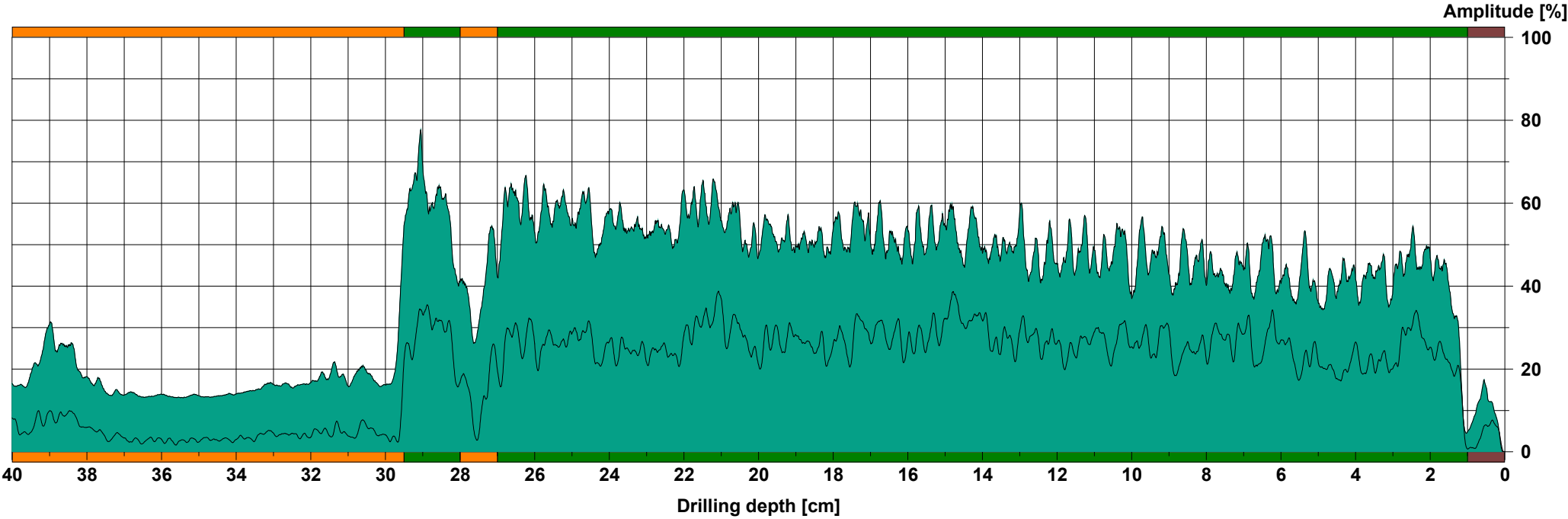
From	0.00 cm to	1.00 cm	: Bark
From	1.00 cm to	26.50 cm	: Sound Wood
From	25.00 cm to	25.75 cm	: Decay, Crack, Cavity
From	25.75 cm to	27.50 cm	: Reaction wood
From	27.50 cm to	40.00 cm	: Decay, Crack, Cavity

Comment

BEECH 90 N

Measuring / object data

Measurement no.:	4	Speed	: 2500 r/min	Diameter:	110.00 cm
ID number	: SS 1 3	Needle state:	---	Level	: 900mm
Drilling depth	: 40.00 cm	Tilt	: ---	Direction:	South
Date	: 03.07.2023	Offset	: 121 / 281	Species	: Beech
Time	: 13:54:19	Avg. curve	: off / off	Location	: 71 Lakewood Road
Feed	: 200 cm/min	Name	:		



Assessment

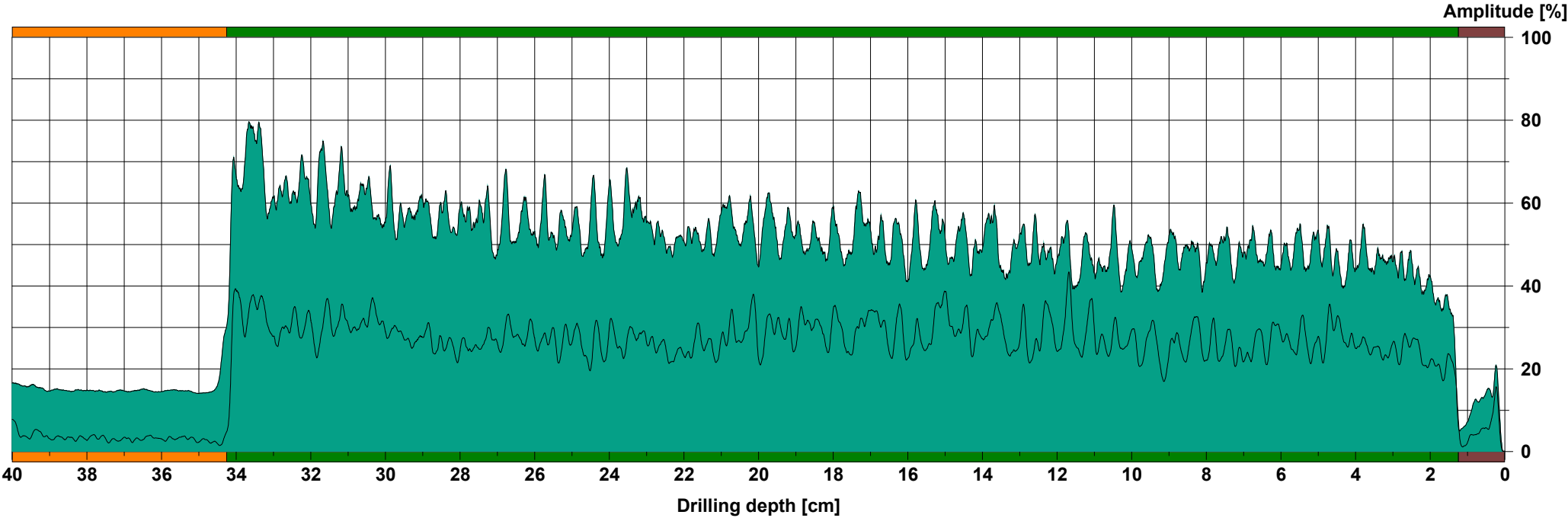
From	0.00 cm to	1.00 cm	: Bark
From	1.00 cm to	27.00 cm	: Sound Wood
From	27.00 cm to	28.00 cm	: Decay, Crack, Cavity
From	28.00 cm to	29.50 cm	: Sound Wood
From	29.50 cm to	40.00 cm	: Decay, Crack, Cavity

Comment

BEECH 90 S

Measuring / object data

Measurement no.:	5	Speed	: 2500 r/min	Diameter:	110.00 cm
ID number	: SS 1 3	Needle state:	---	Level	: 900mm
Drilling depth	: 40.00 cm	Tilt	: ---	Direction:	West
Date	: 03.07.2023	Offset	: 115 / 282	Species	: Beech
Time	: 13:55:19	Avg. curve	: off / off	Location	: 71 Lakewood Rd
Feed	: 200 cm/min	Name	:		



Assessment

From	0.00 cm to	1.25 cm	: Bark
From	1.25 cm to	34.25 cm	: Sound Wood
From	34.25 cm to	40.00 cm	: Decay, Crack, Cavity

Comment

BEECH 90 SW





The Professional Arboricultural Consultancy

Qualifications of Stefan Rose Principal Consultant

Stefan Rose *BSc (Hons), TechCert (Arbor.A), TechArbor.A*, joined CBA Trees in 1998 as a junior surveyor and having gained extensive knowledge and a wealth of experience over the years including Professional Tree Inspectors Certification (LANTRA), has progressed to Principal Consultant. He has considerable experience in working as a locum for Local Authorities, assessing new and extant Tree Preservation Orders, and continues to work on a number of major development projects nationwide.

As our Principal Consultant Stefan undertakes a full range of arboricultural services from health and safety audits to BS5837:2012 tree surveys, providing expert advice and guidance on initial feasibility site assessments to full scale planning applications. He is accomplished at producing implication assessments and method statements for the submission of planning applications, working with both individual home owners and within multi-disciplinary teams to achieve successful arboricultural outcomes.