



# Arboricultural Survey

At

**National Horse Racing Museum  
Palace House  
Palace Street  
Newmarket  
Suffolk  
CB8 8EP**

## Site Survey Report

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Following;

A Requirement for a Visual Tree Assessment of approx. 30 Trees & To Provide Information on Any Decay & Fungi Present, Potential Hazards and/or Pruning & Maintenance or Remedial Action Required

Written By;  
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Qualified Arboriculturalist  
In Association with; Anglia Tree Contractors Ltd

I have been instructed on behalf of Anglia Tree Contractors Ltd to undertake a survey of the above site with an aim to carry out visual tree assessments of all trees. The information to be collated is to include;

- Species (Latin & Common Name)
- Age class, structural condition, height, crown spread & DBH.
- Potential Hazards & Urgent Remedial Action Required
- Advised Pruning & Maintenance
- Any Further Notes of Interest, Pests and diseases etc.

The brief of this survey is to further identify trees in need of remedial works first noted in a site survey carried out in Oct 2020 and to identify trees in the species Acer. Soil samples and accompanying pictures have not been included however the British Geological Survey web site indicates the site being located on bedrock geology of Holywell Nodular Chalk Formation with superficial deposits of River Terrace Deposits, Sand and Gravel. Soil conditions have the potential to affect tree growth, rooting depth and extent, species selection and foundation design.

This survey is accompanied with Pear technology mapping software detailing location of all trees identified within this survey however, does **not** map every tree on the site. Where hazards that could pose a risk to properties, persons or animals is noticed then recommendations will be made. This may include tomographic testing, bat surveys and plant toxicity testing along with Ariel tree inspections to be carried out by trained and qualified persons.

Site visits were conducted on Tuesday 5<sup>th</sup> September 2023. Ariel inspections identified and required for assessment and recommendations are to be conducted as soon as possible upon receipt and perusal of recommendations provided within this report.

This survey begins from T1 located at the eastern edge of the site near the rear gated entrance. Start point coordinates are; 52, 24301o N, 0, 04103o E. This is a small copse of 5 semis to early mature Horse Chestnut trees together with a semi mature Norway maple tree.

This report begins with T1-T6- running N – S and then turning –W and running anticlockwise to T7 which runs N-S to T21.

This survey continues with each tree being noted in sequential order running anti clockwise around the site beginning with T1 and ending in this case, with T34

All measurements were estimated unless otherwise specified. I.e. use of specialist measuring instruments/techniques such as inclinometers, PH & soil testing equipment however, a DBH tape was used for stem diameter measurement. Technical terms have been kept to a minimum, but a limited use of them is unavoidable in this report. As such any further questions or subjects requiring clarification should be directed to the author or other qualified person/s.

The following Tree Survey Schedule will include all trees on the site having already been numbered and their location plotted. Data collated to include species, height, stem diameter, crown spread and age class along with notes with a brief description of the tree/s structural condition and any management recommendations applicable to each tree/species..

Life Stage Description:

NP = newly planted.

Y = young. An establishing tree which can be transplanted if required.

SM = semi mature. Established tree that is yet to reach maximum height and crown spread.

EM = early mature. A tree reaching its maximum height but with considerable girth and crown spread remaining.

M = mature. A tree with limited potential for future growth but with considerable life expectancy remaining.

OM = over mature. A tree in senescence with limited life expectancy expected.

V = veteran. Is a tree older than typical for its species and one of great amenity/ habitat value?

## Sycamore Poisoning in Horses

Sycamore poisoning also known as Atypical Myopathy or Seasonal Pasture Myopathy is a dangerous muscle disease in horses caused by eating parts of the sycamore tree, especially the seeds and seedlings.

The condition is most notable in autumn and spring.

Atypical Myopathy is an often fatal condition which affects horse's muscles. As it a result it affects vital organs including the respiratory system and heart.

Atypical Myopathy is caused by the ingestion of Hypoglycin A (HGA) which is a toxin found in Sycamore, Maple and other Acer trees. HGA is found in its highest concentrations in seeds during autumn and winter and saplings in spring however, HGA is also found in the leaves and other parts of the tree.

As few as 50 seeds could be fatal. However, different horses have different reactions. Young horses or those grazed on parched or over grazed land are particularly susceptible.

Different trees appear to have different levels of toxin but it is recommended that all measures are taken to reduce the risk of sycamore seeds/seedlings being nearby horses.

Tests for Hypoglycin A in seeds, leaves and seedlings can be tested through the Royal Veterinary College Diagnostic Service.

The above information is freely available via [Blucross.org.uk](http://Blucross.org.uk) and is the advice of

Ruth Court

Horse and Welfare Manager

**TREE SURVEY SCHEDULE**

Ref no	Species	Ht (ft)	Stem Diam (mm)	Crown spread (m)				Life Stage	Structural Condition/Description	Management recommendations
				N	E	S	W			
T1	<i>Aesculus hippocastanum</i> "Horse Chestnut"	65+	1608	4	4	4	6	SM-EM	Fair – Fair form. Crown asymmetry. Dead wood present within canopy above 50mm. No fruiting bodies at time of inspection. Congested crown on W side – response to pruning. Ivy swamped tree/base. Poor pruning cuts – stubs left. Leaf minor evidential affecting majority of crown. Building debris at base. Evidential crown lifting/pruning on E side of T1 affecting crown symmetry – School side.	***T1 is of <b>HIGH</b> priority***  ***Ariel Inspection Required***  <b>Minimum recommendations:</b>  Ivy management.  Deadwood/crown clean/thin and lift canopy to 5 metres – Consideration for pollard dependent upon Ariel inspection.  Consideration for removal and replant due to historic limb loss and prior evidence of bleeding canker at base during last survey Oct 2020  – T1 was cleared for removal In Feb 2021 – Notification No: DC/21/0057/TCA  Recommend replant/replace T1 if removed  ***Next review - N/A***
T2	<i>Aesculus hippocastanum</i> "Horse Chestnut"	50+	630	2.5	3	3	3	SM	Fair - Fair form. Minor asymmetry due to co dominant crown with T3. No fruiting bodies at time of inspection. Evidential large lib loss approx. 10 m. Stub cuts remain from prior pruning. Leaf minor evidential. Ivy covered tree.	***T2 is of <b>Medium</b> priority***  ***Ariel Inspection Required***  Crown raise to 4 metres.  Clean/thin canopy.  ***Next review in 3 Yrs***
T3	<i>Aesculus hippocastanum</i> "Horse Chestnut"	65+	680	2.5	2.5	2.5	3	Y-SM	Fair - Fair form. Minor asymmetry due to co dominant crown with T2 & T5. Leaf minor evidential affecting majority of crown. Building debris at base. Ivy at base. No fruiting bodies at time of inspection.	***T2 is of <b>Low</b> priority***  Crown raise to 4 metres.  Clean/thin canopy.  ***Next review in 3 Yrs***
T5	<i>Acer Platanoides</i> "Norway Maple"	65+	697	4	4	4	6	EM-SM	Good – Good form. Building debris at base. Ivy at base. No fruiting bodies at time of inspection. Stub cuts remain from prior pruning.	***T5 is of <b>High</b> priority***  Consider Remove To Ground Level due to SPM/Acer toxicity.  Recommend replant/replace T5 if removed  ***Next review – N/A***
T6	<i>Aesculus hippocastanum</i> "Horse Chestnut"	50+	685	4	4	3	3	SM	Fair - Fair form. Leaf minor evidential affecting majority of crown. Cluttered canopy. Building debris at base. Ivy at base. No fruiting bodies at time of inspection however – evidence of exudate at base. Prior survey dated Oct 2020 advises possibly Phytophthora. Evidence of Mycelium attachments to main stem/buttress possibly through bracket fungus ( <i>Ganoderma</i> spp) displaying annular ring growth patterns. Unable to confirm.	***T6 is of <b>High</b> priority***  ***Tomographic Testing Required***  Consider Remove To Ground Level - dependent upon results.  Recommend replant/replace T6 if removed  ***Next review – N/A***
T7	<i>Acer Pseudoplatanus</i> "Sycamore"	40	389	6	4	2	3	Y	Good condition – Fair form. No fruiting bodies at time of inspection however evidence of "sooty bark" on main stem. Co dominant crown.	***T7 is of <b>High</b> priority***  Consider Removal To Ground Level due to SPM/Acer toxicity.  Recommend replant/replace T7 if removed  ***Next review – N/A***
T8	<i>Acer Pseudoplatanus</i> "Sycamore"	35	350	3	6	2	0	Y	Good condition – Fair form. Asymmetrical crown. No fruiting bodies at time of inspection however evidence of "sooty bark" on main stem.	***T8 is of <b>High</b> priority***  Consider Removal To Ground Level due to SPM/Acer toxicity.  Recommend replant/replace T8 if removed  ***Next review – N/A***

T9	<i>Acer Pseudoplatanus</i> "Sycamore"	45	640	4	3	2	6	EM	Good condition – Fair form. Asymmetrical crown showing co dominance. No fruiting bodies at time of inspection however scattered deadwood below 50mm within crown. Straw/Grass cuttings at base.	***T9 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T9 if removed</b>  ***Next review – N/A***
T10	<i>Acer Pseudoplatanus</i> "Sycamore"	35+	395	2	2	2	2	Y	Fair condition – Fair form. No fruiting bodies at time of inspection. Co dominant crown. Straw/Grass cuttings at base.	***T10 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T10 if removed</b>  ***Next review – N/A***
T11	<i>Acer Pseudoplatanus</i> "Sycamore"	30	288	3	3	3	3	Y	Fair condition – Fair form. No fruiting bodies at time of inspection. Co dominant crown. Straw/Grass cuttings at base.	***T11 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T11 if removed</b>  ***Next review – N/A***
T12	<i>Tilia x europaea</i> "Common Lime"	35	665	5	8	5	6	Y	Fair-Poor condition - Poor form. Ivy management required. Dense and cluttered crown. Poor prior pruning. Debris @ base.	***T12 is of <b>Low</b> priority***  <b>Ivy management.</b>  <b>Lift canopy.</b>  <b>Crowns reduce by min 30% due to proximity to horse paddock.</b>  <b>Consideration for 4 yearly pollards upon next review.</b>  ***Next review – 3 years***
T13	<i>Acer Platanoides</i> "Norway Maple"	35	650 below 1.5m	0	0	3	7+	Y	Poor condition – Poor form. Multi stemmed below 1.5m. Crown asymmetry with co dominant crown with T15, T14, and T12. . No fruiting bodies at time of inspection. Scattered deadwood. Ivy at base. Grass trimmings at base.	***T13 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T13 if removed</b>  ***Next review – N/A***
T14	<i>Acer Platanoides</i> "Norway Maple"	35	622	0	6	3	4	Y	Poor condition – Poor form. Crown asymmetry with co dominant crown No fruiting bodies at time of inspection. Scattered deadwood. Sparse crown.	***T14 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T14 if removed</b>  ***Next review – N/A***
T15	<i>Fraxinus excelsior</i> "Common Ash"	30	252	3	0	3	8	Y	Poor condition – Poor form. Scattered dieback within crown. Crown asymmetry due to co dominant crowns – tree suppressed.	***T15 is of <b>Low</b> priority***  <b>Recommend replant/replace</b>  ***Next review – N/A***

Ref no	Species	Ht (ft)	Stem Diam (mm)	Crown spread (m)				Life Stage	Structural Condition/Description	Management recommendations
				N	E	S	W			
T17	<i>Acer Platanoides</i> "Norway Maple" (poss Crimson King)	35	545	5	6	3	5	EM	Poor condition – Poor form. Dense cluttered crown with scattered dieback. Stub cuts from prior pruning. Flaking bark at base. No fruiting bodies at time of inspection.	***T17 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T17 if removed</b>  ***Next review – N/A***
T20	<i>Acer Platanoides</i> "Norway Maple"	35+	468	3	3.5	5	4	EM	Good condition – Good form. No fruiting bodies at time of inspection, Large concrete deposits at base. Yew tree growing from base – severed but roots remain intact.	***T20 is of <b>High</b> priority***  <b>Consider Removal To Ground Level due to SPM/Acer toxicity.</b>  <b>Recommend replant/replace T20 if removed</b>  ***Next review – N/A***
T21	<i>Acer Pseudoplatanus</i> Spp	45+	595	5	5	5	5	EM	Good condition – Good form. Good symmetry,	***T21 is of <b>Low</b> priority***

	"Sycamore" (Poss var. Leopoldii)									Epicormic growth at base. No fruiting bodies at time of inspection. No issues.	N/A – D/f/c acceptable – no grazing horses.  ***Next review – 3 Yrs***
T23	<i>Acer Pseudoplatanus</i> "Sycamore"	50+	584	6	4	6	4	EM		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection. No issues.	***T23 is of Low priority***  N/A – D/f/c acceptable – no grazing horses.  ***Next review – 3 Yrs***
T29	<i>Acer Pseudoplatanus</i> "Sycamore"	50	587	7	3	6	4	EM		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection. Root undermined on N/E face due to raised bed/pathway – monitor.	***T29 is of Low priority***  N/A – D/f/c acceptable – no grazing horses.  ***Next review – 3 Yrs***
T30	<i>Ilex aquifolium</i> "Holly"	25+	330	3	3	3	3	Y		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection.	***T30 is of Low priority***  ***Next review – 3 Yrs***
T31	<i>Fraxinus excelsior</i> "Common Ash"	60+	612	8	8	8	8	SM		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection. No issues.	***T31 is of Low priority***  ***Next review – 3 Yrs***
T32	<i>Fraxinus excelsior</i> "Common Ash"	50	340	4	4	4	4	SM		Good condition – Good form. Good symmetry, Appearance of rust of main stem. No fruiting bodies at time of inspection. No issues.	***T32 is of Low priority***  ***Next review – 3 Yrs***
T33	<i>Carpinus Betula</i> "Hornbeam"	25+	160	2.5	2.5	2.5	2.5	Y		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection. No issues.	***T33 is of Low priority***  ***Next review – 3 Yrs***
T34	<i>Taxus baccata</i> "Yew"	25+	200	3	3	3	3	Y		Good condition – Good form. Good symmetry, No fruiting bodies at time of inspection. No issues.	***T34 is of Low priority***  ***Next review – 3 Yrs***

#### Glossary of Abbreviations & Terms:

**Arboriculturalist:** a person skilled in the science of the care and maintenance of trees they should carry the appropriate liability/ insurance and preferably be a member of a professional body of tree specialists (the current leading national body is the "Arboricultural association").

**Aspect:** The general out look of the site.

**BGS:** British Geological Survey.

**Butt:** the lowest part of the trunk where it adjoins the surrounding ground.

**C.O.D.I.T:** Compartmentalisation of decay in trees, the natural means used by a tree to prevent the spread of decay.

**Cavity:** a hollow in a wooden part of the tree.

**Coupe/Compartment/Copse:** a defined area within a woodland or forest.

**Condition:** G = Good, f = Fair, P = Poor, D = Dead

**Covenant:** an agreement to maintain or carry out present commitments often contained within the deeds of a property.

**Crotch:** the junction of two branches.

**Crown:** The section of the tree which contains leaf/bud covered branches.

**D.F.C:** distance from construction.

**DBH:** diameter at breast height, the measurement is taken at 1.3 meters above ground level.

**Decay/Rot:** the breaking down of the normal structure of the wood, usually leading to the structural weakening of the tree.

**Deed:** a law contract.

**Desiccation:** any significant reduction in soil moisture content by evaporation or extraction by trees, shrubs, etc.

**Diameter:** a straight line passing through the centre of a geometrical shape.

**Dog Leg:** an unusual growth form where a branch suddenly changes direction. Caused by many different factors but may weaken the integrity of

the affected limb.

*Epicormic Growth*: literal meaning 'upon stem' forming from adventitious buds. Such branching is often founded on a poor attachment.

*Early Mature*: A tree reaching its ultimate height and whose growth is slowing however it will still increase in stem diameter and crown spread.

*F.S.B*: First significant branch

*Good Form*: Reference to the tree's crown structure and general shape.

*Heave*: upward ground movement and the corresponding movement of effected foundations..

*Inclinometer*: a device using geometry to measure the height of objects.

*Increment*: a small sample of wood removed for analysis with a boring device.

*L.P.A.*: the local planning authority (part of local council).

*Parasitic*: an organism, which will attack its host, usually to the disadvantage of the host.

*Phototropism*: The effect of light and its direction on a living organism.

*Pollarding*: Tree management method where the entire crown is removed at regular periods.

*Kopparding*: A method as above but with the removal of the entire crown down to the main trunk.

*Scaffold*: the branch structure in the crown that supports the smaller branches and gives shape to the tree.

*Silt*: a soil made up of particles with diameters of size intermediate between clay (less than 0.002 mm) and sand (greater than 0.06 mm).

*Subsidence*: downward ground movement and the corresponding movement of affected foundations.

*Suckers*: young adventitious shoots growing from the base of the tree or directly from the trunk and main branches.

*Target*: any item either static or transient that would be hit in the event of any part of the tree failing.

*TO*: Tree officer.

*TPO*: Tree preservation order.

*Trunk*: The main supporting portion of the tree normally devoid of twigs and leaves.