Gale Tree Consultancy

Tree Condition Report

Plaistow Recreation Ground

November 2025

Ref: TCR/706/25

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Contents

View from the recreation ground – T1 on the right T2 on the left

Executive Summary

- Two mature Pedunculate oak trees along the southwest boundary of a recreation ground and a busy rural lane
- One tree (T1) requires minimal pruning work whilst the other (T2) requires more radical pruning work to reduce the risk of branch failure
- Works to be carried out within 12 months of he report's date but not within the bird nesting season
- Reassess in three years of the report's date

1.0 Introduction

1.1 Client and Address

- Jane Bromley, Clerk to the Parish Council, The Winterton Hall, Loxwood Road, Plaistow, RH14 0PX

1.2 Site Address if Different from the Above

- Plaistow Recreation Ground

1.3 Date of Inspection

- 11th November 2025

1.4 Name of Inspector

- Andrew Gale *MICFor Dip Arb L6 (ABC) M.Arbor.A*

1.5 Our Reference

- TCR/703/25

1.6 Instructions Received

- The clerk has instructed me to perform an aerial inspection of two Pedunculate oaks, on the Recreation Ground which require follow up assessments on various cavities and features
- I am to provide my findings in the form of a report detailing any remedial work that may be necessary

2.0 Scope of the Report

- Trees are dynamic living organisms, and their health and condition can be subject to rapid changes, depending upon a number of internal and external factors
- The conclusions and recommendations contained within this report are based on information gained at the time of inspection and are subject to the limitations of the specialist nature of this survey
- Therefore, the likelihood of failure is considered for three years from the reports date based on the information gained on the day of the report and on the assumption that any recommended work will be undertaken in the period specified
- It should be noted that even completely sound, healthy trees, can fail given sufficiently severe weather conditions therefore this report is not valid in adverse or unpredictable weather conditions or for any failure due to Force Majeure
- The survey conducted relates to specific defects identified in TCR/646/25
- The site has not been checked for any statutory constraints
- The trees were not assessed for wildlife which would include birds or bats

3.0 Results of Inspection

3.1 General Site Observations

- The two trees are located in the southwest corner of the recreation ground, close to the T-junction with Common House Road and The Street – see the aerial view below
- Directly beneath the southern crown spread of the two trees is a lay-by/parking area and to the north is an aerial zip line
- The trees are growing on a bank where the difference in height between the recreation ground and Common House Road is c.1.2m
- The southwest side of the site is c.75 above sea level[1]
- The wider landscape is made up of open farmland and blocks of woodland with the main area of housing being to the north and northwest

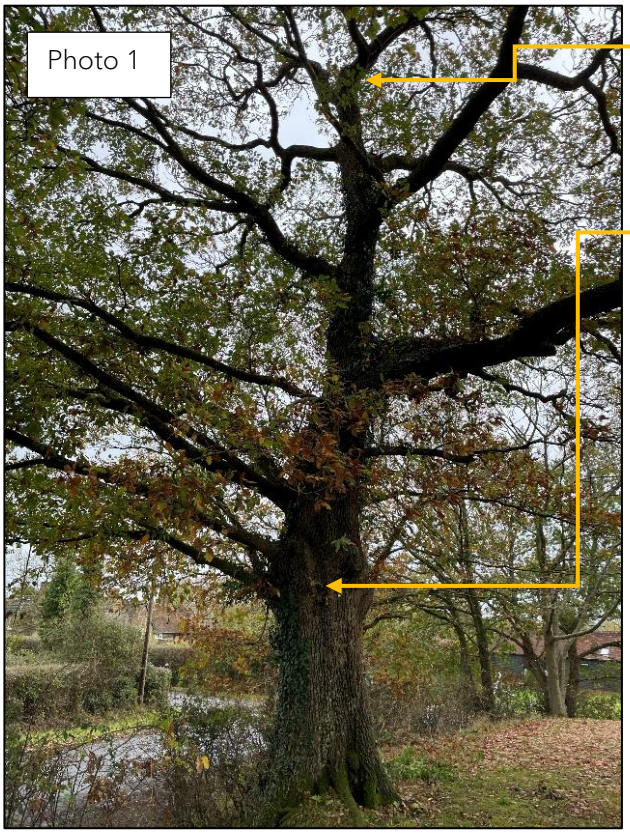
[1] www.calcmaps.com

3.2 Tree Species and Dimensions

No.	Species	Scientific Name	H (m)	Crown Spread (m)				Age	Phys. Con.
				N	E	S	W		
T24/524	Pedunculate oak	*Quercus robur*	17.0	11.0	5.0	10.0	9.0	M	Good

3.2 General Description

- Running directly to the east of the tree is a cut through path from Common House Road onto the recreation ground
- The tree has several cavities through the main stem, with one forming on a tertiary stem section in the upper crown – please see Photo 1 below

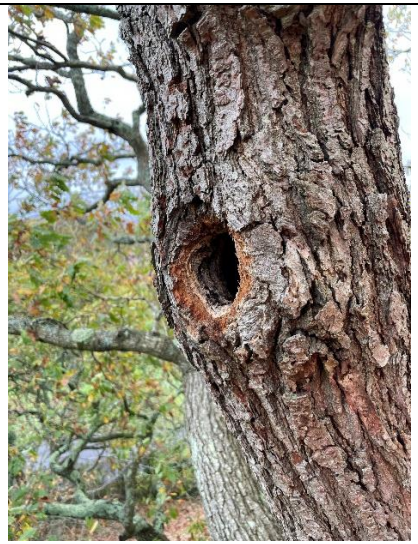


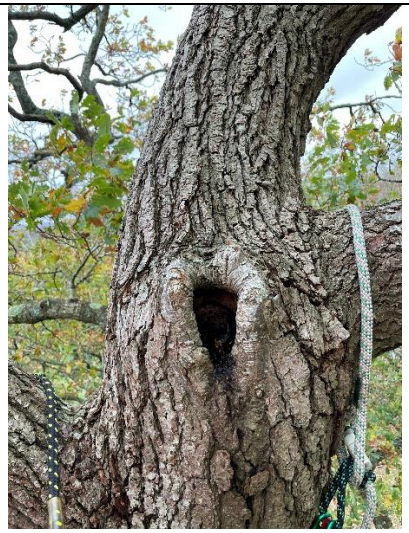
c.11m cavity on main stem

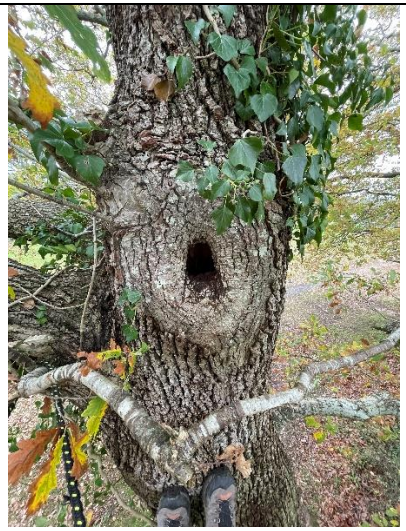
c.3m cavity on main stem

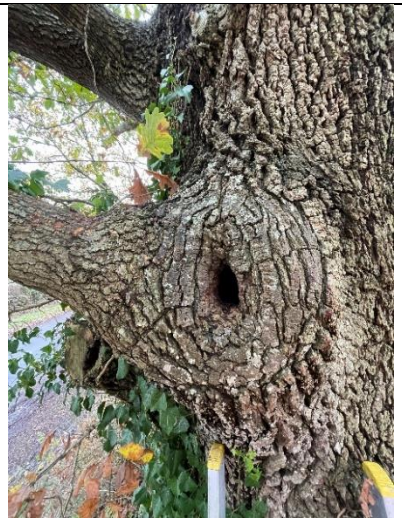
Note Common House Road and the T-junction with The Street in the distance

3.3 Results of Inspection

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C1		11.4	South	24	10	6	10	//	42	Tertiary Stem Section – TSS Unable to assess extent of the cavity up the stem Light can be seen through the rear of the TSS Distance from the bottom of the cavity to the attachment point with the main stem section c.52cm Dull tone heard around the TSS

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C2		11.0	East	//	7	5	14	//	42	Main Stem Cavity forming at the point of a previous stem section removal Occluding wound wood forming No immediate changes in tone
C3		8.0	North	//	//	//	//	//	//	Main Stem Cavity highlighted in the previous report now fully occluded Very slight change in tone heard around the occluded area

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C4		6.0	South	//	10	6	10	5	20	Main Stem Cavity forming at the point of a previous pruning wound Detritus in bottom of cavity Occluding wound wood developing Slight change in tone heard below the cavity when the area
C5		5.0	South East	//	22	13	11	//	5	Main Stem Cavity forming at the point of a previous pruning wound Detritus in bottom of cavity Exposed wood becoming friable Occluding wound wood developing No obvious changes in tone heard

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C6		4.0	South East	94	55	25	52	//	15	Main Stem Cavity forming at the point of a previous pruning wound Detritus in bottom of cavity Exposed wood becoming friable fruiting body of *Cerioporus squamosus* is present in the cavity Occluding wound wood developing
C7		3.0	South East	//	8	5	45	//	15	Main Stem Cavity forming at the point of a previous pruning wound Detritus in bottom of cavity Occluding wound wood developing – near fully occluded No obvious changes in tone heard

3.4 Summary of Results

- Wound wood is developed around areas of stress caused by pruning activities, storm damage or other mechanical stresses placed upon the tree where it helps to compensate for any loss of strength in that region
- This can be seen in Cavity 3 where the adaptive tissues have fully occluded over the cavity which was initially identified in 2018
- Cavity 1 forming in a tertiary stem section does not have any wound wood developing around its outer edge. The bark around the aperture showing signs of damage suggesting a woodpecker or other cavity nesting bird is using it as a nest space – at the time of assessment no birds were present – see Photo 2 below
- Light could be seen through the rear of the stem section in what appears to be an occluding longitudinal crack, this suggests that in places the north side of the stem section is beginning to break apart – see Photo 3 below
- The growth from the stem section heads south over the lay-by/parking area and Common House Road meaning should it fail it could reach the area below if not caught by the lower branching structure

Cavity 1 at c.11.4m on a tertiary stem section over the neighbouring road
Longitudinal crack on the north side where light can be seen
Cavity 2 on the main stem at c.11m – see Photo 4

- The desiccated bracket of the decay fungus *Cerioporus squamosus* found in Cavity 6 shows that an active wood decay fungi is active within the cavity
- The fungus is associated with a selective white rot, where the lignin is removed in preference to the cellulose leading to cavity formation. When distributed over a large area of the main stem or branching structure, widespread dysfunction will develop which can result in stem/limb failure
- However, the cavity appears to be restricted the branch cone[2] of the removed stem section meaning that the tree's natural features may function as a barrier for the decay fungi's development

[2] Branch Cone – the more or less cone shaped mass of branch wood embedded in the parent stem wood caused when the branch is smaller than the parent stem; the surface of the removed branch represents the base of the cone shaped core

3.5 Conclusion

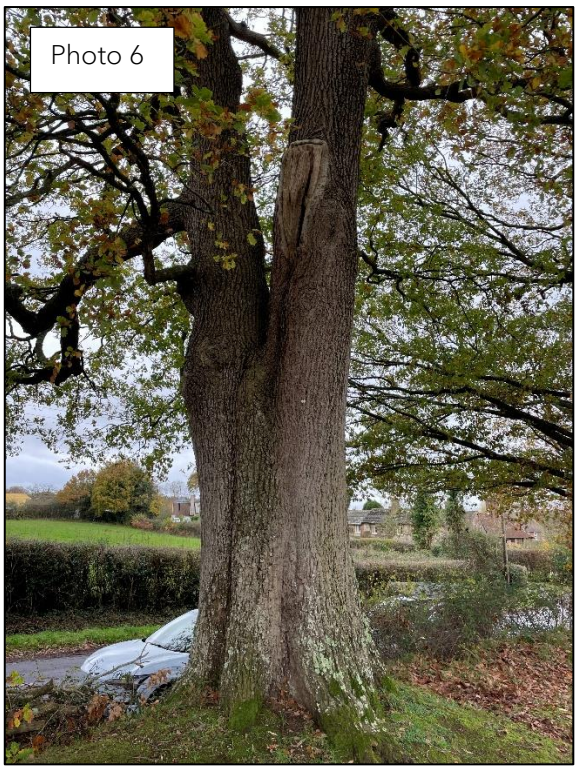
- The cavities with occluding wound wood require no further action
- The tertiary stem section where Cavity 1 is located will require shortening in length as any failure could result in it falling onto Common House Road or the lay-by/parking area beneath
- The branch should be shortened by c.2m as this will reduce the end weight/sway whilst retaining the nest feature
- This should be undertaken within 12 months of the report's date, but in line with the Wildlife and Countryside Act 1981, not within the nesting season which is regarded as 1st March – 31st August

3.6 Tree Species and Dimensions

No.	Species	Scientific Name	H (m)	Crown Spread (m)				Age	Phys. Con.
				N	E	S	W		
T25/525	Pedunculate oak	*Quercus robur*	18	9.5	7.5	10	6	M	Good

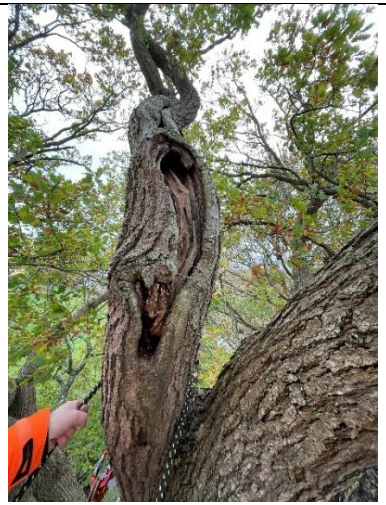
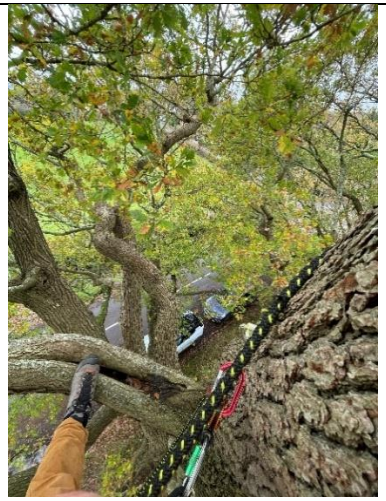
3.7 General Description

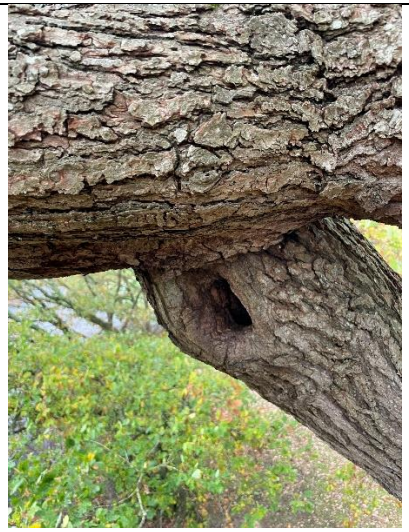
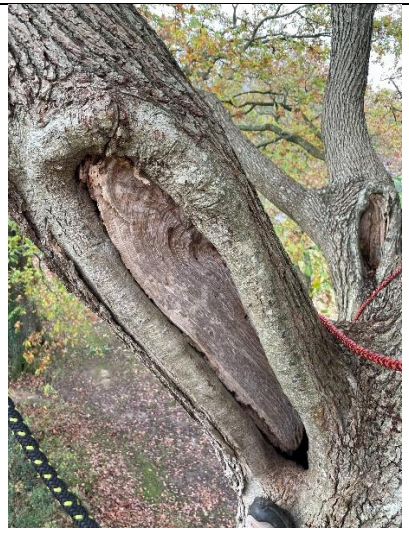
- The main stem forks at c.2.5m forming two primary stem sections in a north-to-south arrangement
- However, the union appears to manifest itself closer to the ground with adaptive growth being formed on the tree's east and west side of the stem
- The growth from the southern primary stem section predominately extends over Common House Road and the lay-by/parking area, and runs parallel with the hedge line beneath
- The northern crown spread heads over the aerial zip line

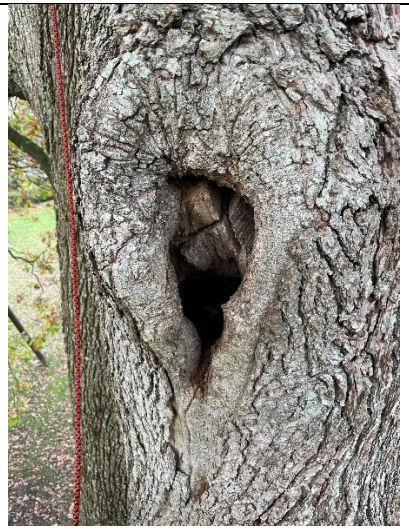
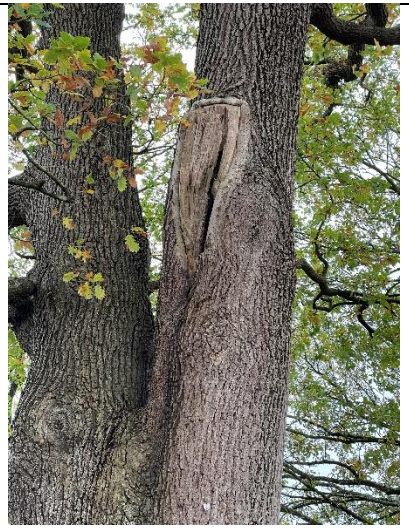


View from Common House Road showing the height difference with the recreation ground
Main stem and primary stem sections at c.2.5m

3.8 Results of Inspection

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C1		10.5	South	30	142	17	15	15	120	Northern Primary Stem Section Tertiary Stem Section Open wound on upper surface, cause unclear Occluding wound wood developing Obvious changes in tone heard Exposed wood becoming friable in nature
C2		9.0	East	30	95	6	12	//	//	Southern Primary Stem Section Tertiary Stem Section Open wound on upper surface, cause unclear Occluding wound wood developing Obvious changes in tone heard Exposed wood becoming friable in nature Running parallel with the hedgerow

Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C3		9.5	South	//	7	5	9	//	40	<u>Southern Primary Stem Section</u> Tertiary Stem Section Cavity forming on underside c.2.5m away from stem Occluding wound wood developing Slight change in tone heard Large wound being generated on upper surface from a tertiary stem section from the North Primary Stem Section resting and rubbing
C4		7.5	South East	//	85	15	14	//	80	<u>Southern Primary Stem Section</u> Tertiary Stem Section Tear out wound forming cavity at the junction with the secondary stem section Cavity extends into the secondary stem section Occluding wound wood developing Obvious and extensive changes in tone heard Exposed wood becoming friable in places

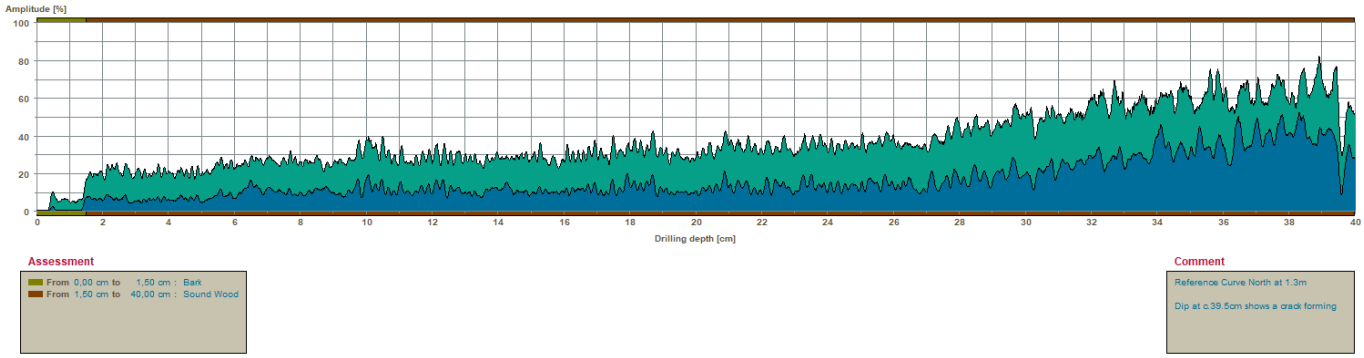
Cavity No.	Image	Height on tree in m	Aspect	Dia. in cm	Height in cm	Width in cm	Depth In in cm	Depth Up in cm	Depth Down in cm	Comments
C5		5.5	South	61	30	10	46	5	46	<u>Southern Primary Stem Section</u> Cavity forming at the point of a previous pruning wound/possible flush cut/area of storm damage Occluding wound wood developing around the cut marks c.1.2m below Cavity 4 Inner surface hard with detritus forming in the bottom of the cavity Obvious and extensive changes in tone heard
C6		3.5	East	84	115	28	//	//	20	<u>Northern Primary Stem Section</u> Open wound forming from tear out or previous pruning operation Occluding wound wood developing Exposed wood beginning to delaminate

- To confirm the extent of the hollowing associated with Cavity 5, the Resi PD400 was used in four locations at the bottom of the cavity – please see Photo 7 below drill traces below:

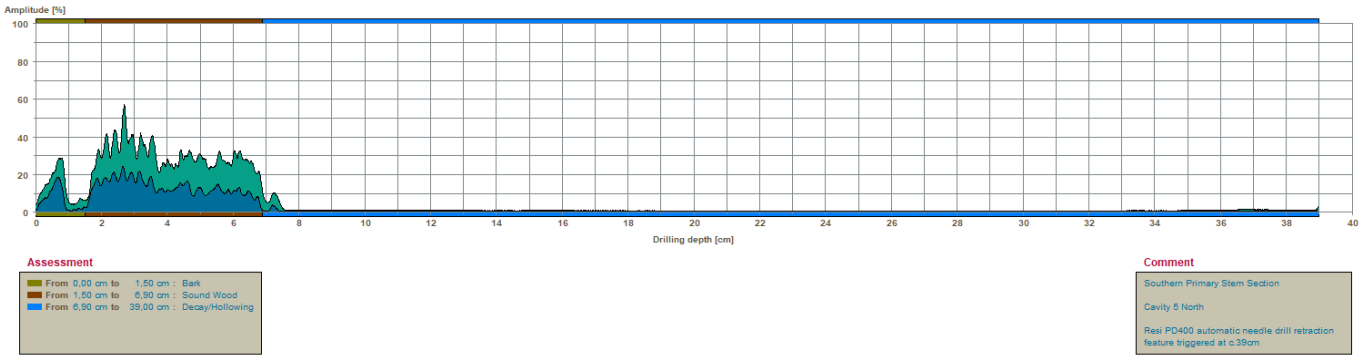
Assessment height level with the bottom of the cavity

The red dot references the west drill spot – Drill Trace 4

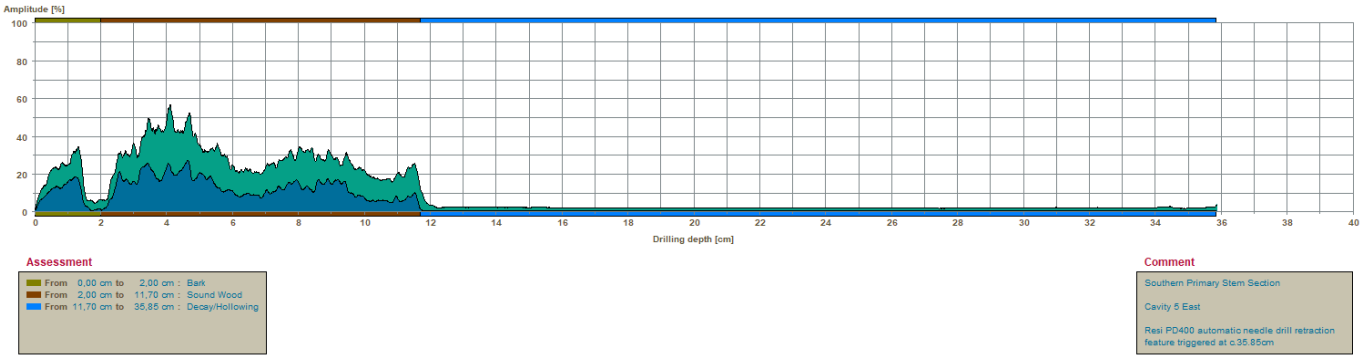
Reference Curve – north at 1.3m



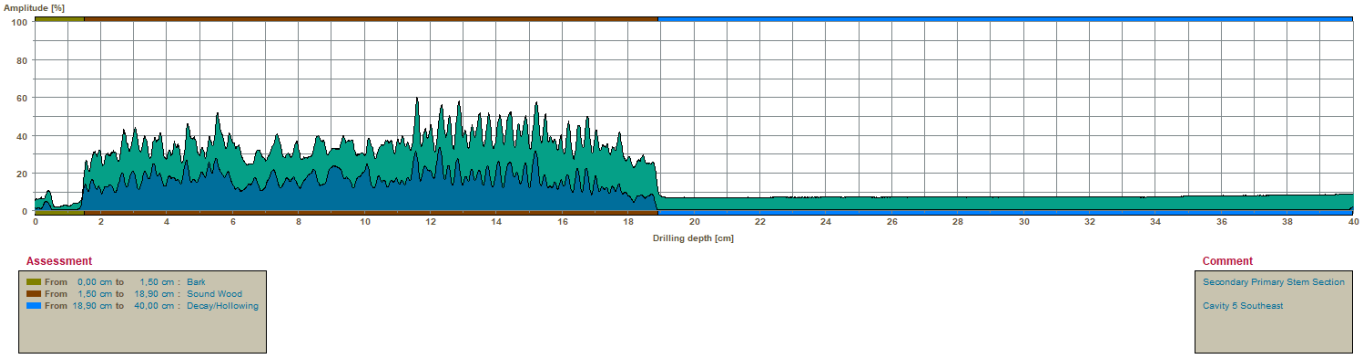
Drill Trace 1 – north drilling southwards



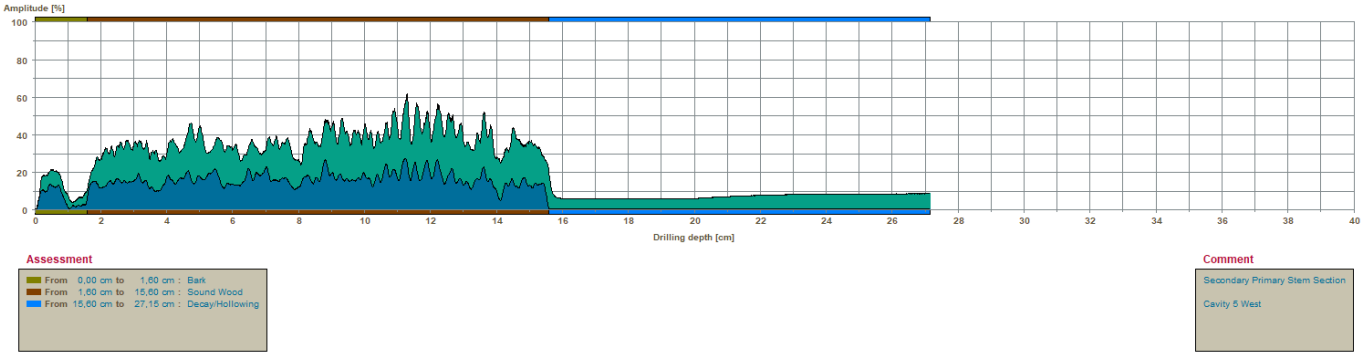
Drill Trace 2 – east drilling westwards



Drill Trace 3 – southeast drilling northwest



Drill Trace 4 – west drilling eastwards



3.9 Summary of Results

- Broadleaf trees produce a form of reaction wood known as tension wood on the upper surface of stems that have a lean
- As the tension wood ages, it acts like a rope pulling the leaning stem back and stopping it from collasping in the direction of the lean; should the tension wood become compromised, its ability to 'pull' the stem section is reduced
- Drill Trace 1 shows the narrowest depth of sound wood is on the north side of the stem at only c.6.1cm which means the tension wood is becoming compromised
- Drill Traces 2 and 4 show an average depth of sound wood of c.13.65cm to the east and west of Drill Trace 1 which is helping to mainatin the tension wood, but as these degrade, the risk of stem failure will increase
- To limit the loading on the compromised tension wood, the southern crown spread should be shortened in length by c.2m to reduce the risk of failure across Common House Road or the lay-by/parking area beneath
- The upper teriray stem section home to Cavity 1 should also be reduced the reduce the end weight and lessen the risk of failure
- This should be undertaken within 12 months of the report's date, but in line with the Wildlife and Countryside Act 1981, not within the nesting season which is regarded as 1st March – 31st August

4.0 Recommendations

- Implement the recommended tree work on both trees within the time period specified
- Reassess in three years of the report's date
- This period should be shortened in the event:
    - The tree's local environment changes significantly
    - Fruiting bodies emerge from anywhere on the tree
    - After extreme weather events such as:
        - Wind gusts in excess of Force 8 on the Beaufort Scale – see Appendix 3
        - After named extreme weather events

- If the tree is located within a conservation area or subject to a tree preservation order, a formal application to the local planning authority will be required and written consent obtained prior to any work is conducted

This concludes my report.

Yours sincerely

Adrew Gale *MICFor Dip Arb L6 (ABC) M.Arbor.A*

Institute of Chartered Foresters
Registered Consultant

Arboricultural Association
Professional Member

Date: 17th November 2025

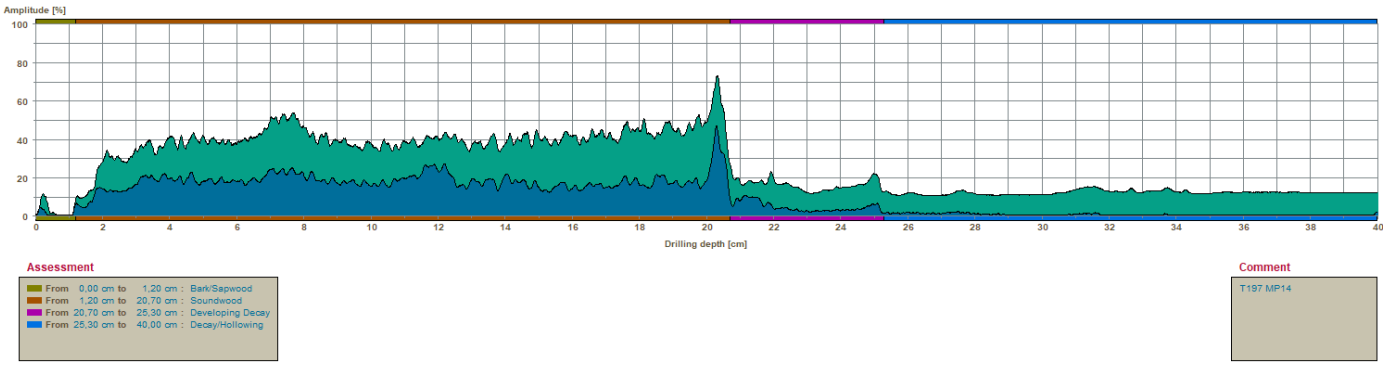
5.0 Appendix 1

Method of Inspection Visual Tree assessment – VTA

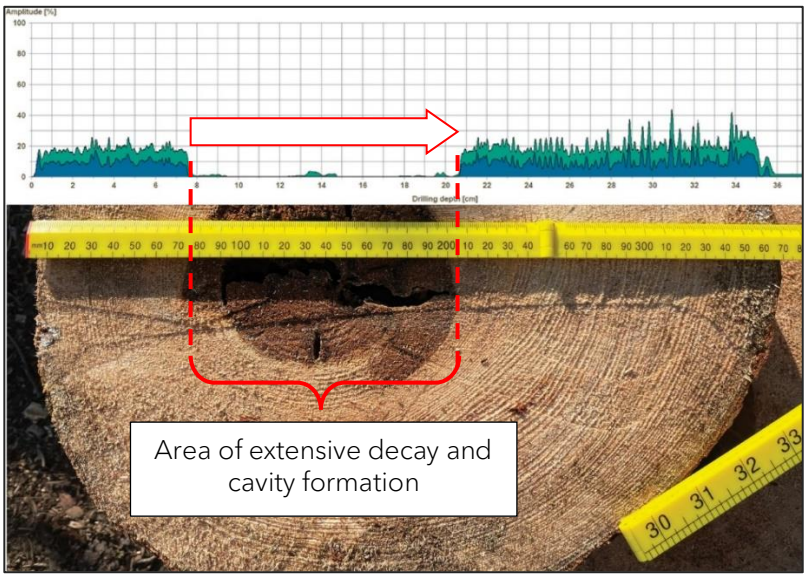
- A nylon headed mallet is used to sound the stem as an initial indication of the presence of decay
- Dull tones indicate areas of lifted and moribund bark, and areas where decay is forming within the main body of the stem
- A thin steel rod is used, where necessary, to assess the depth of any decay in cavities and concavities between buttress roots

Internal Tree Inspection

- An IML Resi PD400 microdrill, which measures the resistance of a fine drill bit to a depth of 400mm, can be used for further confirmation. Significant drops in drilling resistance are indicative of decay or hollowing
- On the example below, sound wood is present to a depth of c.20.7cm before the needle drill enters an area of developing decay; at c.25.3cm the needle drill enters a cavity which extends to the end of the assessment
- Please note, the colours of the Resi Drill Traces have been colour-coded to match those of the PiCUS 3 Sonic Tomography unit



- Historically, Resi drill traces have read from right-to-left due to the configuration of the original machine. However, by using the software available, I have flipped the drill traces to read left-to-right, the more conventional way to read a graph
- On the image overleaf, you can see where the drill entered the area of extensive decay and cavity at c.7.5cm and re-entered the sound wood at c.20.8cm; the drill exited the stem at c.35.4cm


Amplitude [%]
Drilling depth [cm]
Area of extensive decay and cavity formation

Appendix 2

Survey Key

Tree No.	Relating the tree being assessed	
Species	Common name in English	
Scientific name	The current scientific name will be used	
Height	Measured using a TruPulse digital clinometer and shown in metres (m)	
Crown Spread	Measured using a TruPulse digital clinometer and shown in metres (m)	
Age Class	Young [Y]	recently planted or established within the last 5 years
	Semi Mature [SM]	a well-established youngish tree but far from full maturity
	Early Mature [EM]	long established nearing its full size but not fully mature
	Mature [M]	fully mature tree that has met its full size
	Late Mature [LM]	a fully mature tree that has passed its peak; may exhibit areas of decline
	Veteran [V]	a tree with the physical characteristics of an Ancient tree but is not ancient in years compared to other trees of the same species
	Ancient [A]	a tree that has past full maturity and is old or aged in comparison to other trees of the same species
Physiological Condition	GOOD	No significant physiological problems
	FAIR	Some physiological problems
	POOR	Significant physiological problems
	MORIBUND	In a serious and irreversible decline
	DEAD	Not alive
Tree Structure	Main Stem	The stem, from ground level up to the point at which it bifurcates
	Primary Stem Section (PSS)	The larger stem sections that emanate from the main stem after bifurcation; form the main crown structure
	Secondary Stem Section (SSS)	The stem sections that emanate from the primary stem sections that contribute to the inner crown structure
	Tertiary Stem Section (TSS)	The stem sections that emanate from the secondary stem sections that contribute to the inner and outer crown structure
	Subordinate Branch Structure (SBS)	The smaller diameter branches that help form the inner and outer branch structure; leaf bearing twigs emanate from these to form the crown

Appendix 3

Beaufort Scale

Beaufort Number	Name	Knots	MPH	Effects Observed on Land
0	Calm	Under 1	Under 1	Calm, smoke rises vertically
1	Light Air	1-3	1-3	Direction of wind is shown by smoke drift but not by wind vanes
2	Light Breeze	4-6	4-7	Wind felt on face, leaves rustle, ordinary wind vane moved by wind
3	Gentle Breeze	7-10	8-12	Leaves and small twigs in constant motion, wind extends light flag
4	Moderate Breeze	11-16	13-18	Raises dust and loose paper, small branches are moved
5	Fresh Breeze	17-21	19-24	Small trees in leaf begin to sway, crested wavelets in inland waters
6	Strong Breeze	22-27	25-31	Large branches in motion, whistling heard in telegraph wires, umbrellas used with difficulty
7	Near Gale	28-33	32-38	Whole trees in motion, inconvenience felt in walking against the wind
8	Gale	34-40	39-46	Breaks twigs off trees, generally impedes progress
9	Strong Gale	41-47	47-54	Slight structural damage occurs – chimney pots, slates removed
10	Storm	48-55	55-63	Seldom experienced inland, trees uprooted, considerable structural damage occurs
11	Violent Storm	56-63	64-72	Very rarely experienced, accompanied by widespread damage
12	Hurricane	64 and over	73 and over	