

# Tree Condition Survey and Report

at

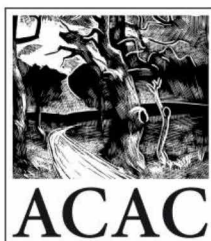
The Old Vicarage, Nailsworth, GL60QS

for



19<sup>th</sup> January 2024

Prepared by:



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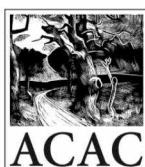
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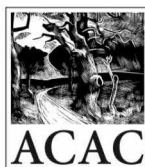
## 1. INTRODUCTION

1.1 Andrew Cunningham Arboricultural Consultant (ACAC) was instructed by [REDACTED] to inspect specific trees within the grounds of The Old Vicarage, Nailsworth. From hereafter is referred to as ‘the site’.

1.2 The survey was focused on a mature Horse Chestnut tree within the rear garden area and several Sycamore trees located on an embankment to the east of the main garden area (still within the ownership of Mr Bewsey). The scope of the tree survey was to establish the overall structural and physiological condition of the trees and to recommend appropriate management if required.

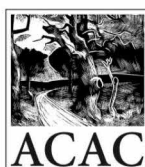
1.3 It has been requested that ACAC provides;

- All survey data in tabular form.
- An associated Tree Report to discuss the survey findings.
- Tree Risk Assessments (VALID) for major defects identified.



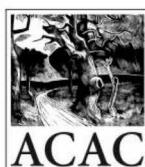
## 2. LIMITATIONS OF THE REPORT

- 2.1 This report will identify and evaluate risk to existing trees on the site. The visual inspection/assessment was carried out at ground level only. Where appropriate, inspection aids such as a metal probe and nylon hammer were utilised to establish the extent of decay within the tree and help inform management recommendations.
- 2.2 Trees are living organisms as well as self-supporting dynamic structures. Their physiological and structural condition can change rapidly in response to a wide range of biotic/abiotic factors. They have the potential to fail structurally without prior manifestation of any reasonably observable symptoms. It is therefore not possible to categorically state that any tree is 'safe'.
- 2.3 During the survey, every attempt was made to provide a realistic and accurate assessment of the trees condition at the time of inspection. No responsibility can be accepted for damage or injury sustained as a result of the failure of any tree due to faults not apparent upon a visual, ground level inspection carried out or to any defects developing following the tree survey.
- 2.4 On occasion tree stems can be obscured by other vegetation (such as dense ivy) or are inaccessible. On these occasions, no liability can be accepted for the condition of these trees. Only those features that *are* apparent at the time of the inspection could be assessed and subsequent management recommendations made.
- 2.5 Physical alterations to site conditions subsequent to the date of the tree survey could have the potential to change/invalidate the findings and recommendations within this report.
- 2.6 Any management recommendations that have been set out in this report should be assessed by a competent and suitably qualified Arborist and any subsequent tree works should be undertaken in accordance with recommendations set out within *BS3998:2020 – Tree Work – Recommendations*.
- 2.7 It is beyond the scope of this report to highlight in-direct damage that existing trees could cause to structures on site through tree related subsidence. This is a specialist area within arboriculture and requires several variants. In relation to this survey, only general comments/assumptions can be made but any concerns should be followed up with further investigations as necessary.
- 2.8 Findings and any recommendations set out in this report will only be valid for a maximum of 24 months.



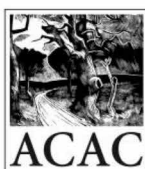
### **3. STATUTORY TREE AND WILDLIFE PROTECTION**

- 3.1 The site is administered by Stroud District Council (SDC). Their online mapping service has confirmed that the site is not located within a Conservation Area, however, there is a Tree Preservation Order (TPO) which protects many trees within Vicarage Gardens. This includes the mature Horse Chestnut tree located within the rear garden of the site. The TPO is referenced TPO547 and the Horse Chestnut is T4 within the order.
- 3.2 It should be noted that the site also neighbours an Area of Outstanding Natural Beauty (ANOB) which includes the open space area to the south. This designation will have a bearing on any management decisions made by SDC.
- 3.3 General advice regarding TPO's and trees within Conservation Areas is listed below;
- 3.4 A TPO prevents the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees or woodlands without the prior consent of the local planning authority.
- 3.5 It is also an offence to carry out any works to a tree in a Conservation Area with a trunk diameter greater than 75mm diameter at 1.5 height without formal consent from the Local Planning Authority (LPA).
- 3.6 Anyone who commits an act in contravention of a TPO is liable, on conviction in a Magistrates Court, to a fine of up to a £20,000. For a serious offence, a person can be committed for trial in the Crown Court and if convicted, can be liable for an unlimited fine.
- 3.7 On many non-residential sites there is also a statutory restriction relating to tree felling that relates to quantities of timber that can be removed within set time periods. Therefore, you must obtain a felling license from the Forestry Commission if you plan to remove more than 5 cubic metres of timber within a calendar quarter (3 months).
- 3.8 Although preliminary visual checks from ground level of likely wildlife habitats are made at the time of surveying, detailed ecological assessments should be made by a suitably qualified Ecologist. This falls outside the scope of the Arboriculturist.
- 3.9 Trees which contain holes, splits, cracks and cavities could potentially provide a habitat for bats in addition to birds and small mammals. It is recommended that in line with any accompanying specialist advice, any tree works should only be carried out following a detailed climbing inspection to the tree to ensure that protected species or their nests/roosts are not disturbed. If any are found, Site Owner or consulting



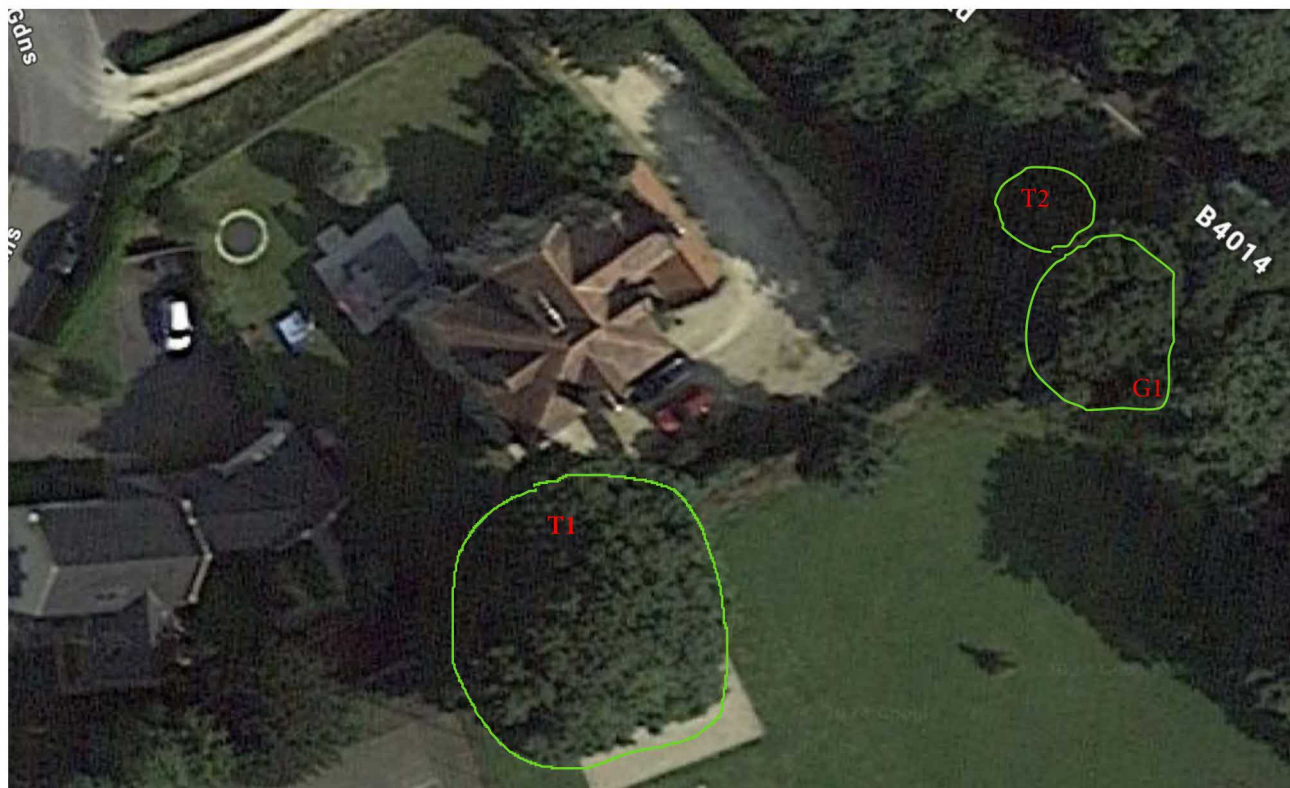
Arboriculturist/Ecologist should be informed and appropriate action taken as recommended by a Statutory Nature Conservation organisation such as Natural England.

- 3.10 It is advised that tree/hedgerow works are carried out with the understanding that birds will generally nest in trees, hedges and shrubs in summer months (March and September). Ideally, operations should be avoided during this period, however, visual inspection should be carried out by the tree contractor before works commence.
- 3.11 Any proposed tree works must adhere to the statutory controls outlined above.



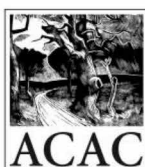
#### 4. SITE DESCRIPTION

- 4.1 The site comprises of the grounds associated with the private dwelling ‘The Old Vicarage’ which is located within Vicarage Gardens to the south-east of the centre of the market town of Nailsworth, Gloucestershire.



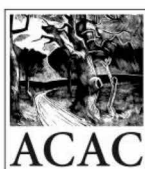
**Figure 1:** Site Plan showing location of each of the trees inspected during the survey. Source: Google maps 2024.

- 4.2 The site includes the main garden area around the dwelling as well as an embankment to the east which drops away down to Avening Road. There are a number of early-mature to mature trees within the main garden area with more scrubby/unmanaged early-mature trees located on the embankment.
- 4.3 There is a public right of way which bisects the garden area and the embankment. This runs from north to south-east and along the eastern boundary of the garden area. This allows access for users of the open space area to the south.



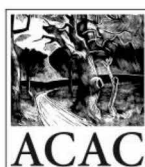
## 5. SURVEY METHODOLOGY

- 5.1 The tree survey was carried out and aided by the Visual Tree Assessment (VTA) method - Mattheck and Breloer (1998).
- 5.2 Trees were surveyed individually or as groups when it was considered that they had grown together to form cohesive arboricultural features. However, where it was considered that there was an arboricultural need to differentiate between attributes trees within groups, these were also surveyed as individuals.
- 5.3 Within the tree survey schedule, each surveyed tree (T), group (G), hedgerow (H) or woodland (W) on or adjacent to the site is given a reference number which refers to its position on the tree survey plan.
- 5.4 Heights are measured in metres. They are recorded to the nearest half metre.
- 5.5 Stem diameters are measured in millimetres and are rounded to the nearest 10 millimetre. Single stemmed tree diameters are measured at 1.5 metres above ground level or, where a fork or swelling makes this impractical, at the narrowest point beneath.
- 5.6 An average radius of canopy spread was measured in metres.
- 5.7 Life stage is defined as Y – young (stake dependent), SM - Semi-Mature (still capable of being transplanted without preparation, up to 30cm girth and not yet sexually mature), EM – Early Mature (not yet having reached 75% of expected mature size), M – Mature (anything else up to normal life expectancy for the species), OM – Over Mature (anything beyond mature and in natural decline), V – Veteran.
- 5.8 Structural condition is described as Good (without any observable significant bio-mechanical structural weaknesses), Fair (with minor biomechanical structural flaws. Some remedial action may be required), Poor (with significant biomechanical weaknesses requiring intervention particularly where risk management is required).
- 5.9 Physiological condition is described as Good (no indications of impaired physiological function and in optimum condition for age and species), Fair (with indicators of reduced vitality. Some intervention may be required), Poor (with significantly impaired physiological function for age and species).
- 5.10 General observations are recorded in relation to a tree's structural and/or physiological condition (i.e. the presence of any decay or physical defect). This will also highlight the need for further detailed inspection if considered a requirement.





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- 5.11 A tree risk assessment (VALID) was undertaken for any significant defect identified associated with a tree/tree group when located close to publicly accessed areas. This was used as a tool to make a balanced assessment of the risk of harm in relation to that defect and potential target. The VALID Tree Risk Management Benefit Strategy/assessment reports are included within the survey results.
- 5.12 Tree Work Recommendations in relation to identified defects and risk assessment if carried out.
- 5.13 The work priority was highlighted in 5 main categories. These included;
- **Priority 1 – High** (to be carried out within 3 months).
  - **Priority 2 - Moderate** (to be carried out within 12 months of survey).
  - **Priority 3 – Low** (to be carried out within 24 months of survey).
  - **Priority 4 – Discretionary tree works** – not essential but may be considered.
  - **N/a - No Work** required.

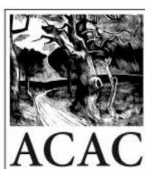


## 6. SURVEY FINDINGS AND DISCUSSION

- 6.1 The tree survey was focused on the large Horse Chestnut tree located within the rear garden, as well as a small group of Sycamore trees located on the embankment and adjacent to the public right of way to the eastern boundary to the garden area.
- 6.2 These survey items were identified as individual trees T1/T2, and tree group G1. Survey notes are included within the tree survey schedules at **Appendix 1**.

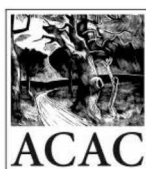
### Horse chestnut T1

- 6.3 This is a substantial tree located to the south-west of the main dwelling. It was measured at over 20 metres in height with an approximate canopy spread of over 20m. The stem of the tree is located approximately 8.5 metres from the rear elevation of the dwelling on a raised section of the garden.
- 6.4 The tree has been subject to past management. Most recently the management was to raise the canopy by 9 metres (consent reference - S.17/0857/TPO) in 2017 and it was also noted during the tree survey that the entire canopy had been reduced in size at some time in the past. The tree has re-formed a new canopy with substantial regrowth.
- 6.5 The tree had mature ivy to the stem which inhibited inspection and therefore was removed with hand tools to 4m in height to reveal the tree stem and bole area. On inspection, there are no significant defects to the stem and main bole area. Unions for the substantial main scaffold branches were considered good with adaptive growth bolstering the unions. Some fibre-buckling was noted to the underside of some of these substantial limbs but not thought to be significant.
- 6.6 The main canopy appears to be in reasonable condition. Some unions to secondary scaffold branches were obscured by ivy and therefore could not be inspected. The tree has recovered well following the past canopy reduction although some minor cavities have formed at past pruning cuts which is not uncommon. The bud density and vigour of the tree appears to be good.
- 6.7 More of a concern is the recent (2017) excessive canopy lift to approximately 9 metres. This has resulted in the main scaffold branches being 'end weighed' (where all the weight and leaf mass is retained at the end of a main branch). This in turn can change the mechanical balance to the structure of the canopy. This 'high-canopy' form could make the tree more susceptible (during adverse weather conditions) to limb failure due to the increased stress between the unions and the main stem. Having said that, these unions are reasonably good, and the tree has laid down good adaptive growth on upper side of the union (Photo



- 3). It was also noted that the tree has recovered well from the canopy lifting works, with significant epicormic growth to all major limbs within the lower canopy section. This will form a new lower canopy over time and help stabilise the tree.
- 6.8 Concerns were raised for the large limb over the Boules pitch to the south within the open space area. Although no major defects were noted to this limb, a VALID risk assessment (RA) was made to assess whether management would be required to the limb. The RA confirmed an ‘acceptable’ risk meaning management is not generally required. The RA form is included at **Appendix 2**.
- 6.9 The tree is large for its location being under 9 metres from the rear elevation of the dwelling. The canopy does overhang the main dwelling as well as neighbouring gardens and the public open space to the south.
- 6.10 Although no formal site investigation has been undertaken to whether the tree is impacting the foundations of the dwelling, concern was referenced by the Structural Engineer during the recent purchase of the dwelling in late 2023. Although there may be potential for the tree to influence underlying soils beneath the dwelling due to its size and distance from the structure, many factors such as foundation depth, soil type, whether a clay soil is present, species type will all have to be considered. Without a full Engineers Report and Site Investigation suggesting the tree is causing indirect damage, this is out of the scope of this report.
- 6.11 Options for management of the tree could be;
1. **Remove the tree.** The tree has offered a contribution to the local and wider landscape for many years. It has now become large for its location and past management may impact its longevity. Its overall form is average but does offer amenity value from publicly accessed areas. It would be to SDC’s discretion to whether removal would be allowed and would follow a period of consultation.
  2. **Reduce the tree.** As the tree is oversized for its location and past management may result in limb failure (end weighed limbs), a solution would be to reduce the canopy as previously undertaken. This would reduce potential of limb failure on to the dwelling and neighbouring gardens/public open spaces, increase light to the dwelling, reduce the over-bearing impact of the tree and reduce the potential of the tree to influence underlying soils through water uptake and root growth (Hort Link Project 212).

As there has already been canopy reductions to this tree and other neighbouring protected trees within Vicarage Gardens, this approach is considered appropriate and reasonable.



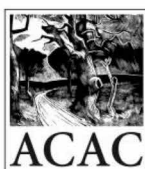
- 6.12 Any work to this tree would be subject to a formal Tree Work application to SDC. The tree officer will assess the proposed tree works against planning policy (local and national), as well as receiving comments from relevant parties during a consultation period. This will allow a final decision to be made which is usually following a 6-week period.
- 6.13 Considerations before any works commence would be concerning wildlife legislation (bats and birds) and potential heave implications if the tree is removed/reduced significantly. Therefore, before any works commence, guidance should be obtained from a suitably qualified Structural Engineer regarding potential impacts to the dwelling and also a qualified Ecologist regarding potential impact to wildlife during or following the works.

### **Sycamore T2**

- 6.14 This is an early-mature tree located to the east of the main garden area and adjacent to the public right of way to the open space area. The tree was considered typical of that species within a wooded setting. The canopy was drawn up and suppressed by neighbouring trees. The stem was leaning but has righted itself over time, with the upper canopy now straight.
- 6.15 The tree is located on a wooded embankment, with limited rooting space, compromised by the slope of the embankment. Having said that, following the inspection there were no signs of root-plate movement or any mechanical defects which may indicate the tree is a hazard.
- 6.16 There was some minor deadwood (up to 40mm in diameter). Some of this was over the public right of way and could potentially fail, although this is likely to occur in adverse weather conditions. As a precaution, any deadwood over the footpath within the canopy of this tree, should be removed as a low priority.

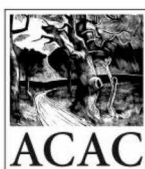
### **Sycamore G1**

- 6.17 This was a self-set tree group which were situated off-site but adjacent to the boundary. Again, these are typical for their species and location. Canopies are drawn up and suppressed. There is ivy to stems which can obscure potential structural defects. One tree was noted to have a very misshapen form and another with notable deadwood. Although these trees are the responsibility of the neighbouring landowner, some management should be carried out in the form of the removal of deadwood and the misshapen tree adjacent to the public right of way. Again, these recommendations are of a low priority.



## 7. SUMMARY

- 7.1 The tree survey focused on the mature Horse chestnut tree (T1) within the main garden area and the Sycamore trees (T1, G2) located on the embankment to the east of the dwelling.
- 7.2 No major defects were noted to Horse chestnut T1 during the tree survey. There is concern that past management could result in future limb failure unless some sort of management is carried out in the future.
- 7.3 The Horse chestnut tree (T1) is protected by a Tree Preservation Order (TPO547/T4) and therefore, formal written consent from Stroud District Council will be required before any tree works are carried out.
- 7.4 The removal of a protected tree is usually only allowed if a notable defect is present, or it can be demonstrated that the tree is the main causation of a subsidence event. As neither of these are currently relevant, and the fact that the tree has good prominence within the local and wider landscape and offers good visual amenity, it may be difficult to gain consent to remove the tree even though it is oversized for its location. Another factor is that the site is on the boundary of an area of outstanding natural beauty (AONB). The removal of the tree may also conflict with Policy ES7 (Landscape Character) within Stroud District Council's Local Plan. This will be a consideration when the tree work application is being determined.
- 7.5 Considering the above, I would recommend a canopy reduction of the tree which would address many issues the tree presents for its location. It should be possible to reduce the canopy by 40% and still retain the overall amenity of the tree but reduce the over-bearing effect the tree presents. As other canopy reductions have already been allowed to other protected trees within Vicarage Gardens, this has set a precedent and SDC are likely to allow the proposed works.
- 7.6 As the tree was measured at 23 metres in height, this would equate to a 9-metre reduction from its height with a reduced lateral reduction (4-5 metres) to allow the trees form to be retained.
- 7.7 The tree appears to be in good physiological condition. I consider that the proposed reduction should have limited impact to the trees overall health and should recover overtime to form a new much more compact canopy.
- 7.8 Any tree works should be undertaken by a fully qualified and competent tree contractor and in accordance with industry best practice (*BS3998:2010 – Tree Work – Recommendations*).
- 7.9 It is recommended that the Horse chestnut tree has its condition assessed on a regular basis. This should be carried out on a 3-4 yearly cycle.



## APPENDIX 1

### TREE SURVEY SCHEDULES AND PHOTOGRAPHS



# TREE SURVEY SCHEDULE

Site: The Old Vicarage, Nailsworth

Date: 16.01.24

Client: XXXXXXXXXX



## TREES

Tree Number	Species	Height in metres	Canopy spread (radius in metres)	Stem Diameter in mm	Life stage	Structural condition	Physiological condition	General observations	Tree work Recommendations	Risk assessment?	Priority
T1	Horse chestnut	23.0	10.5	1360	FM	Good	Good	Substantial tree, very prominent from public accessed areas (highway/park area). Canopy reduced in past to 18m but now with 2-3 years regrowth. Form is good and tree recovered well. Tree approximately 8.5m from dwelling (rear elevation). Clear stem to 4m then splits in to 6 main laterals to form canopy. Bud density and vigour appears to be good. Ivy to stem (mature) - removed to 4m to allow inspection of stem. Canopy lifted in past to leave high canopy form (Photo 5). Clearance at base has not revealed any cavities, minor staining to bark in places. Stem to bole - historic longitudinal wounds, minimal decay - good adaptive growth around wounds (Photo 6). Minor epicormic growth to stem/base. Cavity pocket at bole on south-eastern section. Inspection shows little decay and good adaptive growth around union - 3 main leaders from this union appear to be good. Main unions at bole (6 in total) all appear to be good with adaptive growth. Some fibre buckling to underside of main scaffold branches which is to be expected due to size of the branches. Canopy - unable to assess secondary unions due to ivy growth. Some epicormic growth to lower canopy. Cavity formation at old branch wounds (historic and not thought to be significant). Some main leaders over extended and have been 'end weighted' from past management - unions to these limbs appear to be good.	See tree report.	Yes - limb over boules pitch.	N/a
T2	Sycamore	17.5	5	550	EM/M	Fair	Fair	Tree located on embankment, slight lean to north, but has righted itself over time, suppressed form due to neighbouring trees. Old ivy to stem, some minor deadwood to 40mm over footpath. Debris at base has been cleared.	Remove deadwood over footpath.	No	Low

## GROUPS

Group Number	Species	Number of stems (est)	Max height in metres	Max dbh in mm	Life stage	Structural condition	Physiological condition	General Observations	Tree Work Recommendations	Risk assessment?	Priority
G1	Sycamore	4	18	500	EM/M	Fair	Fair	Trees located on embankment, debris at base, ivy to stems. Mis-shaped and drawn up in form, dead limbs within canopies - low risk over embankment.	Remove mis-formed stem over footpath/ remove deadwood	No	Low



**Photo 1:** Looking west towards mature the Horse chestnut T1 which is situated close to the boundary fence to the property. Note the canopy overhangs part of the adjacent open space area.



**Photo 2:** Looking south-east towards Horse chestnut T1. The tree is approximately 8.5m from the adjacent dwelling.



**Photo 3:** One of the unions (stem over open space area). Note adaptive growth on the upper side of the union. No decay pockets were noted at all unions within the bole.



**Photo 4:** Looking south towards the stem of Horse chestnut T1. The mature ivy was removed from the stem to allow the inspection.



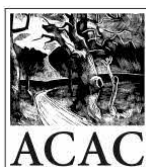
**Photo 5:** Limb to the north growing towards the dwelling. Note that the lower laterals have been removed in the past resulting in an end weighed limb, this is consistent with all other main scaffold limbs.



**Photo 6:** Longitudinal historic bark damage to south-western section of stem. No decay identified and adaptive growth noted around the old wound. This feature is not thought to be significant.



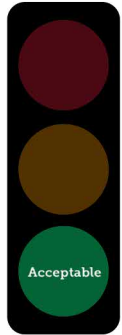
**APPENDIX 2**  
**VALID RISK ASSESSMENTS**



### Horse Chestnut (T1)



<b>Highest Risk</b>	Acceptable
Risk Reduction	N/a
Tree Management	N/a
<b>Review Year</b>	<b>2027</b>
Date Assessed	2024-01-16 10:42
Assessed By	[Redacted]
Phone Number	[Redacted]
Email	[Redacted]



### Summary

### Risk

### Tree Details and Location



Species	Height (m)	Stem Ø (cm)	Crown Ø (m)
Horse Chestnut Aesculus hippocastanum	23	1360	10.5

### Risk Inputs

### Likelihood of Occupation



People



Weather Affected



Group

0



### Consequences



Tree



Stem



Branch



Deadwood

C



### Likelihood of Failure

VITALITY	<b>V</b>	crown density woundwood response growth	G
ANATOMY	<b>A</b>	wood properties architecture H/D ratio	A
LOAD	<b>L</b>	exposure changes to the tree changes around tree	A
IDENTITY	<b>I</b>	species profile age of wounds CODIT	G
DEFECT	<b>D</b>	soundwood decay - extent feature or fault	G

F

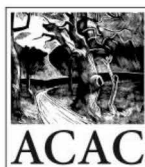


### Notes

The highest risk is acceptable

## **APPENDIX 3**

## **REFERENCES**



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