Tree Condition Report

& Management Recommendations

at

11 Cumberland Avenue
Huddersfield
HD6 2JJ

Dated
20th February 2023

CROWN
Tree Consultancy
Branching out through England and Wales

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1. Introduction

1.1. Instructions and References

1.1.1. I am instructed by Daniel Phelan to conduct an Arboricultural Survey at 11 Cumberland Avenue and produce my findings in a report.

1.1.2. I have sketched the prominent features of the site and plotted tree positions to enable them to be identified from the Tree Location Plan at Appendix 5.

1.2. Scope and Purpose of the Report

1.2.1. The purpose of the report is to highlight any issues which may be of concern from a safety perspective. All hazards and potential hazards are recorded, and appropriate recommendations are made in order to reduce risk to acceptable levels.

1.3. Tree Survey and Tree Data Schedule

1.3.1. The *Tree Location Plan* and *Tree Data Schedule* in Appendix 5 contain information gathered for each tree during a ground-level survey undertaken on the 15th of February 2023. The survey was conducted by Joe Taylor. No climbed inspections or specialist decay detection were undertaken.

1.3.2. The Schedule includes scaled tree images based on the sizes recorded for stem diameter, crown spread, crown height and overall height. Their purpose is to indicate, at a glance, the relative dimensions of each tree. These dimensions were estimated and should be treated as indicative only.

1.4. Brief Site Description

1.4.1. The trees surveyed grow within the rear garden of Number 11 Cumberland Avenue. The boundary trees overhang other residential gardens and a public footway and highway to the south.

1.5. Supporting Information

1.5.1. A definition of the Safety Categories can be found in Appendix 1. All other terms used within the Tree Data Schedule are defined and explained in Appendix 3.

1.6. Author

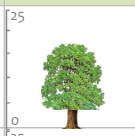
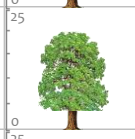
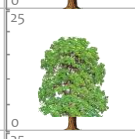
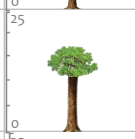
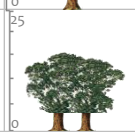
1.6.1. This report was compiled by Joe Taylor - FdSc (Arboriculture), M. Arbor A. Details of the author's experience that qualify him to produce such a report are detailed in Appendix 4.

2. Tree Condition and Recommendations

In this section, I have grouped all of the trees according to the type of work recommended. The table at Appendix 5 includes all trees in chronological order. The Tree Location Plan can also be found there.

2.1. Trees to Remove

2.1.1. Trees recommended for removal are listed below:

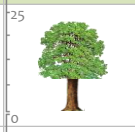
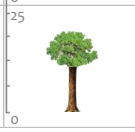
Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Inspect Freq (yrs)	Vigour Physiological Condition / Structural Condition	Amenity Value Life Expectancy (yrs) / Safety Class
T4	Early-Mature **Sycamore** Acer pseudoplatanus.	17	4	50	N 5 W 5 E 2.5 S 3		Position: Tag no: 00654. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Multiple pruning wounds due to crown lifting. **Defects: Cavities developing at old pruning wounds (acceptable condition at present). Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High N/A	Low / Poor / Poor	Moderate <10 4
T11	Early-Mature **Sycamore** Acer pseudoplatanus.	20	4	45	N 4 W 5.5 E 2 S 5		Position: Tag no: 00660. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High N/A	Low / Poor / Poor	Moderate <10 4
T13	Early-Mature **Sycamore** Acer pseudoplatanus.	19	3	40	N 5 W 4 E 4 S 4		Position: Tag no: 00662. Form: Single stemmed and vertical with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Major decline and dead wood throughout.** Other: Circa 20% of live canopy remains - Low Safe Useful Life Expectancy.	Remove.	High N/A	Low / Poor / Poor	Moderate <10 4
T23	Semi-Mature **Sycamore** Acer pseudoplatanus.	17	12	43	N 2.5 W 3 E 3.5 S 3		Position: Tag no: 00672. Form: Twin-stemmed at 10m with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High N/A	Low / Poor / Poor	Moderate <10 4
G34	Semi-Mature **Elm** Ulmus sp.	av 16	av 4	av 48	N av W 5.5 E 7 S 4 each		Position: Tag no: 00683. Form: Two very close growing specimens. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Major included bark between two stems to south and significant dieback. Numerous epicormic shoots throughout.** Other: Low Safe Useful Life Expectancy.	Monitor or remove.	Moderate 1	Moderate / Poor / Fair	Moderate 10-20 3

Additional Notes: The sycamores T4, T11, T13 and T23 are in an advanced state of decline. They have low vigour, major decline to their upper canopies with large dead limbs and brittle bark to their stems falling to the ground. Given the size of these trees and their low Safe Useful Life Expectancy, we recommend they are removed as a matter of high priority.

G34 also has a low Safe Useful Life Expectancy though it is considered less hazardous than the sycamores; consequently, this tree may be retained in the short-term, and its condition monitored annually.

2.2. Removal of Deadwood

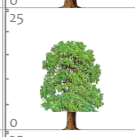
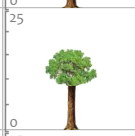
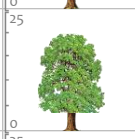
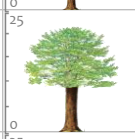
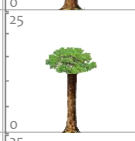
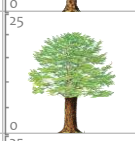
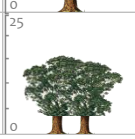
2.2.1. Trees with dead branches recommended for removal are listed below:

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Inspect Freq (yrs)	Vigour Physiological Condition / Structural Condition	Amenity Value Life Expectancy (yrs) / Safety Class
T2	Early-Mature **Sycamore** Acer pseudoplatanus.	18	7	55	N 5 W 3.5 E 3.5 S 3.5		Position: Tag no: 00652. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Several cavities at lower stem, possible hollow stem. Bark loose on west side from base to 1.5m. Significant dead wood to south due to shading.**	Decay detection required & remove dead wood.	High 0.5	Moderate / Fair / Poor	Moderate 10-20 3
T14	Early-Mature **Sycamore** Acer pseudoplatanus.	16	10	35	N 4.5 W 2 E 2 S 4		Position: Tag no: 00663. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Significant dead wood to south.** Other: Epicormic shoots throughout stem.	Remove dead wood and monitor.	Moderate 1.5	Moderate / Fair / Fair	Moderate 20-40 2

Additional Notes: The removal of dead branches will enable the trees to heal before decay spreads into the stem. Dead branches are also hazardous as they will inevitably fall.

2.3. Monitoring Defects

2.3.1. Trees which are considered to be in an acceptable condition at present but which have defects that require more regular professional inspections are listed below:

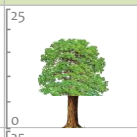
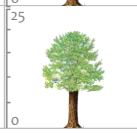
Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Inspect Freq (yrs)	Vigour Physiological Condition / Structural Condition	Amenity Value Life Expectancy (yrs) / Safety Class
T3	Mature **Horse Chestnut** Aesculus hippocastanum.	18	3	65	5.5 4.5 4 3.5		Position: Tag no: 00653. Form: Single stemmed and vertical with an unbalanced crown. History: Occasional pruning wounds due to crown reduction. **Defects: Significant strip of dead bark to west of stem base.**	Monitor. Moderate	1	Moderate / Good / Fair	Moderate / 20-40 / 2
T12	Early-Mature **Sycamore** Acer pseudoplatanus.	18	3.5	45	4.5 4 4 3		Position: Tag no: 00661. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: No significant defects observed.** Other: Epicormic shoots throughout stem.	Monitor. Moderate	1	Moderate / Fair / Fair	Moderate / 20-40 / 2
T14	Early-Mature **Sycamore** Acer pseudoplatanus.	16	10	35	4.5 2 2 4		Position: Tag no: 00663. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Significant dead wood to south.** Other: Epicormic shoots throughout stem.	Remove dead wood and monitor. Moderate	1.5	Moderate / Fair / Fair	Moderate / 20-40 / 2
T16	Early-Mature **Sycamore** Acer pseudoplatanus.	20	4	40	4.5 4.5 4.5 4.5		Position: Tag no: 00665. Form: Single stemmed and vertical with a balanced crown. History: No evidence of significant pruning. **Defects: Dead wood to lower crown - acceptable condition at present.** Other: Epicormic shoots throughout stem.	Monitor. Moderate	1	Moderate / Fair / Fair	Moderate / 20-40 / 2
T21	Mature **Beech** Fagus sylvatica.	22	10	60	4.5 4.5 8 8.5		Position: Tag no: 00670. Form: Single stemmed and vertical with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Significant bark wound to stem at 0.2m - 1m above ground level (acceptable condition at present). Bark wound to upper branch, significant tight union between upper branches.**	Monitor. Moderate	1	Moderate / Good / Fair	High / 40+ / 2
T32	Early-Mature **Sycamore** Acer pseudoplatanus.	17	13	45	2 4 4 2.5		Position: Tag no: 00681. Form: Twin-stemmed at 12m with an unbalanced crown. History: Multiple pruning wounds due to crown lifting. **Defects: Bark wound to stem at circa 10m above ground level and cavities possibly developing at old pruning wounds. Minor cavities at base of stem (acceptable condition at present).**	Monitor. Moderate	1.5	Moderate / Fair / Good	Moderate / 20-40 / 2
T33	Mature **Beech** Fagus sylvatica.	21	8	65	3.5 6 6 6		Position: Tag no: 00681. Form: Twin-stemmed at 12m with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Scattered small dead wood throughout. Two significant bark wounds to branch at the west of stem at 7m above ground level.** Other: Minor dieback to upper canopy to east - acceptable condition.	Monitor. Moderate	1.5	Moderate / Fair / Good	High / 40+ / 2
G34	Semi-Mature **Elm** Ulmus sp.	av 16	av 4	av 48	av 6 5.5 7 4 each		Position: Tag no: 00683. Form: Two very close growing specimens. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Major included bark between two stems to south and significant dieback. Numerous epicormic shoots throughout.** Other: Low Safe Useful Life Expectancy.	Monitor or remove. Moderate	1	Moderate / Poor / Fair	Moderate / 10-20 / 3

Additional Notes: The above trees have defects that are not currently considered hazardous though they may worsen in the near future. Monitoring allows for a timeline of observations that can be compared to better analyse a tree's condition and any management strategies. We recommend that these trees are professionally inspected at least once every year.

The sycamores T12, T14 and T16 have epicormic growth throughout their stems. This growth indicates that the trees may be physiologically impaired as it often grows as a response to stress factors. Consequently, we recommend they are monitored and the potential rate of decline assessed. If the trees do decline, remedial works are likely to be recommended.

2.4. Decay Detection Required

2.4.1. Trees with extensive decay present (or suspected) that require a more detailed inspection with specialist decay detection equipment are listed below:

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Inspect Freq (yrs)	Vigour / Physiological Condition / Structural Condition	Amenity Value / Life Expectancy (yrs) / Safety Class
T2	Early-Mature **Sycamore** Acer pseudoplatanus.	18	7	55	N 5 W 3.5 E 3.5 S 3.5		Position: Tag no: 00652. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Several cavities at lower stem, possible hollow stem. Bark loose on west side from base to 1.5m. Significant dead wood to south due to shading.**	Decay detection required & remove dead wood.	High 0.5	Moderate / Fair / Poor	Moderate / 10-20 / 3
T6	Early-Mature **Beech** Fagus sylvatica.	20	8.5	45	N 3 W 6 E 2.5 S 3.5		Position: Tag no: 00655. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Significant cavity between buttress roots to south east of stem and cavity a at 0.5m above ground level. Minor cavity developing at 3.5m above ground level to the east. Tear wound at 5m with crack.**	Climbed inspection of tear wound and decay detection required.	High 0.5	Moderate / Good / Fair	High / 20-40 / 3

Additional Notes: A Picus Tomograph, Residrill and/or increment borer is required to map out the extent of decay. Please contact Crown Tree Consultancy to arrange for such an inspection.

For T6, a climbed inspection of an observed crack to the tree's stem is also recommended. The crack is visible on the surface of an old tear wound at circa 5m above ground level (see Photograph 8). It may be localised to the area of exposed decayed timber of the tear wound or expand deeper into the tree's stem. If it is the latter, the stem may be at an increased risk of failure at this point.

2.5. Limited Inspection

2.5.1. Trees that could not be fully inspected are listed below:

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations Priority	Inspect Freq (yrs)	Vigour / Physiological Condition / Structural Condition	Amenity Value / Life Expectancy (yrs) / Safety Class
T27	Early-Mature **Elm** Ulmus sp.	14	11	45	N 0 W 4.5 E 1.5 S 4.5		Position: Tag no: 00676. Form: Single stemmed with a slight lean and an unbalanced crown. History: Occasional pruning wounds due to crown reduction. **Defects: Covered in burrs from ground level to 6m.** Other: Ivy prevented detailed inspection of upper stem and dying epicormic shoots prevented detailed inspection of stem base.	Remove ivy and inspect stem for defects.	Moderate 1	Moderate / Fair / Fair	Moderate / 10-20 / 3

Additional Notes: T27 could not be fully inspected due to the presence of dense ivy. Given this tree overhangs the advanced decay footway and highway, we recommend the ivy is removed so that the tree may be re-inspected to ascertain its structural condition better.

2.6. Other Works

2.6.1. All other trees within the survey area are deemed to be in an acceptable condition, and no further works have been recommended.

2.7. Work Priority and Future Inspections

2.7.1. In order to assist with the budgeting of funds, all works have been allocated a priority based on the perceived risk associated with each defect. A schedule is proposed below for the timing of operations. Works may be undertaken sooner, though it is not recommended that the suggested timescales are extended.

Work Priority	Definition	Tree Number
Urgent	As soon as possible	None
Very High	Within 1 month	None
High	Within 3 months	T2, T4, T6, T11, T13 and T23
Moderate	Within 1 year	T3, T12, T14, T16, T21, T27, T32, T33 and G34
Low	Non essential works	None

2.7.2. Following completion of these works the trees shall be in an acceptable condition. However, trees are dynamic organisms and should be inspected regularly. The table below suggests a schedule of future inspections based on the condition and location of each tree:

Inspection Frequency (years)	Tree Number
0.5	T2 and T6
1	T3, T12, T16, T21, T27 and G34
1.5	T5, T8, T14, T15, T17, T18, T19, T28, T32 and T33
3	T3, T12, T14, T16, T21 and T27

2.7.3. The trees should be inspected sooner if there is a noticeable decline in their condition or following extreme weather events.

2.8. Statutory Protection

2.8.1. Heavy fines exist for carrying out unauthorised works to protected trees. We advise that thorough checks are made to determine if the trees are covered by a tree preservation order or lie within a conservation area. This may be done by either writing to your local authority or studying their website. The procedure varies according to the particular authority. Crown Tree Consultancy can determine the statutory protection status on your behalf if desired.

2.8.2. Before undertaking works to trees protected by a Tree Preservation Order, consent needs to be obtained from the local authority, who will provide application forms and advice to potential applicants. The removal of deadwood is exempt.

2.8.3. Where trees are located in a Conservation Area, works are not permitted without first giving the local authority six weeks' notice of intention. During this time, the local authority may elect to create a Tree Preservation Order or inform the applicant that they have no objection to the proposed works. If the local authority does not respond within six weeks, then the intended work may be undertaken. Note: the local authority cannot refuse consent for works to trees within a conservation area; they may only create a tree preservation order if they wish to have further control over what works are undertaken.

3. Photographs

Photo 1. T2.

Photo 2. T2.

Photo 3. T2.

Photo 4. T3.

Photo 5. T4.

Photo 6. T4.

Photo 7. T6.

Photo 8. T6.

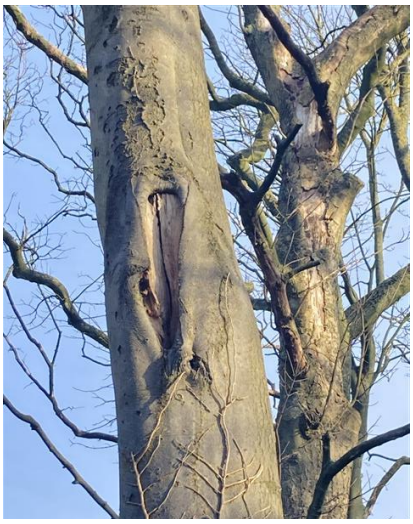


Photo 9. T6.

Photo 10. T6.

Photo 11. T11.

Photo 12. T13.

Photo 13. T13.

Photo 14. T21.

Photo 15. T21.

Photo 16. T21.

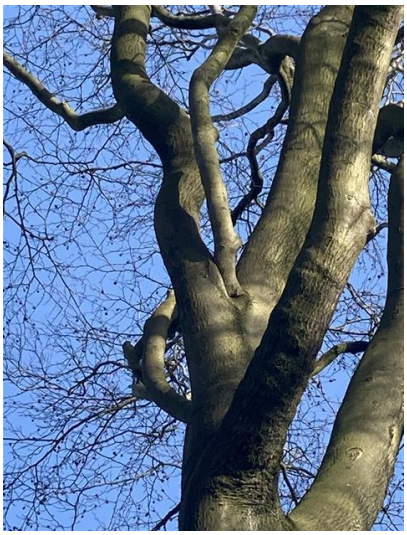


Photo 17. T21.

Photo 18. T23.

Photo 19. T23.

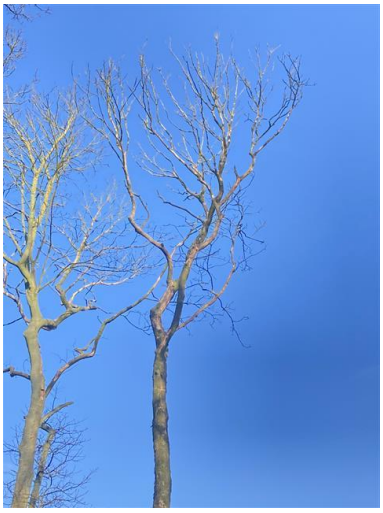


Photo 20. T33.

Photo 21. T33.

Photo 22. G34.

Photo 23. G34.

Photo 24. G34.

Appendix 1: Safety Categories

A *Safety Class* has been assigned to each tree according to its condition, defects observed, and the works that have been recommended. An explanation of each category is offered below:

Safety Class 1: Trees in good condition. No defects apparent or likely to develop in the foreseeable future. No significant works are required to maintain them in an acceptable condition.

Safety Class 2: Trees with **minor defects.** Pruning works are usually required to ensure that they are in an acceptable condition (unless they are remotely located).

Safety Class 3: Trees with **significant defects.** Works are usually necessary in order to bring them into an acceptable condition (unless they are remotely located).

Safety Class 4: Trees with **major defects.** These trees often require removal or significant pruning works (unless they are remotely located).

It should be noted that not every tree falls neatly into one of the 4 categories listed above. Trees are complex organisms and often have multiple defects. In which case, the category deemed to be most appropriate is selected.

Appendix 2: Survey Methodology

A2.1 A ground level visual survey was carried out using the *Visual Tree Assessment* technique described by Mattheck and Broeler (1994) and endorsed by the Arboricultural Association (LANTRA Professional Tree Inspection course, 2007).

A2.2 Structural condition was assessed by inspecting the stem and scaffold branches from all angles looking for weak branch junctions or symptoms of decay. Particular attention was paid to the stem-base. Cavities were explored using a metal probe in order to assess the extent of any decay. If this was not possible further inspection was recommended in the form of a climbed inspection or using specialist decay detection equipment.

A2.3 The physiological condition was assessed by inspecting the stem, branches and foliage for symptoms of disease. The overall vigour of the tree was also taken into account.

A2.4 Where the condition of a tree was deemed to be unacceptable, recommendations were made according to a scale of priority in order to reduce the liability of the owner. The position of the tree and its potential targets were taken into account.

A2.5 Measurements were obtained using a diameter tape, clinometer, distometer and loggers tape. Where this was not practical measurements were estimated.

A2.6 Some trees were surveyed as groups, though this was avoided close to areas likely to be developed.

A2.7 Finally, a *safety category* was allocated as described in section 2.

Appendix 3: Explanation of Tree Data and Glossary

This section explains the terms used in the **Tree Data Schedule**.

A3.1 General Observations

A3.1.1 **Numbering System:** Each item of vegetation has its own unique number prefixed by a letter such that T1 = Tree 1, G2 = Group 2, H3 = Hedge 3 and W4 = Woodland 4.

A3.1.2 **Age Categories:**

Young Usually less than 10 years old.

Semi-Mature Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy).

Early-Mature Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy).

Mature Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy).

Veteran A level of maturity whereby significant management may be required in order to keep the tree in a safe condition.

Over Mature As for veteran except management is not considered worthwhile.

A3.1.3 **Species:** Common names and Latin names are given.

A3.1.4 **Height:** Measured from ground level to the top of the crown.

A3.1.5 **Stem Diameter:** Taken at 1.5m above ground level where possible. On multi-stemmed trees this measurement may be taken at ground level though usually an indication of the number of stems and average diameter is given, e.g. 3 x 30cm.

A3.1.6 **Crown Height:** Measured from ground level to the height at which the main crown begins. Where the crown is unbalanced it is measured on the side deemed to be most relevant. This is usually the side facing the area of anticipated development.

A3.1.7 **Tree Diagram:** This scaled drawing is computer animated based on measurements taken for stem diameter, crown height and spread and overall height. It is designed to help the reader rapidly assess the data. It is not an accurate representation of the form of the tree.

A3.1.8 **Crown Spread:** Measured north, east, south and west. This is taken from the centre of the stem and usually rounded up to the nearest metre.

A3.1.9 **Observations:** If a tree's position is considered to be relevant it will be commented upon (e.g. overhanging a children's play area). Tree form and pruning history are also recorded along with an account of any significant defects. Defects and descriptive terms are dealt with in more detail at the end of this section.

A3.1.10 **Recommendations:** Usually based on any defects observed and intended to ensure that the tree is in an acceptable condition.

A3.1.11 **Priority Scale:** Depending upon the threat posed by the tree, and the likelihood of failure, recommendations should be carried out according to the following priority scale:

Urgent	To be carried out as soon as possible.
Very High	To be carried out within 1 month.
High	To be carried out within 3 months.
Moderate	To be carried out within 1 year.
Low	To be carried out within 3 years.

A3.1.12 **Inspection Frequency:** An interval of 6 months, 1 year, 1.5 years or 3 years is allocated before the next inspection is due. Wherever practical, consideration should be given to seasonal changes

so that deciduous trees are not always surveyed in winter when they have no leaves, or in summer when leaves may obscure branches within the upper crown.

A3.1.13 **Vigour (An indication of growth rate and the tree's ability to cope with stresses):**

High	Having above average vigour.
Moderate	Having average vigour.
Low	Having below average vigour.
Very Low	Tree is struggling to survive and may be dying.

A3.1.14 **Physiological Condition:**

Good	Healthy and with no symptoms of significant disease.
Fair	Disease present or vigour is impaired.
Poor	Significant disease present or vigour is extremely low.
Very Poor	Tree is dying.

A3.1.15 **Structural Condition:**

Good	Having no significant structural defects.
Fair	Some defects observed though no high priority works are required.
Poor	Significant defects found. Tree requires monitoring or remedial works.
Very Poor	Major defects which will usually require significant remedial works or tree removal.

A3.1.16 **Amenity Value:**

Very High	Exceptional specimen, observable by a large number of people.
High	Attractive specimen, observable by a significant number of people.
Moderate	One of the above factors is not applicable.
Low	Unattractive specimen or largely hidden from view.

A3.1.17 **Life Expectancy:** The estimated number of years before the tree may require removal. Classified as (<10), (10 – 20), (20 – 40), or (40+).

A3.1.18 **Safety Category:** These are explained in detail in Appendix 1.

A3.2 Evaluation of Defects

A3.2.1 Cavities, wounds, deadwood etc are all evaluated as follows:

Major	Such that structural integrity is, or will become, compromised and the tree is, or will inevitably become, hazardous.
Significant	A defect that may over time become a major defect, though not necessarily so. This will depend on the vigour of the tree and its ability to deal with decay etc.
Minor	A defect that is not likely to compromise the structural integrity of the tree.

General Glossary

Adaptive growth	In tree biomechanics, the process whereby wood formation is influenced both in quantity and quality by the action of gravitational forces and mechanical stresses on the cambial zone.
Aerobic	Conditions in which oxygen is freely available, or to biomechanical processes that depend on the presence of oxygen.
Anaerobic	A condition marked by the absence of oxygen; Generally such areas are unsuitable for normal life and growth of plant tissues. These sites tend to be populated by bacteria capable of surviving low oxygen conditions often associated with Slime Flux.
Arboricultural Implication Assessment	The early involvement of an arborist on a development site can avoid costly delays and mistakes whilst allowing a site to achieve its full potential and retain important trees.
Arboriculture	The culture and management of trees as groups and individuals primarily for amenity and other non-forestry purposes.
Arborist	A person possessing the technical competence through experience and related training to provide management of trees or other woody plants in a landscape setting. Generally involved with the development or management of trees for visual amenity or land management rather than the growth of trees for product or profit.
Ariel Inspection	The science of inspection is continually evolving, however, there can be little substitute for close inspection of a particular feature. We are happy to undertake a full Ariel inspection service, compliant with all heath and safety legislation.
Barrier zone	A layer within an annual increment of wood which contains abnormal xylem cells, laid down by the cambium in response to wounding or other trauma.
Biomechanics	This area of tree care has come to the fore in recent years, enabling a more accurate assessment of tree stability to be undertaken. Often trees previously condemned, can be managed and confidently retained to offer ongoing benefits.
Body language	In trees, the outward display of growth responses and or deformation in response to mechanical stress.
Bole	Or Trunk, the main stem of a tree below its first major branch.
Bracket	A type of fruiting body produced by various fungal species, plate like to hoof like in shape and often a one sided attachment to the wood or bark.
Branch bark ridge	A ridged area located at the union of a branch to a trunk or stem.
Branch Collar	Trunk tissue that forms around the base of a branch between the main stem and the branch, or between a main branch and a lateral branch. As a branch decreases in vigour or begins to die, the collar usually becomes more pronounced and completely encircles the branch.
Brown Rot	Form of decay where cellulose is degraded, while lignin is only modified.
Buttress Root	Roots that emerge from the base of the tree stem, normally large and well developed that rapidly reduce in diameter to create the Root Plate this offers structural support for the tree. Buttress roots divide rapidly forming the connection between the stem and the transport roots.
Cabling Bracing	Installation of steel cables, attached to lag screws or bolts placed in tree limbs, to provide additional support or to limit movement and stress of limbs. Recent developments have established non-injurious flexible systems that enable the partial movement of parts within reasonable limits enabling the trees to produce Reaction growth and forms an excellent alternative to Propping The installation of such features does require legal interpretation.
Callus	Undifferentiated cells often formed at the edges of recent injuries. This tissue quickly becomes differentiated, forming cells of the type characteristic of that position on the tree (e.g. forming wood, bark, roots, etc.) see wound response tissue.
Cambium	A thin layer of actively growing and dividing cells, located between the xylem (sapwood) and bark of a plant; the part responsible for radial growth of a tree stem or branch.
Canopy	The topmost layer of twigs and foliage in a woodland, tree or group of trees.
Cellulose	A carbohydrate consisting of molecules bonded in strings to create filaments; a key component of plant cell walls. May be selectively destroyed by fungi.
Canker	A localised area of dead bark and cambium on a stem or branch, caused by fungal or bacterial organisms, characterised by woundwood development on the periphery. This may be annual or perennial.
Cavity	An open and exposed area of wood, where the bark is missing and internal wood has been decayed and dissolved.
Chlorotic	Also Chlorosis. A condition of the plant marked by yellowing of normally green foliage, often indicating nutrient deficiency or plant dysfunction.
Clinometer	Devices that measures vertical angles, and provides direct height measurements of objects by triangulation.
Co-dominant stems/trunk	Are forked branches or trunks of nearly the same size in diameter and lacking a normal branch union.
Compacted soils	Soils in which the air-space (oxygen space) has been reduced or eliminated, reducing water infiltration and percolation, reducing root presence and inhibiting new root development.
Compartmentalisation	The physiological process that creates the chemical and mechanical boundaries that act to limit the spread of disease and decay organisms.
Compression Failure	Localized buckling of fibres and other longitudinal elements produced by compression of wood along the grain; compression failures sometimes develop in standing trees.
Compression Strength	The ability of a material or structure to resist failure when subjected to compressive loading; measurable in trees using special drilling devices
Compression Wood	Abnormal wood formed on the lower side of branches and curved stems, with physical properties different from normal wood.
Conservation Area	In Great Britain, designated areas of architectural or historical interest, in which there are special procedures for planning applications. Additionally tree works cannot generally be undertaken without prior notification (Currently 6 weeks) to the relevant local planning authority. See also Tree Preservation Orders.
Core Sample	A sample of wood extracted from a trunk or branch, using an increment borer tool. The resulting core can be analysed for characteristics of growth, wood strength, structure, decay, and for species identification.
Crotch	The union of two or more branches; the auxiliary zone between branches.
Crown	The upper canopy of a tree, including upper trunk, scaffold branches, secondary branches, stems and leaves.

Crown lifting / raising	**Crown Lift The removal of the lowest branches, usually to a given height. It allows more residual light and greater clearance underneath for vehicles etc.**
Crown reduction	**The reduction of a tree's height or spread while preserving its natural shape.**
Crown thinning	**The removal of some of the density of a tree's crown, usually 5-25% allowing more light through its canopy and reducing wind resistance.**
Deadwood (noun)	**Deadwood is often present within the crown or on the stems of trees. In some instances is may be an indication of ill health, however, it may also indicate natural growth processes. If a target is present beneath the tree, deadwood may fall and cause injury or damage and should be removed, otherwise deadwood can remain intact for conservation purposes (insects, fungi, birds etc.).**
Deadwood (verb)	**The removal of dead branches from a tree's canopy, usually of a specified size (in diameter).**
Decay	**Progressive deterioration of organic tissues, usually caused by fungal or bacterial organisms, resulting in loss of cell structure, strength, and function. In wood, the loss of structural strength.**
Decay Detection	**The assessment of decay within a tree has been traditionally difficult, but recent advances have made it possible to achieve accurate representations of the internal section of a tree in both 2D and 3D, removing doubt over the condition of the tree and allowing accurate management decisions.**
Decurrent	**In trees a, system of branching in which the crown is borne on a number of major widely spreading limbs of similar size. In fungi relates to toadstools whose gills run down the stem and leaves and other plant organs, which extend down the stem.**
Defect	**In relation to tree hazards, any feature of a tree which detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment.**
Defoliation	**The losing of plants foliage.**
Dieback	**Progressive death of buds, twigs and branch tissues, on individual limbs resulting in Deadwood, or throughout the canopy, extreme cases can result in Stag Heading.**
Dripline	**A projected line on the ground that corresponds to the spread of branches in the canopy; the farthest spread of branches.**
Epicormic shoots	**Fast growing, weakly attached shoots/branches that often grow as a response to stress factors upon a tree or branch removal.**
Excurrent	**In trees, a system of branching that a single leader remains dominant, through the control of lateral branches.**
Failure	**In connection with tree hazards, a partial or total fracture within the wood tissue or loss of cohesion between roots and soil. (In total failure affected parts will snap or tear away completely, Partial failure there is a crack or deformation, which results in an altered distribution of mechanical stress.**
Felling Licence	**In Great Britain, a permit to fell trees in excess of a certain size or total volume.**
Feeder Roots	**Fine fibrous Water and nutrient absorbing roots located in the outer root system.**
Flush-Cut	**In trees and shrubs, a pruning cut close to the parent stem, which removes the branch bark ridge.**
Foliage	**The live leaves or needles of the tree; the plant part primarily responsible for photosynthesis.**
Formative pruning	**The trimming of a tree to remove weaknesses and irregularities which may lead to problems. The formative pruning operation is aimed at reducing the potential for future weaknesses or problems within the tree's crown.**
Gall	**An abnormal, disorganized growth of plant tissues, caused by parasitic or infectious organisms such as insects, fungi, bacteria, or viruses.**
Girdling	**In woody plants, any form of damage that destroys the bark and / or the Cambium all the way around the stem, branch or root, normally resulting in death of the damaged section.**
Girdling Root	**In woody plants, a root that grows across the buttress, or across other roots, eventually causing constriction of the radial growth.**
Growth Increment	**The incremental growth added as new annual ring develops each season over existing wood. This is seen as (growth) rings in cross-sections of wood.**
Hazard beam	**An upwardly curved branch in which strong internal stresses may occur without the compensatory formation of extra wood (longitudinal splitting may occur in some cases).**
Heartwood	**Inner non functioning tissues that provide structural support to trunk.**
Heave	**In relation to shrinkable clay soils, expansion due to rewetting of a volume of soil previously subjected to the removal or water by plant / trees following felling or root severance. Also in relation to root growth, the lifting of pavements and other structures by radial expansion. Also in relation to tree stability, the lifting of one side of a wind rocked root plate.**
Herbicide	**A chemical compound that causes the death of a plant.**
Included Bark	**Bark that becomes embedded in a crotch between branch and trunk or between co-dominant stems, usually found in narrow or tight crotches, and causes a weak structure.**
Increment Borer	**A tool that cuts and extracts a narrow cylinder of wood from a tree for analysis of the wood tissue and growth increments.**
Internodal	**The part of a twig between two nodes, or points of beginning of annual twig growth. The node is formed at the end of each year's growth.**
Leader	**The primary terminal shoot or trunk of a tree.**
Lignin	**The hard cement like constitute of wood cells found within the Cellulose matrix. Lignification is the addition of lignin to the cellulose filaments. Lignin can be specifically removed by certain fungi.**
Limb	**A large lateral branch growing from the main trunk or from another larger branch.**
Lion Tailing	**Often the result of poor pruning practices; the main leader or branches are largely devoid of side branches, growth is restricted to the end of branches and is likely to suffer damage through end loading.**
Live Crown Ratio	**The proportion of the total height of the tree that is represented by live branch growth within the canopy. Used as an indicator of potential vitality, when compared as a ratio to the woody mass of the tree.**
Lopping	**In trees, a general term that related to the removal of branches from a tree.**
Macronutrient	**One of six elements required in relatively large quantities by a plant for metabolic processes; essential to plant health. (See micronutrient)**
Micronutrient	**One of seven elements required in small quantities by a plant for metabolic processes; essential to plant health. (See macronutrient)**
Monitoring	**Due to the relative life span of trees in relation to our own, long-term monitoring provides a valuable insight to the health of trees, identifying decline and or stabilisation and or improvement.**

Mulch	**A material laid over the root system of a tree to help conserve moisture within the soil. Additionally it may help control the development of weeds close o the tree.**
Mycelium	**A mass of growing filaments (hyphae) formed by fungi.**
Mycorrhizae	**A term given to the symbiotic relationship between roots and certain beneficial fungi. Mycorrhizae are the combined root / fungal growth.**
Natural Pruning	**The shedding of a branch or twig that has died back naturally and has become decayed at or near its base.**
Necrosis	**The failure and subsequent death of a branch, leader or tree.**
Negligence	**A failure to take reasonable action to deal with a hazard to prevent damage to property or person.**
Node	**The point were a leaf is connected to a shoot, the point were an auxiliary bud may develop**
Nutrient	**Substances that are absorbed by living organisms for the maintenance of internal processes.**
Occluding tissue	**The general tern of wood, cambium and bark that develop around the site of a wound on a woody plant**
Pathogen	**A microorganism that causes diseases within another organism.**
Petiole	**The stem of the leaf, attaching the leaf blade to the twig.**
Phloem	**The principle conductive tissue that the products of Photosynthesis are transported around the plant**
Photosynthesis	**The process were light energy is used to create energy (Carbohydrate) for use within the plant.**
Pollard	**A term for a pollarded tree.**
Pollard head	**The swollen section of branch / stem that forms behind the pollarding cut.**
Pollarding	**The complete or partial removal of the crown of a young tree so as to encourage the development of numerous branches either for amenity or historically as fodder, repeated management is required cyclically to maintain the feature**
Propping	**The use of artificial apparatus to support living sections of a tree that may be prone to failure. The installation of such features does require legal interpretation.**
Prune or Pruning	**Selective removal of woody plant parts of any size, using saws, Loppers, Secateurs, or other pruning tools.**
Rams Horn	**In connection with wounds on trees, a roll of wound wood or occluding tissues that has a spiral appearance in cross section. Opposing faces may result in the formation of cracks as they connect.**
Reaction Wood	**Wood with distinctive anatomical and physical characteristics, formed in parts of leaning or crooked stems and in branches to provide additional strength / support. In hardwoods, tension wood usually forms. In conifers, compression wood is usually found.**
Reaction Zone	**A zone normally darker than surrounding wood that denoted the boundary often a defensive one between functional sapwood and dysfunctional or decaying wood.**
Re-grading	**The raising or lowering of a soil profile from its original grade.**
Rejuvenation pruning	**Where historically or environmentally important trees are to be retained, their life spans can be significantly extended through the adoption of particular pruning regimes.**
Rejuvenation root treatment	**Management of the root zone can have a significant positive effect upon the health of trees. Physical, mechanical and biological approaches are available and can be prescribed in accordance within the constraints of individual sites.**
Remedial Action	**In tree hazard management, action to mitigate or remove the risk of injury to persons or property.**
Remedial pruning	**The removal of old stubs, deadwood, epicormic growth, rubbing or crossing branches and other unwanted items from the tree's crown.**
Resistograph	**Invasive decay detection technique whereby the resistance offered by the timber to a spinning probe is measured and plotted. Invasive though very small hole diameter.**
Rib	**In tree body language, a long narrow, axial protuberance which often over lays a crack.**
Ring Barking	**Artificial Girdling of the stem, to result in the death of a tree. May be used in habitat creation were the retention of dead standing trees is required.**
Risk	**The likelihood of potential damage occurring to a feature or a hazard resulting in harm.**
Rod Bracing / Bolting	**Traditionally, this has relied upon the Installation of steel rods or bolts through the stems or limbs, to reduce twisting or splitting of the wood. The installation of such features does require legal interpretation.**
Root Barriers	**Both Buildings and services can benefit from the installation of root barriers to protect a soil volume from the ingress of roots.**
Root Collar	**The basal area of the tree; transition zone from trunk to root. Also sometimes called trunk flare.**
Root Crown	**The area where the trunk turns into the roots, usually at soil level, the trunk tapers out at the base.**
Root Plate	**The primary support area for the tree; an area of the root system close to the base that structurally anchors the tree to the soil.**
Root Rot	**Either a general term for decay within the wood of the lower stem / buttress roots, or a disease in which the fine roots are killed.**
Root System	**The portion of the tree containing the root organs, including buttress roots, transport roots, and fine absorbing roots; all underground parts of the tree.**
Root Zone	**The area and volume of soil around the tree in which roots are expected. May extend to three or more times the branch spread of the tree, or several times the height of the tree.**
Sail Area	**In arboriculture, a general description for the wind intercepting area of a trees live crown. This can vary with both orientation and season.**
Sanitation	**In plant disease control, the removal of material that could a source of infection by a pathogen. Removal of diseased plant parts, such as fallen leaves and twigs, and pruning of dead and diseased branches. Diseased parts should be burned or buried under soil or active compost.**
Sapwood	**Xylem wood tissue, usually light in colour, representing the outer growth rings of the wood. Usually living, reactive wood tissue, in a healthy tree. See heartwood**
Scaffold limbs / scaffold Branches	**The branches that from the main network framework of the crown of a tree.**
Senescent	**A decline in growth and vigour due to age or stress factors.**
Shrub	**A woody plat that branches at or close to the ground level and so does not have a single stem.**
Slime Flux	**Relating to a toxic condition from the spreading of bacteria or their products from a source of infection; characterized by malodorous gases, or salt deposits upon the bark. If these products enter the sap stream, localised vessel necrosis can result, usually associated with anaerobic conditions.**
Snag	**In a woody plant, a portion of cut or broken stem which extends beyond any growing point or dormant bud.**
Soft Rot	**A kind of wood decay, were a fungi degrades cellulose within the cell wall, without causing overall degradation.**

Soil Compaction	**The compression of soil, causing a reduction of pore space and an increase in the density of the soil. Air is squeezed out and nutrients become locked. Tree roots cannot grow in compacted soil.**
Soil Profile	**The characteristics of a soil as regards to relative depth; the changes in soil texture and composition that occur with depth.**
Soil Texture	**The classification of the constituent particles of soil; includes sand, silt and clay particles. Directly related to soil porosity, permeability, and aeration.**
Sonic Decay Detection	**Non invasive method whereby sound waves are passed through the tree and the speed is measured. Slow speeds indicate decay and a tomography picture representing the inner stem is produced.**
Sprout	**Also Epicormic shoot. A shoot or stem that grows from the bark of a tree; adventitious or secondary growth generally the result of physiological stress.**
Stag Heading	**In a tree, a state of dieback were dead branches protrude beyond the current living crown.**
Stress	**In plant physiology, conditions were one or more physiological functions Are not working within normal parameters.**
Stump Grinding	**The removal of a tree stump using a specialist grinding machine.**
Subsidence	**In relation to vegetation, the removal of water by plant growth resulting in localised shrinkage in the soil volume.**
Sucker	**Same as sprout.**
Suppressed	**Trees which are dominated by surrounding vegetation and whose crown development is restricted from above.**
Systemic	**Affecting the whole plant or organism. A systemic compound is carried throughout the entire plant to all parts through the vascular system.**
Target	**Any person or object within reach of a falling tree or part of a tree that may be injured or damaged.**
Target Pruning	**The pruning of a branch were the wound affects only branch material, often result in a target shaped wound.**
Tension Wood	**Reaction wood typically formed on the upper side of limbs or curved stems; characterized by lack of cell wall lignifications (higher ratios of cellulose to lignin).**
Thermography	**The use of very sensitive equipment can detect small temperature changes within the volume of a tree, these small changes are used to identify the location of decay, faults and water pockets. Totally un-invasive.**
Tight Union / Tight Crotch	**Also, narrow crotch. A crotch with a narrow angle between branches, often having included bark.**
Tomography	**The comparison of sound or stress waves through the tree allows the creation of a 2D or 3D representation of the internal structure of a stem or branch section and highlights areas of damage. Virtually non-injurious.**
Topography	**The configuration of surface features, including the vertical and horizontal relationships or positions of the ground and other features.**
Topping	**The practice of cutting large limbs back severely, without regard to form or habit of the tree. Cuts are usually made between lateral branch nodes. This practice is extremely injurious to trees, and promotes decay and structural weakness within the canopy.**
Tree	**A woody plant that typically has a single stem, at maturity has a height of a least 4 metres and a stem diameter at breast height of at least 75mm.**
Tree Preservation Order	**In Great Britain, an order made by the local planning authority, were consent must be gained before undertaking all but exempt works to a tree.**
Trunk Flare	**The basal area of the trunk that flares or widens, and merges with the main roots. See root collar**
Veteran Tree	**Veteran trees are often found in large parks or estates and commonly affected by extensive decay or have been subject to extensive works. These trees are retained for historical importance and often pose greater risk than normal, which is generally justified. Such trees need careful management and often propping or bracing to support them, some require fencing to limit access.**
Vigour	**Active, healthy growth of plants: ability to respond to stress factors.**
Visual Tree Assessment (VTA)	**An assessment of the mechanical condition of trees based upon their 'body language'. Trees are dynamic and respond to faults / decay / environmental factors in various ways, these responses can be indicative of structural integrity.**
Wetwood	**An infection caused by bacteria living inside the plant tissues. The bacteria ferment the plant fluids, resulting in death of nearby cells, and often causing exudations of fluid from the bark, often referred to as a Slime Flux.**
White Rot	**A kind if wood decay were a fungi attacks the lignin within the wood matrix**
Wind loading	**Forces placed upon tree canopy, branches, trunk and roots of a tree under windy conditions.**
Wind Throw	**The failure of a tree due to wind loading.**
Witches Broom	**A deformed or unusual growth of twigs from adventitious buds, caused by insects, disease, or dieback of twigs and buds.**
Wood	**Secondary Xylem; the main structural support and water conducting tissue of trees and shrubs.**
Woodland Structure	**The vertical and horizontal arrangement of trees within a group or woodland i.e. Dominant - trees with a crown above the upper layer of the canopy, Co dominant - trees that define the general upper edge of the canopy, Intermediate - trees that have been largely overgrown by others, Suppressed - trees that have been overgrown and occupy an under storey position and grow slowly, often severely asymmetrical.**
Wound Response Tissue	**Also Occluding Tissue, Wound Wood or Callus. Differentiated wood tissue that grows around the margins of a wound or injury.**
Wound Wood	**Wood with atypical anatomical features, formed in the vicinity of a wound and a term to describe the occluding tissues around a wound**
Xylem	**Plant tissues with special function of translocation of water and dissolved nutrients.**

Appendix 4: Author's Qualifications

Qualifications & Experience of Joe Taylor - MArborA, FdSc (Arboriculture), Lantra Approved Tree Inspector

Joe began his career in Arboriculture as a tree surgeon/climber. During his time as a tree surgeon, Joe has achieved City & Guilds NPTC qualifications in Chainsaw Maintenance and Cross Cutting, Tree Climbing and Rescue, Safe Use of Manually Fed Wood-chipper and Supporting Colleagues Undertaking Tree Related Operations.

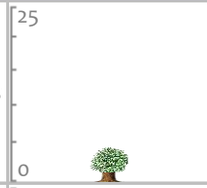
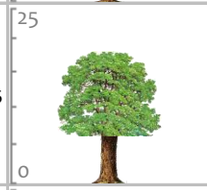
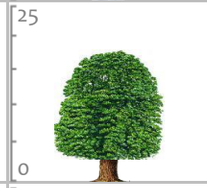
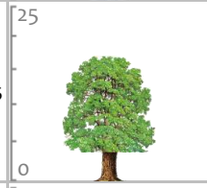
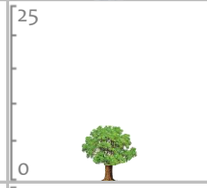
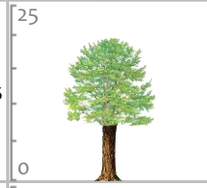
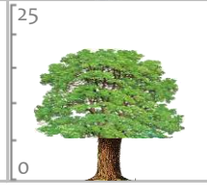
Joe obtained a Foundation Degree in Arboriculture at Askham Bryan College in 2015 which he passed with merit. Joe is a professional member of the Arboricultural Association, the International Society of Arboriculture and the Royal Forestry Society and regularly attends industry related seminars in order to keep abreast of industry best practice.

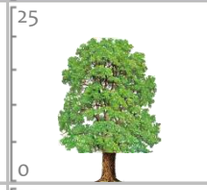
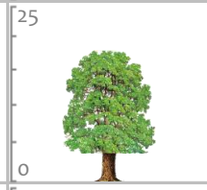
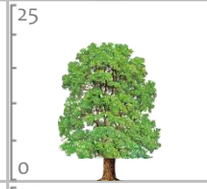
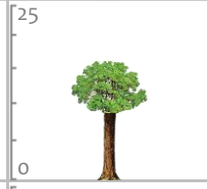
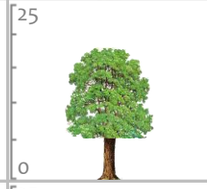
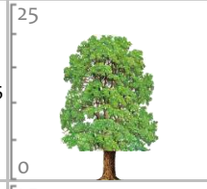
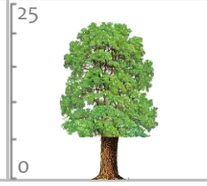
Studying at Askham Bryan College reinforced Joe's passion for trees and drove his enthusiasm to learn more. Learning how trees interact with their surrounding environment and their importance within our urban and rural landscapes highlighted an interest in pursuing a career in consultancy.

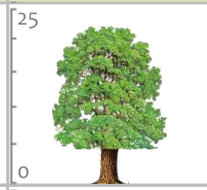
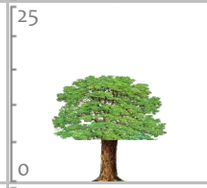
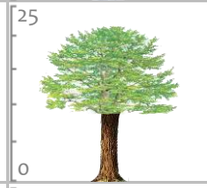
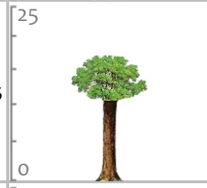
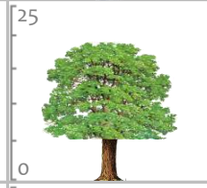
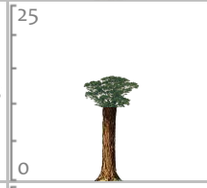
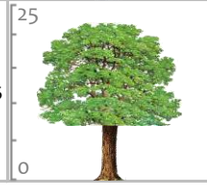
Since working for Crown Consultants Joe has undertaken numerous surveys and produced numerous reports for the purpose of planning (BS 5837), tree condition surveys, subsidence risk assessments, root surveys and decay detection investigations.

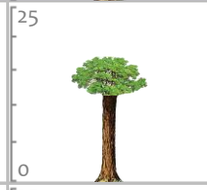
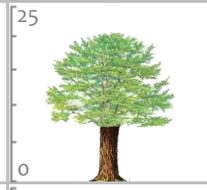
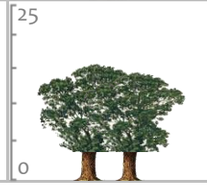
Appendix 5: Tree Data Schedule and Tree Location Plan

The Tree Data Schedule and any drawings accompanying this report follow this page.

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Vigour: Physiological Condition / Structural Condition	Amenity Value: Life Expectancy (yrs) / Safety Class
T1	Early-Mature **Goat Willow** Salix caprea.	3	1	45 @ Base	N 0.5 W 1 E 1.5 S 2		Position: Situated on third party land. Form: Stump with regrowth. History: Reduced to 1.5m tall stump.	No action required.	n/a	3	Moderate Good Good	Low 20-40 1
T2	Early-Mature **Sycamore** Acer pseudoplatanus.	18	7	55	N 5 W 3.5 E 3.5 S 3.5		Position: Tag no: 00652. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Several cavities at lower stem, possible hollow stem. Bark loose on west side from base to 1.5m. Significant dead wood to south due to shading.**	Decay detection required & remove dead wood.	High	0.5	Moderate Fair Poor	Moderate 10-20 3
T3	Mature **Horse Chestnut** Aesculus hippocastanum.	18	3	65	N 5.5 W 4.5 E 4 S 3.5		Position: Tag no: 00653. Form: Single stemmed and vertical with an unbalanced crown. History: Occasional pruning wounds due to crown reduction. **Defects: Significant strip of dead bark to west of stem base.**	Monitor.	Moderate	1	Moderate Good Fair	Moderate 20-40 2
T4	Early-Mature **Sycamore** Acer pseudoplatanus.	17	4	50	N 5 W 5 E 2.5 S 3		Position: Tag no: 00654. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Multiple pruning wounds due to crown lifting. **Defects: Cavities developing at old pruning wounds (acceptable condition at present). Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High	N/A	Low Poor Poor	Moderate <10 4
T5	Semi-Mature **Sycamore** Acer pseudoplatanus.	6	2	20	N 2 W 3 E 1 S 2		Position: Not tagged due to ivy. Form: Single stemmed and leaning with an unbalanced crown. History: No evidence of significant pruning. **Defects: Ivy to lower stem.**	No action required.	n/a	1.5	Moderate Good Fair	Low 20-40 1
T6	Early-Mature **Beech** Fagus sylvatica.	20	8.5	45	N 3 W 6 E 2.5 S 3.5		Position: Tag no: 00655. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Significant cavity between buttress roots to south east of stem and cavity a at 0.5m above ground level. Minor cavity developing at 3.5m above ground level to the east. Tear wound at 5m with crack.**	Climbed inspection of tear wound and decay detection required.	High	0.5	Moderate Good Fair	High 20-40 3
T8	Mature **Sycamore** Acer pseudoplatanus.	18	6	85	N 5 W 6 E 7 S 8		Position: Tag no: 00657. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Occasional minor-significant dead wood throughout and a minor cavity between buttress roots to east.**	No action required.	n/a	1.5	Moderate Good Fair	High 20-40 2

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Vigour: Physiological Condition / Structural Condition	Amenity Value: Life Expectancy (yrs) / Safety Class
T11	Early-Mature **Sycamore** Acer pseudoplatanus.	20	4	45	N 4, W 5.5, E 2, S 5		Position: Tag no: 00660. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High / N/A	Low / Poor / Poor	Moderate / <10 / 4
T12	Early-Mature **Sycamore** Acer pseudoplatanus.	18	3.5	45	N 4.5, W 4, E 4, S 3		Position: Tag no: 00661. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: No significant defects observed.** Other: Epicormic shoots throughout stem.	Monitor.	Moderate / 1	Moderate / Fair / Fair	Moderate / 20-40 / 2
T13	Early-Mature **Sycamore** Acer pseudoplatanus.	19	3	40	N 5, W 4, E 4, S 4		Position: Tag no: 00662. Form: Single stemmed and vertical with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Major decline and dead wood throughout.** Other: Circa 20% of live canopy remains - Low Safe Useful Life Expectancy.	Remove.	High / N/A	Low / Poor / Poor	Moderate / <10 / 4
T14	Early-Mature **Sycamore** Acer pseudoplatanus.	16	10	35	N 4.5, W 2, E 2, S 4		Position: Tag no: 00663. Form: Single stemmed and vertical with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Significant dead wood to south.** Other: Epicormic shoots throughout stem.	Remove dead wood and monitor.	Moderate / 1.5	Moderate / Fair / Fair	Moderate / 20-40 / 2
T15	Semi-Mature **Sycamore** Acer pseudoplatanus.	18	6	35	N 4, W 2.5, E 3, S 5		Position: Tag no: 00664. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Significant dead wood throughout and decaying branch stubb.** Other: Acceptable condition at present.	No action required.	n/a / 1.5	Moderate / Fair / Fair	Moderate / 20-40 / 2
T16	Early-Mature **Sycamore** Acer pseudoplatanus.	20	4	40	N 4.5, W 4.5, E 4.5, S 4.5		Position: Tag no: 00665. Form: Single stemmed and vertical with a balanced crown. History: No evidence of significant pruning. **Defects: Dead wood to lower crown - acceptable condition at present.** Other: Epicormic shoots throughout stem.	Monitor.	Moderate / 1	Moderate / Fair / Fair	Moderate / 20-40 / 2
T17	Mature **Sycamore** Acer pseudoplatanus.	22	6	60	N 1.5, W 4.5, E 3, S 7		Position: Tag no: 00666. Form: Single stemmed and vertical with an unbalanced crown. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Significant dead wood to lower crown - acceptable condition at present.**	No action required.	n/a / 1.5	Moderate / Fair / Fair	High / 40+ / 2

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations: Priority	Recommendations: Inspect Freq (yrs)	Vigour: Physiological Condition / Structural Condition	Amenity Value: Life Expectancy (yrs) / Safety Class
T18	Mature **Sycamore** Acer pseudoplatanus.	22	5	60	N 2, W 4, E 5, S 8		Position: Tag no: 00667. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Occasional minor-significant dead wood - acceptable condition at present.**	No action required.	n/a	1.5	Moderate / Good / Fair	High / 40+ / 2
T19	Mature **Sycamore** Acer pseudoplatanus.	14	6	55	N 2.5, W 4, E 4, S 9		Position: Tag no: 00668. Form: Single stemmed and vertical with an unbalanced crown. History: No evidence of significant pruning. **Defects: Small scattered dead branches.**	No action required.	n/a	1.5	Moderate / Good / Fair	High / 40+ / 2
T21	Mature **Beech** Fagus sylvatica.	22	10	60	N 4.5, W 4.5, E 8, S 8.5		Position: Tag no: 00670. Form: Single stemmed and vertical with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Significant bark wound to stem at 0.2m - 1m above ground level (acceptable condition at present). Bark wound to upper branch, significant tight union between upper branches.**	Monitor.	Moderate	1	Moderate / Good / Fair	High / 40+ / 2
T23	Semi-Mature **Sycamore** Acer pseudoplatanus.	17	12	43	N 2.5, W 3, E 3.5, S 3		Position: Tag no: 00672. Form: Twin-stemmed at 10m with a slightly unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: Major decline and dead wood throughout.** Other: Little live foliage - Low Safe Useful Life Expectancy.	Remove.	High	N/A	Low / Poor / Poor	Moderate / <10 / 4
T25	Early-Mature **Sycamore** Acer pseudoplatanus.	19	6	50	N 5, W 5, E 7, S 6		Position: Tag no: 00674. Form: Co-dominant stem at 5.5m and a slight lean. History: Multiple pruning wounds due to crown lifting (now healed). **Defects: No significant defects observed.**	No action required.	n/a	3	Moderate / Fair / Fair	Moderate / 20-40 / 2
T27	Early-Mature **Elm** Ulmus sp.	14	11	45	N 0, W 4.5, E 1.5, S 4.5		Position: Tag no: 00676. Form: Single stemmed with a slight lean and an unbalanced crown. History: Occasional pruning wounds due to crown reduction. **Defects: Covered in burrs from ground level to 6m.** Other: Ivy prevented detailed inspection of upper stem and dying epicormic shoots prevented detailed inspection of stem base.	Remove ivy and inspect stem for defects.	Moderate	1	Moderate / Fair / Fair	Moderate / 10-20 / 3
T28	Early-Mature **Sycamore** Acer pseudoplatanus.	22	8	50	N 4, W 6, E 5.5, S 9		Position: Tag no: 00677. Form: Twin-stemmed at 6m with an unbalanced crown. History: Occasional pruning wounds due to crown lifting. **Defects: No significant defects observed.**	No action required.	n/a	1.5	Moderate / Good / Good	High / 40+ / 2

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m)	Notes	Recommendations		Vigour / Physiological Condition / Structural Condition	Amenity Value / Life Expectancy (yrs) / Safety Class
								Priority	Inspect Freq (yrs)		
T32	Early-Mature **Sycamore** Acer pseudoplatanus.	17	13	45	2 4 4 2.5		Position: Tag no: 00681. Form: Twin-stemmed at 12m with an unbalanced crown. History: Multiple pruning wounds due to crown lifting. **Defects: Bark wound to stem at circa 10m above ground level and cavities possibly developing at old pruning wounds. Minor cavities at base of stem (acceptable condition at present).**	Monitor.	Moderate 1.5	Moderate Fair Good	Moderate 20-40 2
T33	Mature **Beech** Fagus sylvatica.	21	8	65	3.5 6 6 6		Position: Tag no: 00681. Form: Twin-stemmed at 12m with a slightly unbalanced crown. History: No evidence of significant pruning. **Defects: Scattered small dead wood throughout. Two significant bark wounds to branch at the west of stem at 7m above ground level.** Other: Minor dieback to upper canopy to east - acceptable condition.	Monitor.	Moderate 1.5	Moderate Fair Good	High 40+ 2
G34	Semi-Mature **Elm** Ulmus sp.	av 16	av 4	av 48	av 6 5.5 7 4 each		Position: Tag no: 00683. Form: Two very close growing specimens. History: Occasional pruning wounds due to crown lifting (now healed). **Defects: Major included bark between two stems to south and significant dieback. Numerous epicormic shoots throughout.** Other: Low Safe Useful Life Expectancy.	Monitor or remove.	Moderate 1	Moderate Poor Fair	Moderate 10-20 3

0 5 10m

Site:
11 Cumberland Avenue
HD6 2JJ

Ref No: 11399/TLP
Revision: 1
Scale: Not to Survey
Paper Size: A4

T1	Tree number 1		Stem & canopy of Class 1 tree
G2	Group number 2		Stem & canopy of Class 2 tree
H3	Hedge number 3		Stem & canopy of Class 3 tree
			Stem & canopy of Class 4 tree

Safety Categories

Class 1:
Trees in good or acceptable condition (green). No defects apparent or likely to develop in the foreseeable future or no remedial works required.

Class 2:
Trees with minor defects. Pruning works are usually required to ensure that they are in an acceptable condition (unless they are remotely located).

Class 3:
Trees with significant defects. Works are usually necessary in order to bring them into an acceptable condition (unless they are remotely located).

Class 4:
Trees with major defects. These trees often require removal or significant pruning works (unless they are remotely located).