Tree Code: Sgl/013649

Seq No: 3

Position: adjacent house no.51

Common Name: Lime spp

Site: St Johns Avenue, Harlow

Location: Harlow District

what3words: /// pizza.clues.chase

Notes:

Inspection: 23/11/2023 at: 12:03

Height: 13.0 metres

Age: Mature

Trunk: 55 cm

Spread: 3.0 metres

Condition: Poor

Recommendations: Fell Tree to Ground Level

Conditions:
Crown - Branch Decay
Crown - Fungus
Crown - Low branches
Crown - Lapsed Pollard
Crown - Major Deadwood >5cm diam/1m length
Crown - Minor Deadwood <>5cm diam/1m length
Crown - Pollard
Crown - Previous crown reduction
Roots - Fungus
Trunk - Epicomics/suckers

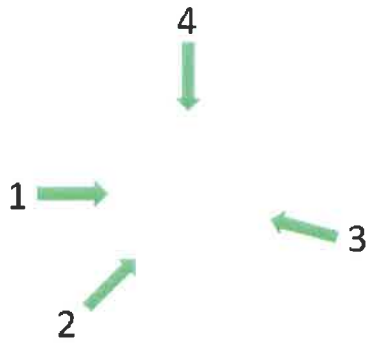
Comments: Overall vitality is poor, defoliation and decay within canopy. Ganoderma located at base of trunk and within crown. Sound tested to reveal extensive hollowing within the main stem and internal decay. Further testing decay detection testing recommended to investigate structural integrity and condition.

St Johns Avenue Harlow Resistograph readings

Background

Following a recent inspection of trees along St Johns Avenue, Harlow, the tree T3 was found with *Ganoderma resinaceum* fungal fruiting brackets on the southeast of the stem. Initial sounding of the main stem with a soft faced rubber mallet revealed intensely impacted wood on the east and south of the stem, evidenced by dull thuds when tapped. Following this, advanced investigations using an IML Resi_PD resistograph drill were undertaken to diagnose and confirm the presence and extent of internal decay and dysfunction of wood fibres.

Diagram of reading measurement locations



Investigation results and comments

Readings 1 and 2 (Figures 1 and 2) were taken into the west of the main stem adjacent to the footway and evidence little residual wood fibres, with decay throughout. The measurements were ended prematurely based on the little resistance offered against the drill, as evidenced by little to no amplitude in the measurements, suggesting intensely decayed internal fibres.

The reading taken to the southeast of the stem (Figure 3), between both footway and carriageway evidence high initial amplitude with a sporadic wave form. This indicates no clear separation between decay columns and a poor CODIT (Compartmentalisation of Decay In Trees) response by wood fibres on this axis. The area of amplitude from 2.5cm to 21.8cm evidence residual wood fibres as being present, however the lack of a clear and consistent wave form in amplitude indicates poor separation between annual growth rings and a clear sign of the progression of dysfunction from the centre of the stem outwards.

The reading taken on the north (Figure 4) of the stem evidence wood fibres with dysfunction throughout, as highlighted by the extreme differences in amplitude and poor consistency of the wave form. Well defined peaks and troughs between waves show annual growth, however the smoothing of this wave indicates the progression of dysfunction of wood fibres in this location. Whilst there are fibres with clear separations evident, the advancement of dysfunction is likely to progress until wave patterns match those from Figures 1 and 2.

Given the position of this tree adjacent to the footway and carriageway along St Johns Avenue, the proximity to resident car parking and private residential properties, as well as overhead cabling, it is recommended that this tree is felled and replanted.

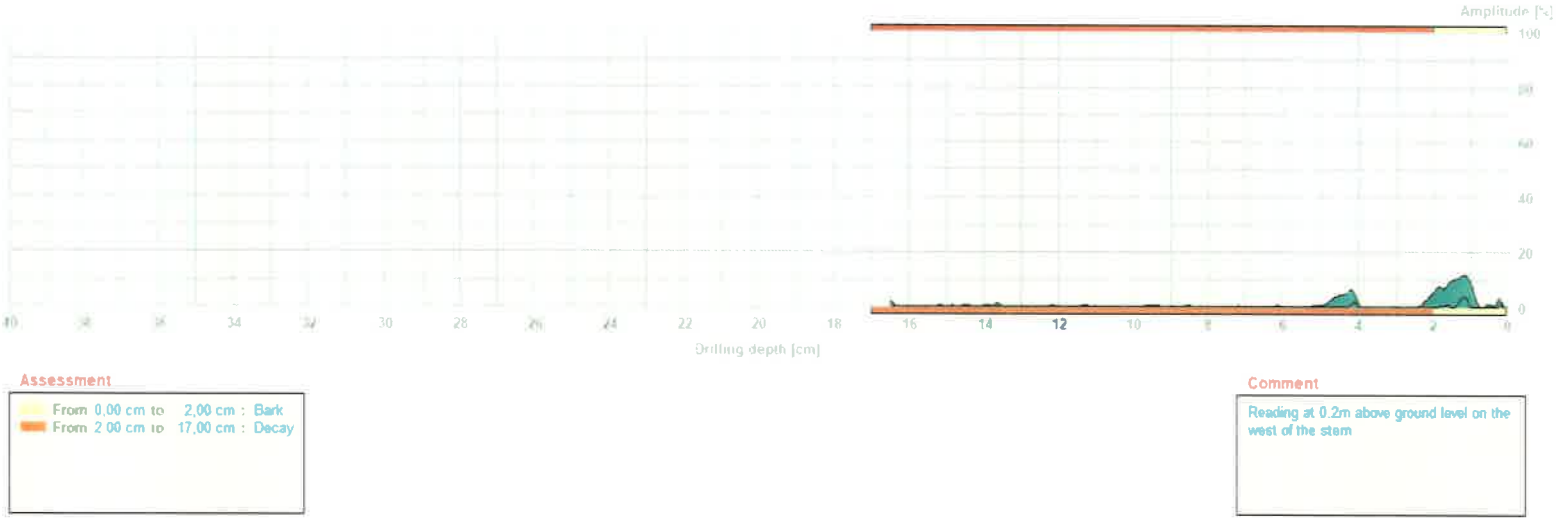


Figure 2 Resistograph readings taken at 0.2m above ground level on the north of the stem.

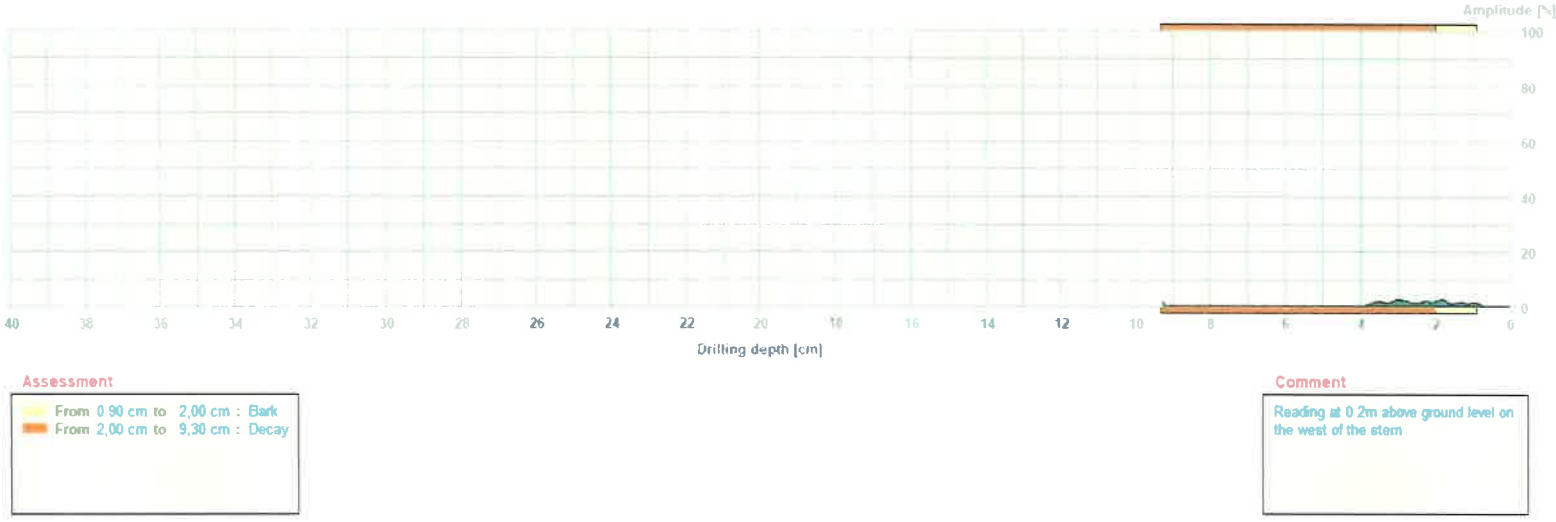


Figure 1 Resistograph readings taken at 0.2m above ground level on the northwest of the stem.

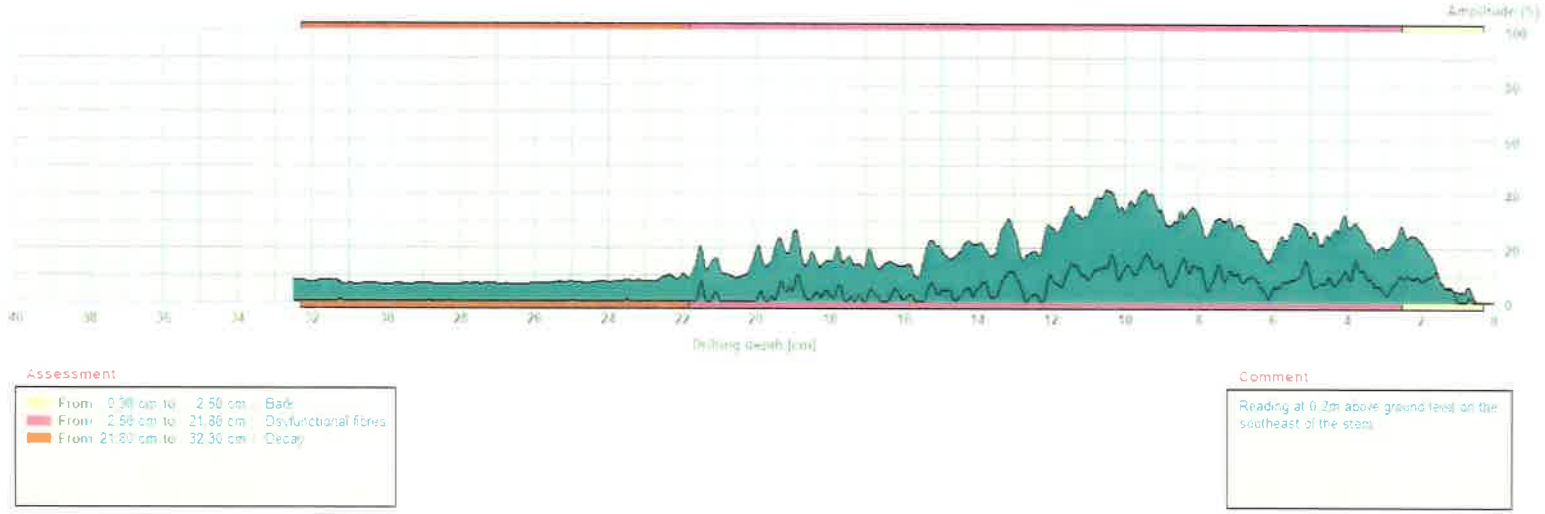


Figure 4 Resistograph readings taken at 0.2m above ground level on the east of the stem.

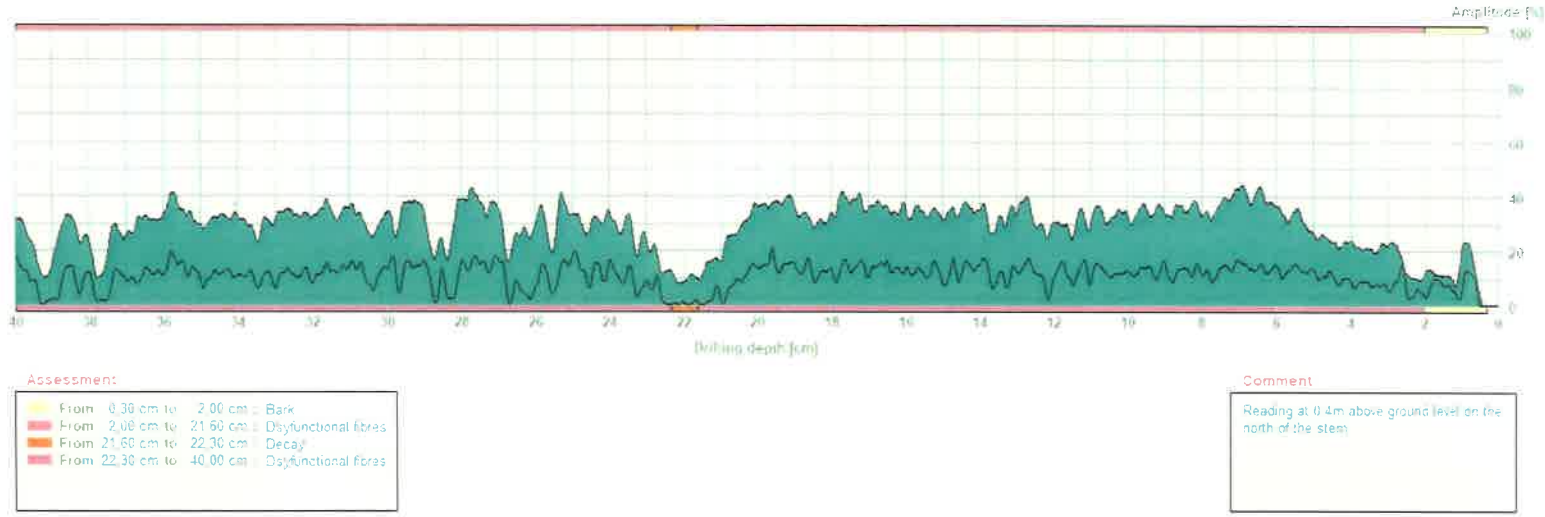


Figure 3 Resistograph readings taken at 0.2m above ground level on the northeast of the stem.