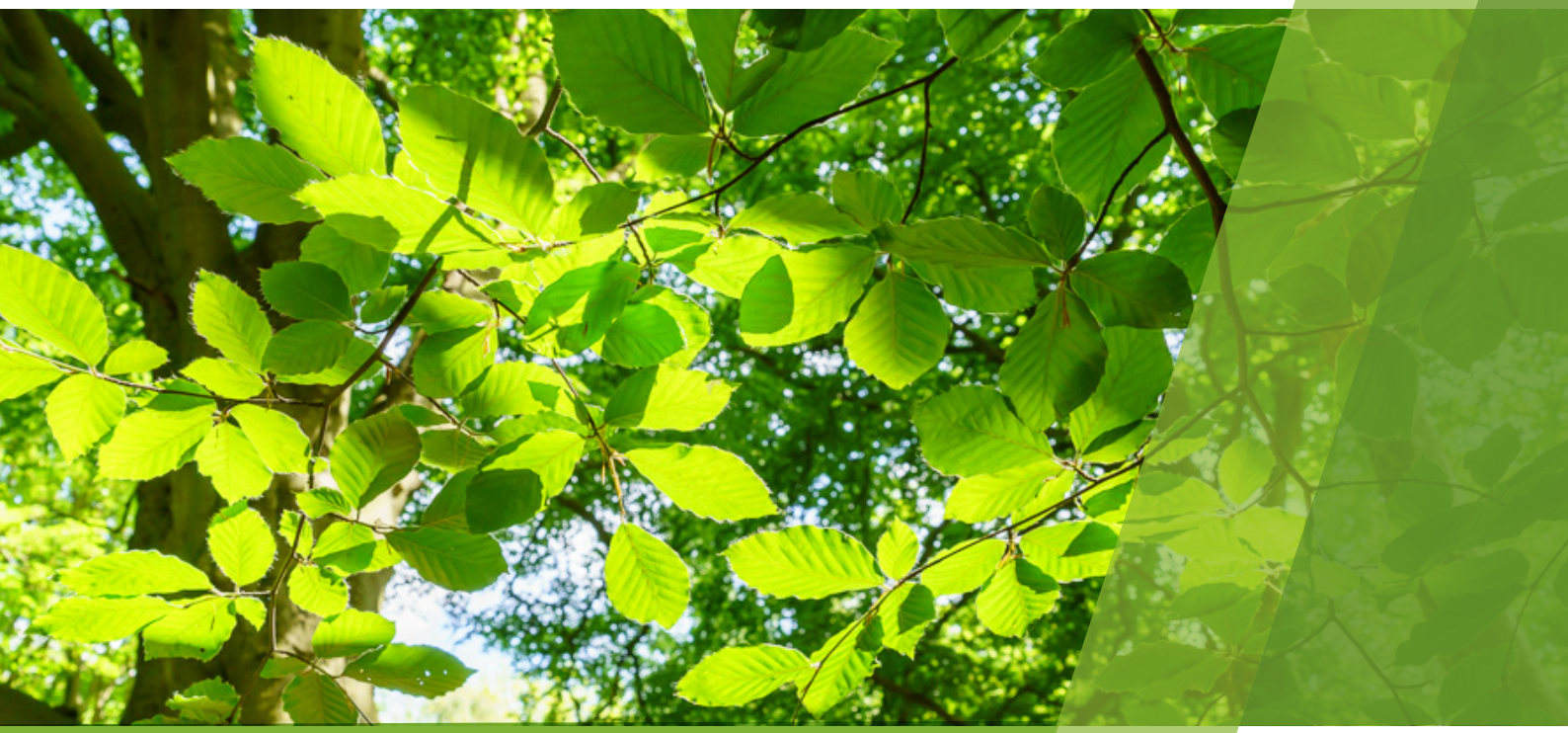
Greenwood



TREE RISK-BENEFIT MANAGEMENT REPORT

LOCATION: 5 The Grove Highgate London N6 6JU

CLIENT: Bartholomew Landscapes Limited

AUTHOR: Oliver Tong ND Arb TechArborA

DATE: 4th November 2022

REF: 1556

Greenwood Environmental Ltd 10749899 GB328956949 Juniper House, Warley Hill Business Park, The Drive, Brentwood, Essex, CM13 3BE

hello@greenwood-env.co.uk

EXECUTIVE SUMMARY

Greenwood Environmental Ltd was commissioned in October 2022 by Bartholomew Landscapes Limited, to carry out detailed inc. advanced tree risk assessments of two protected trees: **T1 Cider gum** and **T12 Holm oak**, located at 5 The Grove Highgate London N6 6JU, and to prepare a tree risk management report.

Detailed tree risk assessments have been carried out for both trees in accordance with VALID Tree Risk-Benefit Management & Assessment:

- The highest risk posed to people from whole tree failure of tree T1 Cider gum, has been assessed as **Red - Not Acceptable** this risk level will need to be reduced to an Acceptable level.

- The highest risk posed to people from whole tree failure of tree T12 Holm oak, has been assessed as **Amber - Not Tolerable** this risk level will need to be reduced to an Acceptable level, but with a lower priority than Red - Not Acceptable risks.

In addition, each tree was subject to an advanced tree risk assessment with a single sonic tomography test, using the ARBOTOM® Sonic Tomograph, which is an instrument for tree risk assessment and wood quality evaluation. Significant hollowing and/or decay was detected for both trees, the section modulus calculation combined with the deterioration leads to a relative loss in load-carrying capacity of the cross-section of approximately -24% for T1 Cider gum and -25% for T12 Holm oak.

To reduce the highest risk identified to people from whole tree failure to acceptable levels, it will be necessary to carryout works to both trees:

- **T1 Cider gum**: it is considered that whole crown reduction pruning of 2m, to reduce the load on the decayed stem, would result in a reduction of risk to an acceptable level. However, due to the pattern of decay and the presence of incipient decay through the cross-section combined with the known characteristics of the species being a relatively poor compartmentaliser of decay, complete removal of the tree is considered a more appropriate long term risk management option for this tree.

- **T12 Holm oak**: whole crown reduction pruning of 1m, to reduce the load on the decayed stem, is considered sufficient to reduce the risk to an acceptable level.

Prior to the work, written permission will be required from the local planning authority. If granted, it is likely that a replacement tree will be made a condition for the removal of tree T1 Cider gum. Tree works should be carried out in accordance with British standard BS3998:2010 - Tree work – Recommendations.

Retained trees should be subject to detailed inc. advanced tree risk assessments on a biennial basis.

CONTENTS

APPENDIX

1.0 Introduction and scope

1.1 Greenwood Environmental Ltd was commissioned in October 2022 by Bartholomew Landscapes Limited, to carry out advanced tree risk assessments of two trees located at 5 The Grove Highgate London N6 6JU, and to prepare a tree risk management report.

1.2 Assessments were carried out by the author on the 18th of October 2022.

1.3 The presence of internal wood decay of the lower stem of both trees has been identified during a previous survey carried out on the 24th of April 2021, as part of an arboricultural impact assessment (Ref: TSS/5TGV/AIA/01b), prepared by Landmark Trees, in connection with the re-development of the property.

1.4 For ease or reference we have re-used the same tree ID numbers from the AIA report, namely trees T1 Cider gum and T12 Holm oak.

1.5 The purpose of the assessment is to establish the structural condition of the trees at the height of assessment, the level of risk, and if found to be unacceptable or not tolerable, to make recommendations for any mitigation works deemed necessary to reduce risk posed to people and/or property to acceptable or tolerable levels.

1.6 This will demonstrate that the tree owner is meeting their 'duty of care' under the Occupiers Liability Act 1957 and 1984.

2.0 Limitations

2.1 The report refers to the condition of the trees on the day that the assessment was undertaken. Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a one-year period from the date of the assessment. Any alteration to the site or re-development could change the current circumstances and may invalidate this report and any recommendations made.

2.2 The assessment of tree condition is based on a visual tree assessment (VTA) and results of any advanced assessments. We have not taken any soil / leaf or root samples for analysis and the tree has not been climbed but inspected from ground level only. The report is valid only for typical weather conditions. Healthy trees, or parts of healthy trees, may fail in normal weather situations, although the risk is significantly increased in storm conditions and as the consequences of such weather events are unforeseeable, Greenwood Environmental Ltd cannot be held liable for any such failures.

2.3 Trees are dynamic structures that can never be guaranteed to be 100% safe; even trees in good condition can suffer damage or failure under average conditions. Regular inspections by competent and / or suitably qualified arboriculturists will help to identify potential problems before they become acute.

2.4 Unless stated otherwise, assessments are limited to the above ground parts of trees and does not include assessment of the condition of belowground structural roots.

2.5 A lack of recommended work does not imply that a tree is safe and likewise it should not be implied that a tree will be made safe following the completion of any recommended work.

2.6 This report is concerned solely with the condition of the trees and does not consider any effect that vegetation may be having or may have on nearby structures, which is considered outside the scope of this report.

3.0 Legal protection status of trees

3.1 Formal enquires have **not** yet been made regarding the legal protection status of the trees. However, it is understood that the trees are protected by tree preservation order (TPO). Additionally, the property is located within the Highgate Conservation Area.

3.2 The Town and Country Planning (Tree Preservation) (England) Regulations 2012 allows for trees with high amenity value to be protected by tree preservation order (TPO), which can be applied on individual trees, groups, areas, and woodlands.

3.3 Trees located within a conservation area which have a stem diameter of 75mm or greater measured at 1.5m are automatically afforded similar protection as those with a TPO. Works to trees within these areas require that the LPA to be given 6 weeks written notice unless an exception applies. This notice period gives the authority an opportunity to assess the tree/s and consider whether a TPO should be applied or not.

3.4 An Order prohibits the: cutting down, topping, lopping, uprooting, willful damage, or willful destruction of trees without the LPAs written consent. If consent is given, it can be subject to conditions which have to be followed. In the Secretary of State's view, cutting roots is also a prohibited activity and requires the authority's consent.

4.0 Tree risk management

4.1 The overall risk to human safety from tree failure is extremely low. Each year between five and six people in the UK are killed by trees, which equates to a risk of about one in ten million.

4.2 The Health and Safety Executive's (HSE) tolerability of risk framework recommends that risks above 1/10,000 per annum are generally considered unacceptable when placed on the public. Risks between 1/10,000 and 1/1,000,000 per annum are tolerable, but consideration should be given to managing them 'as low as reasonably practicable' (ALARP), where it is cost effective to do so. Risks below 1/1,000,000 are considered broadly acceptable and are comparable to those that people regard as insignificant within their daily lives (HSE 2001).

4.3 In 2011, following extensive industry and government consultation, The National Tree Safety Group (NTSG) produced its guide to tree risk management - Common Sense Risk Management of Trees. Its overall approach is that the evaluation of what is considered reasonable tree management should be based on a balance between the benefits and risks from trees. This position is underpinned by a set of five key principles:

- Trees provide a wide variety of benefits to society.
- Trees are living organisms that naturally lose branches or fall.
- The overall risk to human safety is extremely low.
- Tree owners have a legal duty of care.
- Tree owners should take a balanced and proportionate approach to tree safety management.

5.0 Detailed tree risk assessments

5.1 Detailed tree risk assessments have been carried out for both trees in accordance with VALID Tree Risk-Benefit Management & Assessment.

5.2 The highest risk posed to people from whole tree failure of tree T1 Cider gum, has been assessed as **Red - Not Acceptable** this risk level will need to be reduced to an Acceptable level.

5.3 The highest risk posed to people from whole tree failure of tree T12 Holm oak, has been assessed as **Amber - Not Tolerable** this risk level will need to be reduced to an Acceptable level, but with a lower priority than Red - Not Acceptable risks.

5.4 The corresponding tree risk assessment reports can be found in appendix A.

6.0 Advanced tree risk assessments

6.1 In addition, each tree was subject to an advanced tree risk assessment with a single sonic tomography test using the ARBOTOM® Sonic Tomograph, which is an instrument for tree risk assessment and wood quality evaluation. It provides an impression of the inner condition of a tree in very little time. Stress waves travel through sound wood faster than through damaged wood. Sensors around the tree measure the time it takes an impulse to travel through the wood and reach the other sensors. The collected data is simultaneously sent to a computer which will turn the data into a coloured image of the tree's cross-section.

Tree T1 Cider gum

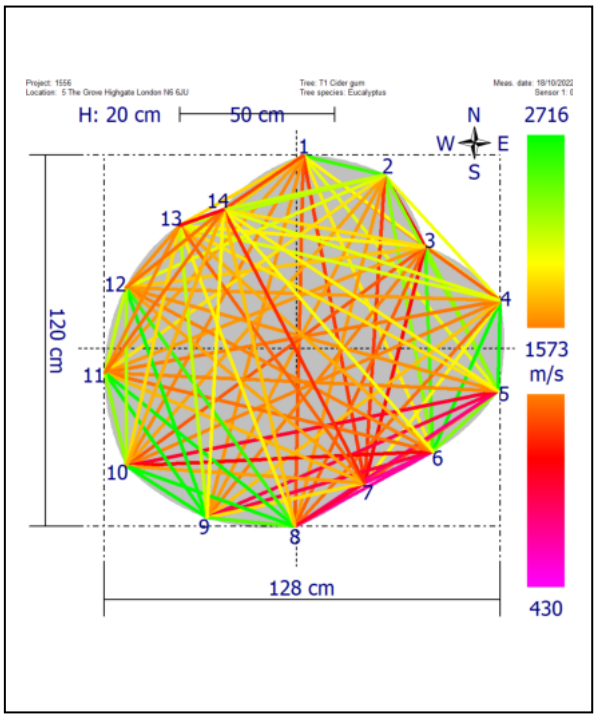


Figure 1. View of line tomogram.

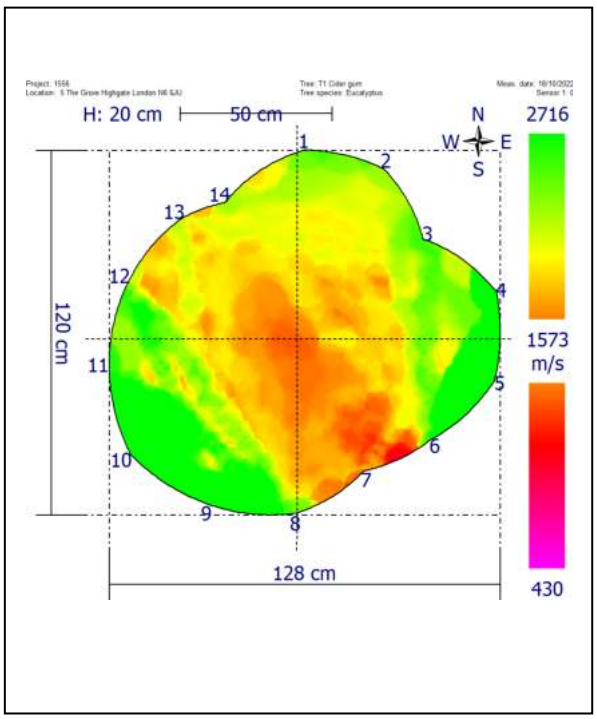


Figure 2. View of 2D tomogram.

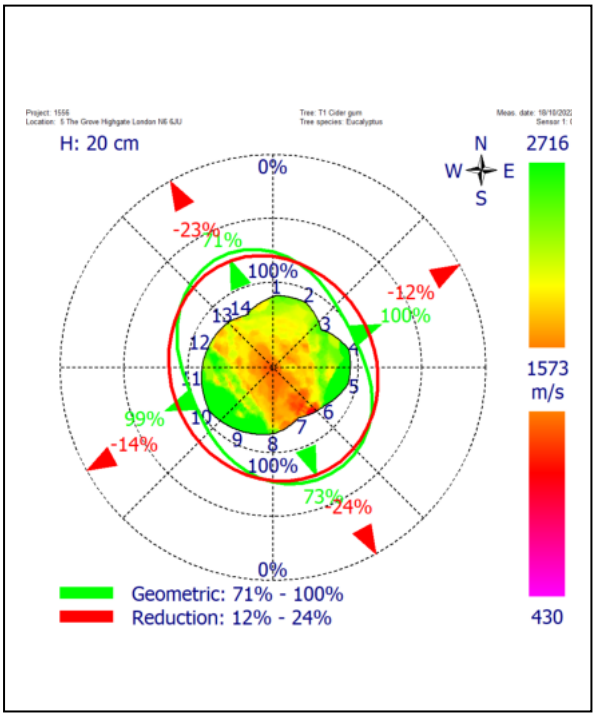


Figure 3. View of 2D tomogram with mechanical stress loss percentage indicated in the direction of the red arrows.

The stress-wave (='sonic') tomogram of the stem reveals some advanced internal decay areas and/or cracks (red/yellow) and strong/intact outer sections (green).

The section modulus calculation combined with the deterioration leads to a relative loss in load-carrying capacity of this cross-section of approximately -24%.

Due to the offset location of the deterioration, this loss isn't distributed evenly for all wind directions.

The stem structure is optimised for winds coming from a south westerly direction

Figure 4. View of tree T1 Cider gum

Figure 5. Close-up view of stem base and sensor positions, with *Ganoderma sp.* fungal fruit body circled at sensor position no.7

Tree T12 Holm oak

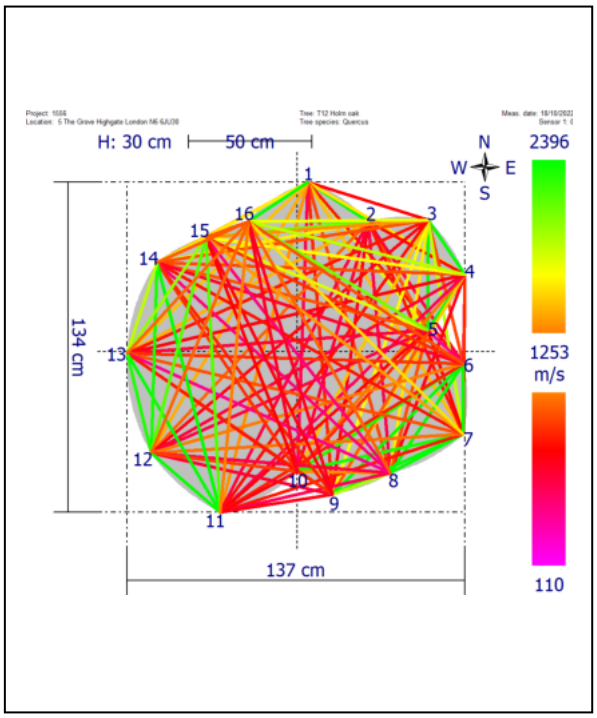


Figure 6. View of line tomogram.

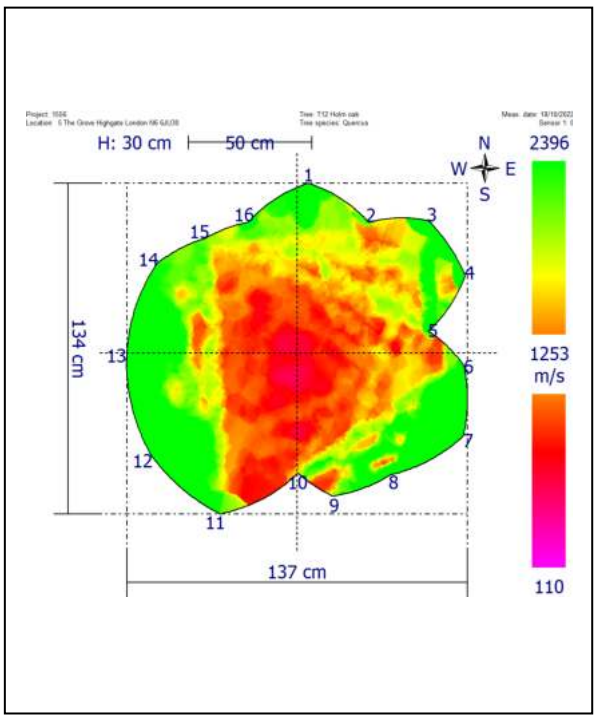


Figure 7. View of 2D tomogram.

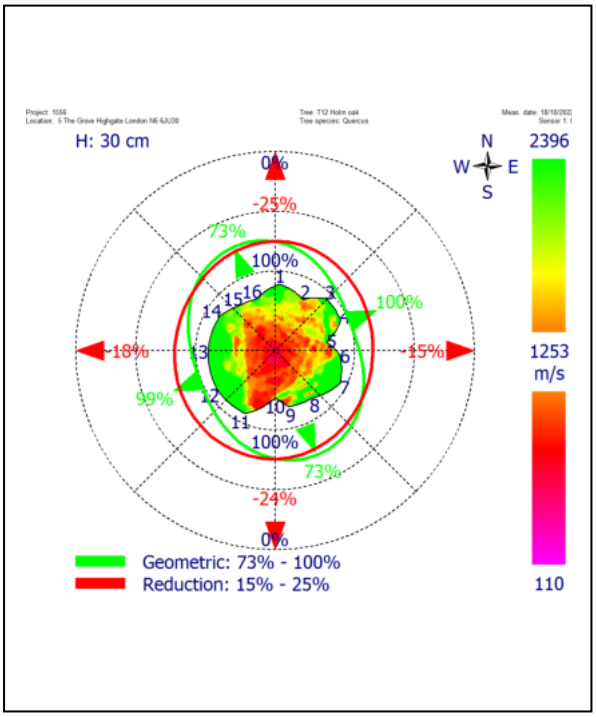


Figure 8. View of 2D tomogram with mechanical stress loss percentage indicated in the direction of the red arrows.

The stress-wave (='sonic') tomogram of the stem reveals some advanced internal decay areas and/or cracks (red/yellow) and strong/intact outer sections (green).

The section modulus calculation combined with the deterioration leads to a relative loss in load-carrying capacity of this cross-section of approximately -25%.

Due to the offset location of the deterioration, this loss isn't distributed evenly for all wind directions.

The stem structure is optimised for winds coming from a south westerly direction

Figure 9. View of tree T12 Holm oak

Figure 10. Close-up view of stem base with sensor positions, there is a small open basal cavity at position 10

7.0 Risk reduction

7.1 To reduce the highest risk posed to people from whole tree failure to acceptable levels, it will be necessary to carryout works to both trees.

7.2 It is considered that whole crown reduction pruning of 2m, to reduce the load on the decayed stem of tree T1 Cider gum, would result in a reduction of risk to an acceptable level. However, due to the pattern of decay and the presence of incipient decay through the cross-section combined with the known characteristics of the species being a relatively poor compartmentaliser of decay, complete removal of the tree is considered a more appropriate long term risk management option for this tree.

7.3 Whole crown reduction pruning of 1m, to reduce the load on the decayed stem of tree T12 Holm oak, is considered sufficient to reduce the risk to an acceptable level.

7.4 Retained trees should be subject to detailed inc. advanced tree risk assessments on a biennial basis.

7.5 Prior to the work, written permission will be required from the local planning authority. If granted, it is likely that a replacement tree will be made a condition for the removal of tree T1 Cider gum.

7.6 Tree works should be carried out in accordance with British standard BS3998:2010 - Tree work – Recommendations.

APPENDIX A

Tree Risk Assessment Reports

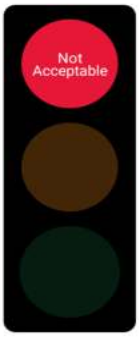
Cider Gum Eucalyptus (T1) | Detailed Tree Risk-Benefit Assessment

Cider Gum Eucalyptus (T1)

Summary

Highest Risk	**Not Acceptable**
Risk reduction	Crown reduce
Tree Management	Remove
Review Year	**2024**
Date Assessed	2022-11-04 04:29 pm
Assessed By	Oliver Tong
Phone Number	02080640870
Email	Hello@greenwood-env.co.uk

Risk



Tree Details and Location

Species	Height (m)	Stem Ø (cm)	Crown Ø (m)
Cider Gum Eucalyptus Eucalyptus gunnii	13	760	13

Highgate
London
N6 6JU

Risk Inputs

Likelihood of Occupation

O
2
High

Consequences

C
1
Very High

Likelihood of Failure

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

Sparse canopy, deadwood

High height to diameter ratio

Recent removal of trees has increased exposure

Species poor compartmentaliser of decay

Ganoderma sp. fungal fruit body present on South side of stem base, extension internal decay inc. incipient decay detected affecting shel...

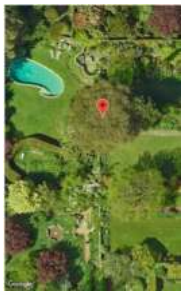
F
2
High

Notes

The highest risk is whole tree failure

Holm oak (T12)

Tree Details and Location



Likelihood of Occupation

Consequences

Likelihood of Failure

VITALITY	V	crown density woundwood response growth	A
ANATOMY	A	wood properties architecture H/D ratio	3
LOAD	L	exposure changes to the tree changes around tree	A
IDENTITY	I	species profile age of wounds CODIT	3
DEFECT	D	soundwood decay - extend feature or fault	A

Notes

Summary

Risk

Highest Risk	**Not Tolerable**
Risk reduction	Crown reduce
Tree Management	Crown reduce, re-assess biennially
Review Year	**2024**
Date Assessed	2022-10-18 2:00 pm
Assessed By	Oliver Tong
Phone Number	020 8064 0870
Email	Hello@greenwood-env.co.uk

Species	Height (m)	Stem Ø (cm)	Crown Ø (m)
Holm oak Quercus ilex	9	101	12

Highgate
London
N6 6JU

Risk Inputs

O
2
High

C
1
Very High

Slightly sparse canopy, poor extension growth

Low height to diameter ratio, good buttress root development

Slight increase in exposure due to recent tree removal works in vicinity

Species good compartmentaliser of decay

Hollowing of lower stem, small open basal cavity to South

F
3
Moderate

The highest risk is whole tree failure

APPENDIX B

Summary Tree Risk-Benefit Management Strategy

1 Our tree risk-benefit management strategy

Why and how we're going to manage the risk from our trees and branches falling

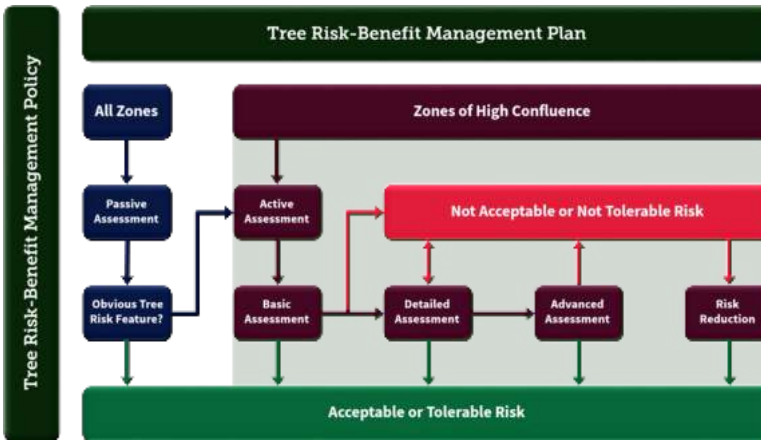
1 The structure of our Tree Risk-Benefit Management Strategy is illustrated in the flowchart below. Everything follows from the Policy, which sets out our position on trees, their benefits, and the risks. In brief, our Policy says;

- Trees give us many benefits that we need
- The overall risk from trees and branches falling is extremely low
- We can't entirely remove the risk, and trees are living structures that sometimes shed branches or fall over; usually because of severe weather
- We have a duty of care to be reasonable, proportionate, and reasonably practicable when managing the risk
- We're going to manage the risk to an Acceptable or Tolerable level

The Plan explains how we'll carry out the Policy. We Plan to manage the risk by Passive Assessment in all zones of use. And by Active Assessment in Zones of High Confluence (high-use and large trees).

The Strategy at a glance

2



1.1 Passive Assessment

Picking up on Obvious Tree Risk Features you can't help but notice

3 Passive Assessment is simply picking up on Obvious Tree Risk Features you can't help but notice as you go about your daily routine. We carry it out in all zones of use. Passive Assessment is our most valuable risk management asset because it can be done by anyone and it's going on day in day out.

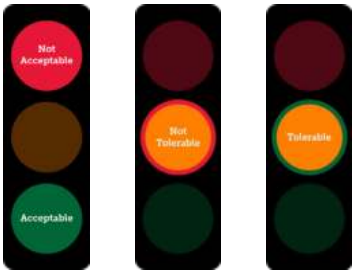
1.2 Active Assessment | Basic > Detailed > Advanced

Trained assessors looking to find risks that might not be Acceptable or Tolerable

4 Active Assessment is where we have trained assessors looking for risks that might not be Acceptable or Tolerable. Or where Passive Assessment has picked up an Obvious Tree Risk Feature that needs a closer look. Active Assessment has three levels to it that increase in depth of investigation from Basic, to Detailed, and up to Advanced for important trees. We'll carry out Active Assessment in zones of high confluence every 5 years.

1.3 Risk ratings

Risk ratings are as easy to understand as traffic lights



5 VALID has applied ISO 31000 : Risk Management and the Tolerability of Risk Framework to tree risk-benefit management and assessment, which we've adopted. We're going to manage the risk from our trees and branches falling using four easy-to-understand traffic light coloured risk ratings.

Red	**Not Acceptable** risks will be reduced to an Acceptable level
Amber	**Not Tolerable** risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks
Amber	**Tolerable** risks will not be reduced, but may require an increased frequency of assessment than green Acceptable risks
Green	**Acceptable** risks will not be reduced

APPENDIX C

Homeowner Tree Risk-Benefit Management Strategy

Tree Risk-Benefit Management Strategy

5 The Grove
Highgate
London
N6 6JU

Contact Arborist
Oliver Tong
Greenwood
020 8064 0870

Page

1 Establishing the context

Trees give us many benefits that we need

1 The more obvious benefits that trees give us are visual beauty in the landscape, wood, and the various crops they produce. Further values include wildlife habitat, pollution filtering, and reducing the harmful effects of both weather and climate change. Trees also have important social value as part of our culture, history, or because they commemorate an important event. As if all those benefits weren't enough, there's an ever-increasing body of scientific evidence shows trees are essential for our physical health, mental wellbeing, and quality of life.

The overall risk to us from trees and branches falling is extremely low

2 Compared to other everyday risks we readily accept, the overall risk to us from branches or trees falling is extremely low. Our annual risk of being killed or seriously injured is less than one in a million. That's so low, we're at greater risk driving about a 400km/250mi round trip to visit friends for a weekend than from branches or trees falling over an entire year. Given the number of trees we live with, and how many of us pass them daily, being killed or injured by a tree is a rare event; one that usually happens during severe weather.

We can't be an insurer of nature or eliminate the risk from trees

3 Of course, we can't be an insurer of nature, and trees are living structures that sometimes shed branches or fall over. But this usually happens because of severe weather. Or because they have an obvious risk feature. Since we need the many benefits from trees, we have to accept we can't remove all of the risk. Trees also drop leaves, bark, cones, nuts, and fruits, but the risk from this natural debris falling is so low it's Acceptable.

1.1 Duty of care

Reasonable
Proportionate
Reasonably practicable

4 We have a duty of care to manage the risk from our trees. The duty also says we should be reasonable, proportionate, and reasonably practicable when managing the risk. That means there's a balance we need to strike between the many benefits trees provide, the risk, and the costs of managing the risk. By taking a balanced approach, we don't waste resources by reducing risk - and losing benefits - when the risk is already Acceptable or Tolerable.

We all have a responsibility to make reasonable decisions

5 We're all expected to act reasonably and responsibly. When severe weather is forecast, we can manage our exposure to the higher risk from tree failure by not going out. If we go out, we're choosing to accept some of the risk.

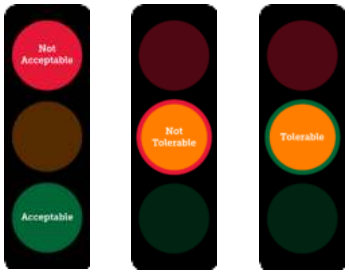
1.2 Risk tolerance

What's an Acceptable or Tolerable level of risk from our trees?

6 The Tolerability of Risk Framework (ToR) is an internationally recognised approach to making risk management decisions. It's used by duty holders where they manage a risk that's imposed on the public. ToR defines Broadly Acceptable and Unacceptable levels of risk. Between them is a region where the risk is Tolerable if it's 'as low as reasonably practicable' (ALARP). Put simply, ALARP means the risk is Tolerable if the costs of the risk reduction are much greater than the value of the risk reduction.

1.3 Risk-benefit management plan & risk ratings

Risk ratings are as easy to understand as traffic lights



7 VALID has applied ToR and ISO 31000 - Risk Management to tree risk-benefit management and assessment, which we've adopted. We're going to manage the risk from our trees with **Passive Assessment**. We have four easy-to-understand traffic light coloured risk ratings.

Red	**Not Acceptable** risks will be reduced to an Acceptable level
Amber	**Not Tolerable** risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks
Amber	**Tolerable** risks will not be reduced, but may require an increased frequency of assessment than green Acceptable risks
Green	**Acceptable** risks will not be reduced

2 When might a tree be dangerous?

Trees with the highest risk are the easiest to spot

Be watchful after storms

8 When a tree has a risk that might not be Acceptable or Tolerable, it'll often have an Obvious Tree Risk Feature that you can't help but notice. If we come across a tree, or the public report one, with anything like these obvious features in a well-used area, we'll get a **Validator** to have a closer look.

2.1 Root failure

Storms can break tree roots without blowing them over

Signs to look out for are

Change in angle of the trunk
Large cracks in the soil
Hump in the ground on one side

9 

2.2 Hanging branches

Don't forget to look up

Branches can break during storms and still hang on

Sometimes they can get stuck up there for quite a while

10 

2.3 A crack or split into the wood, beyond the bark

When trees bend and twist in storms the wood can split and crack

Vertical cracks in the bark are just the tree growing well there's no need to worry

11 

2.4 Decline & death

To stay healthy and strong trees need 'solar panel' leaves to make food

When trees suffer they often have much less leaf cover and many dead branches

Standing dead trees have great habitat benefits but need checking

12 

2.5 Decay fungi fruiting bodies

To decay fungi these 'fruits' are like apples to an apple tree

Decay fungi and trees mostly live happily together creating essential habitat for wildlife

Fungi can sometimes 'eat' too much wood and weaken the tree

13 

2.6 Construction Damage

Tree roots are surprisingly shallow

Trees can't repair wounds
Digging or building near trees makes them very vulnerable to damage

14 

Photographs
Jake Miesbauer, Michael Richardson, Roy Finch, Mark Hartley, Rick Milson, Andrew Benson, David Abrahams
Felicity Cloake & Wilf, David Humphries, Jack Prynn, Moreton Arboretum, Josh Behounek, Jan Allen

3 Simpler • Clearer • Smarter

The Strategy at a glance

15 Whether you manage or assess tree risk, we're here to help make your life less complicated and more effective.

From **Strategy** to **App**, we've got all your bases covered with the first complete tree risk-benefit management system. By taking out the *bafflegab* (vague and ambiguous words) and *numberwang* (questionable maths that you can easily get wrong) from tree risk, we've made it:

"*Uncomplicated...intuitive...simpler...clearer...smarter*"

This is what Duty Holders, Arborists, and other staff who we've trained as Basic Validators **are all saying**. These are some words you'll likely use to describe how you feel after you've validated your approach to tree risk.

3.1 Tree risk-benefit management

Reasonable
Proportionate
Reasonably practicable

16 Whether you're a Government Agency, Landowner, or Homeowner you have a duty of care to manage the risk from your trees falling or dropping branches. That duty of care says you should be reasonable, proportionate, and reasonably practicable when managing the risk to an Acceptable or Tolerable level.

VALID's got your back here with our full range of easy to understand and common sense **Tree Risk-Benefit Management Strategies**. As part of our not-for-profit goals, they're released under a creative commons license. That means they're *free* and open to *everyone*. **Validators** can help you customise these strategies. They also have a potted version to help you if you've not yet formally adopted a strategy.

3.2 Tree risk-benefit assessment

VALID has been stress-tested to breaking point

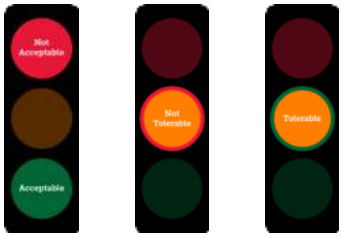
17 Our Tree Risk-Benefit Management Strategies do more than 99% of your assessments for you. When you need to carry out a *Detailed Assessment,* you'll use our super smart and intuitive **Tree Risk App**.

The engine of the App has been built with a Professor of Natural Hazards & Risk Science. The Professor's an internationally distinguished expert in this field. He's test-driven the model to breaking point:

> *"We have stress-tested VALID and didn't find any gross, critical sensitivities. In short, the mathematical basis of your approach is sufficiently robust and dependable for any practical purpose."*
>
> Willy Aspinall
> Cabot Professor in Natural Hazards & Risk Science
> University of Bristol

3.3 Tree risk ratings

Risk ratings are as easy to understand as traffic lights



18 Yes, it really is that clear and easy to understand. There's no confusion about what vague and ambiguous words or complicated numbers mean. We have four easy-to-understand traffic light coloured risk ratings.

Red	**Not Acceptable** risks will be reduced to an Acceptable level
Amber	**Not Tolerable** risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks
Amber	**Tolerable** risks will not be reduced but may require an increased frequency of assessment than green Acceptable risks
Green	**Acceptable** risks will not be reduced

3.4 Tree risk-benefit management advice & training

Visit our Training page
Or get in touch for help

19 We work with duty holders to help them manage the risk and benefits from their trees. We also **train** Arborists to become **Validators**, or staff who aren't Arborists to be **Basic Validators**.

APPENDIX D

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APPENDIX E

Legislation and Guidance for Trees

The following advice applies to England only and is for guidance purposes only. Some trees are protected by legislation, and it is essential that you establish the legal status of trees prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

Tree Preservation Orders (TPOs)

TPOs are administered by Local Planning Authorities (LPA) (e.g., a borough, district or unitary council or a national park authority) and are made to protect trees that bring significant amenity benefit to the local area. This protection is particularly important where trees are under threat.

All types of trees, but not hedges, bushes or shrubs, can be protected, and a TPO can protect anything from a single tree to all trees within a defined area or woodland. Any species can be protected, but no species is automatically protected by a Tree Preservation Order.

A TPO is a written order which, in general, makes it a criminal offence to cut down, top, lop, uproot, wilfully damage or wilfully destroy a tree protected by that order, or to cause or permit such actions, without the authority's permission. Anyone found guilty of such an offence is liable. In serious cases the case may be dealt with in the Crown Court where an unlimited fine can be imposed.

To make an application to carry out tree works you will need to complete an application form and submit it to the LPA. The form can either be submitted through the Planning Portal or directly to the LPA. You can find out more about TPOs in the Department for Communities and Local Government guide titled Protected trees: A guide to tree preservation procedures (withdrawn 7 March 2014) and it's replacement The National Planning Policy Framework and relevant planning practice guidance document with particular reference to Tree Preservation Orders and trees in conservation areas.

Conservation Areas

Normal TPO procedures apply if a tree in a conservation area is already protected by a TPO. But if a tree in a conservation area is not covered by a TPO, you have to give written notice to the LPA (by letter, email or on the LPA's form) of any proposed work, describing what you want to do, at least six weeks before the work starts. This is called a 'section 211 notice' and it gives the LPA an opportunity to consider protecting the tree with a TPO.

You do not need to give notice of work on a tree in a conservation area less than 7.5 centimetres in diameter, measured 1.5 metres above the ground (or 10 centimetres if thinning to help the growth of other trees).

You can find out more about trees in Conservation Areas in the Department for Communities and Local Government guide titled Protected trees: A guide to tree preservation procedures (withdrawn 7 March 2014) and it's replacement The National Planning Policy Framework and relevant planning practice guidance document with particular reference to Tree Preservation Orders and trees in conservation areas.

Trees and the planning system

Under the UK planning system, LPAs have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account when dealing with planning applications. Where trees are statutorily protected, it is important to contact the LPA and follow the appropriate procedures before undertaking any works that might affect the protected trees.

Planning conditions are frequently used by LPAs as a means of securing the retention of trees, hedgerows and other soft landscaping on sites during development and for a period following completion of the development. If it is proposed to retain trees for the long term then a TPO is often used rather than a planning condition. If valid planning conditions are in place then anyone wishing to undertake work to trees shown as part of the planning condition must ensure they liaise with the LPA and obtain any necessary consent or variation.

The nature and level of detail of information required to enable an LPA to properly consider the implications and effects of development proposals varies between stages and in relation to what is proposed. Table B.1 of British Standard *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations* provides advice to both developers and LPAs on an appropriate amount of information that will need to be provided either at the planning application stage or via conditions.

Felling Licences

Felling Licences are administered by the Forestry Commission. You do not need a licence to fell trees in gardens. However, for trees outside gardens, you may need to apply to the Forestry Commission for a felling licence, whether or not they are covered by a TPO. You can find out more about felling licences at Felling Licences quick guide (England) or in the Forestry Commission's booklet *Tree Felling – getting permission*.

Sites of Special Scientific Interest (SSSI)

SSSIs (ASSIs in Northern Ireland) are designated by the Statutory Nature Conservation Organisation (SNCO) for each country of the United Kingdom. They include some of our most spectacular and beautiful habitats - large wetlands teeming with waders and waterfowl, winding chalk rivers, gorse and heather-clad heathlands, flower-rich meadows, windswept shingle beaches and remote uplands moorland and peat bog. Each SSSI will have a management plan and a list of operations requiring the SNCOs consent prior to carrying out works.

Any activity that recklessly or intentionally harms the SSSI (ASSIs in Northern Ireland) or its flora or fauna will be an offence liable on summary conviction to a fine not exceeding £20,000 or on conviction on indictment to an unlimited fine. If you know the name of the Site of Special Scientific Interest and want to know more about it, you can search for it by country at England, Wales, Scotland or Northern Ireland.

Restrictive Covenants

A restrictive covenant is a promise by one person to another, (such as a buyer of land and a seller) not to do certain things with the land or property. It binds the land and not an individual owner, it "runs with the land". This means that the restrictive covenant continues over the land or property even when the current owner(s) sells it to another person. Restrictive covenants continue to have effect even though they may have been made many years ago and appear to be obsolete.

Covenants or other restrictions in the title of a property or conditions in a lease may require the consent of a third party prior to carrying out some sorts of tree work, including removing trees and hedges. This may be the case even if TPO, CA and felling licence regulations do not apply. It may be advisable to consult a solicitor.

Further information

Further information about TPO legislation can be found in the latest National Planning Policy Framework with particular reference to Tree Preservation Orders and trees in conservation areas.

More detailed information on TPOs: www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas#Flowchart-1-Making-and-confirming-TPO

**Source: The Arboricultural Association (24/11/2015 - Last Modified: 01/07/2019) - A brief guide to legislation for trees.*

High Hedges

Part 8 of the Anti-social Behaviour Act 2003 Allows local councils to deal with complaints about high hedges. When councils are determining a complaint, they must first decide whether the height of the high hedge is having an adverse effect on a neighbour's enjoyment of their home and/or its garden or yard. If it is, then councils can order the owner of a high hedge to take action to put right the problem and stop it from happening again. The legislation also allows councils to set and charge fees for handling these complaints.

The government has produced an information leaflet on the subject called Over the garden hedge, which can be found at the following web address: https://www.gov.uk/government/publications/over-the-garden-hedge

Occupiers Liability Act 1957 and 1984 The Occupiers Liability Act (1957 and 1984)

Places a duty of care on tree owners to ensure that no reasonably foreseeable harm takes place to people or property due to their tree. 'Common sense risk management of tree (National Tree Safety Group 2012)' states that, 'The owner of the land on which a tree stands, together with any party who has control over the tree's management, owes a duty of care in Common Law to all people who might be injured by the tree. The duty of care requires that reasonable steps are taken to avoid acts or omissions that could cause a reasonably foreseeable risk of injury to persons or property'.

Common law

Enables pruning back as far as the boundary line only, providing the work is reasonable and does not negatively impact tree health or safety. Other restrictions on tree works, such as tree preservation orders still apply.

Tree Work

All tree work should be carried out in compliance with BS3998: 2010 "Tree work – Recommendations", plus all relevant health and safety legislation, regulations and codes of practice.

Biosecurity

Where there is a risk of transferring pathogens to vegetation at other sites, felling and pruning equipment must be disinfected after use. Also consider brushing mud and debris from soles of boots, and spraying boots and vehicle tyres before leaving the site (suitable disinfectants include Propellar & Cleankill Sanitising Sprays). All disinfectants should be used in accordance with the recommended safety precautions (refer to the material data safety sheet for each product).

Wildlife & Countryside Act 1981 (as amended) and **Countryside and Rights of Way Act 2000**

It is an offence to intentionally or recklessly damage or destroy the nest of any wild bird while it is in use or being built. Please therefore check for the presence of nesting birds before commencing work. Where nesting birds are found to be present, the contractor must stop work immediately and postpone work until further notice.

Conservation of Habitats and Species Regulations 2010 (as amended)

This applies to European protected species which refers primarily to bats.

(a) A person is guilty of an offence if he/she:
(i) deliberately captures, injures or kills a protected species,

(ii) deliberately disturbs a protected species,

(iii) damages or disturbs a breeding site or resting place.

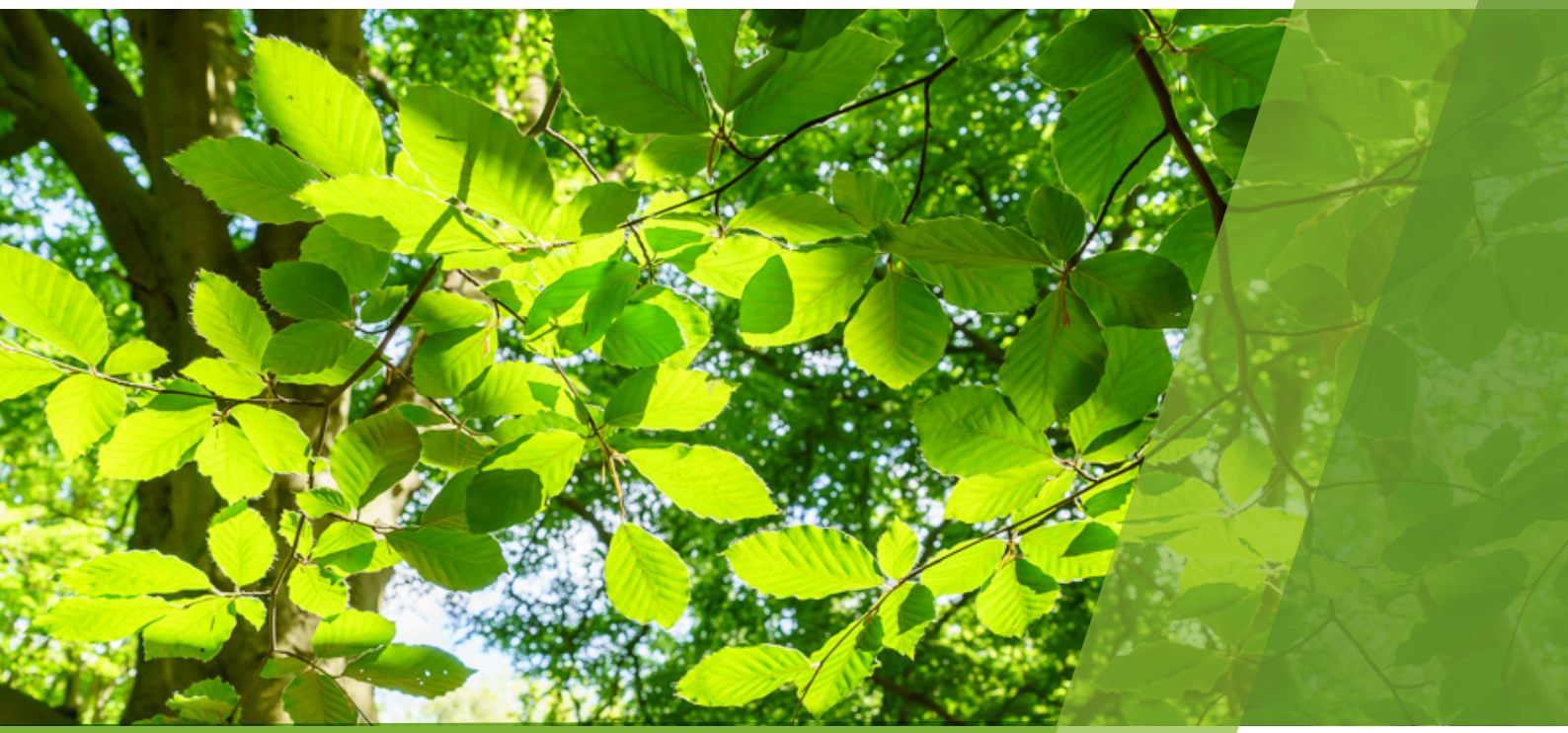
When bats are found to be present, the contractor must stop work immediately and postpone work until further notice.

APPENDIX F

Tree Locations Plan

5 The Grove Highgate London N6 6JU

Greenwood



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