



Arbor Cultural Ltd. *Providing Expertise on Your Trees*®

**BS5837 Arboricultural Report and
Arboricultural Impact Assessment**

OUR REFERENCE	AC.2024.411
CLIENT	Mr Somesh Mitra
SITE	66 Mount Ararat Road, Richmond TW10 6PJ
REPORT BY	I S Thompson (known as Tom) M. Arbor. A., BSc. (Hons) Arb, MSc. eFor
DATE	15th June 2024
DATE OF SITE VISIT	13th June 2024

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66 Mount Ararat Road, Richmond TW10 6PJ

Application Ref No Unknown Single storey rear extension to existing semi-detached dwelling.

Report produced by

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Signed



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Date.....15th June 2024.....

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Executive Summary

The proposal is to construct single storey rear extension on land at 66 Mount Ararat Road, Richmond TW10 6PJ.

The impact of the retained trees on the proposed building and vice a versa have been assessed and found to be consistent with the long-term health of the retained trees and sustainability of the building provided that build and protection methods in accordance with industry best practice and BS 5837: 2012 (Trees in relation to design, demolition and construction – recommendations), are followed as specified.

The site is in a Conservation Area.

This report includes supporting arboricultural information to accompany the planning application. The supporting information demonstrates that there will be no encroachment into the RPAs (Root Protection Areas), of any protected trees as a result of the proposed development. The tree protection measures, and any mitigation measures are also outlined.

The National Planning Policy Framework (NPPF) document further emphasizes the importance of trees and the natural environment.

“Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan).

- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland,” (NPPF, July 2024).

Possible conflicts are:

There are four trees that require their Root Protection areas (RPAs) to be protected during the proposed development.

This is addressed in the Arboricultural Method Statement (AMS) Section 1, Construction Exclusion Zone, and Section 2, Ground Protection Measures, as shown on the tree protection plan AC.2024.411 TPP-01 Rev A.

Site access is addressed in Section 3 of the AMS, Access Details, and on the tree protection plan AC.2024.411 TPP-01 Rev A.

The AMS addresses Contractors' Car Parking in Section 4, Site Huts and Toilets in Section 5, and Storage Space in Section 6, and on the tree protection plan AC.2024.411 TPP-01 Rev A.

There are some recommendations for tree work. This is in Section 12 of the AMS, Remedial Tree Work.

The recommendations for supervision are addressed in Section 16 of the AMS, Arboricultural Supervision.

Executive Summary Conclusion

The impact of trees on buildings and vice versa and allowance for future growth have all been considered in the siting of the new infrastructures.

Tree size, future growth, light/shading, leaf, and fruit nuisance etc. have received due attention and are not considered to be an issue. This is due to the considerable distance of the retained trees from the development and the protection measures proposed within this report.

Overall, the processes of construction are highly unlikely to have a detrimental effect upon the health of the retained trees assuming recommendations made in this report are adhered to at all times by the contractors e.g., the positioning of a stout fence is placed between the retained trees and all construction activities and, where access is required, ground protection measures are installed prior to commencement of any works and for it to remain intact and in position throughout the duration of the construction activities.

1 Terms of Reference

1.1 I have been instructed in writing by Mr Somesh Mitra of 66 Mount Ararat Road, Richmond TW10 6PJ with regards to a planning application to be made by himself in respect of the above development and report on the following in accordance with BS 5837 Trees in Relation to Design, Demolition and Construction - Recommendations 2012:

- I. Tree survey
- II. Arboricultural Impact Assessment
- III. Arboricultural Method Statement
- IV. Tree Protection Plan

1.2 The site was surveyed by I. S. Thompson (known as Tom) on Thursday 13th June 2024 in the morning. The weather was dry and sunny, and visibility was good. The relative quantitative and qualitative tree data was recorded to assess the condition of the trees, their value, and any constraints that they pose to the prospective development and where necessary the tree protection measures, and construction methods required to ensure their safe retention.

1.3 The tree information recorded relates to the tree condition, age, safe useful life expectancy, location, canopy spread, canopy height and tree height and direction of first significant branch as well as any tree work that is required.

1.4 I have based this report on my site observations and investigations, and I have come to conclusions in the light of my qualifications obtained and experience gained whilst working in the field of arboriculture. I have qualifications and practical experience in arboriculture and forestry and list the details in Appendix I.

1.5 Limitations and Use of Copyright:

- 1.5.1** All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means without our written permission. Its contents and format are for the exclusive use of Mr Somesh Mitra and his associates. It may not be sold, lent out or divulged to any third party not directly involved in this situation without the written consent of Arbor Cultural Ltd. This report will remain the intellectual property of Arbor Cultural Ltd. until payment has been received in full.
- 1.5.2** This report contains all my advice and opinions and any representation and/or statements that have or may have been made which are not specifically and expressly included in this report should not be relied upon and no responsibility is taken for the accuracy of such statements.
- 1.5.3** The Inspections were conducted based on ground level, Visual Tree Assessment (VTA) examination of external features of each individual tree. Binoculars were used to assess the aerial parts. The report and recommendations relate to the condition of the trees and their relationship to their surroundings at the time of inspection only. All measurements, proportions and assessments of age are approximate.
- 1.5.4** Visual assessment, in accordance with accepted arboricultural practice, was based on apparent vitality (leaf cover, extension growth), presence of deadwood and die back, fractured, and detached limbs, evidence of excessive basal movement and external indications of stem and basal decay likely to affect the structural condition of the tree. No decay detection equipment either invasive or non-invasive was employed.

- 1.5.5** Trees are living organisms whose health and condition can change rapidly. The conclusions and recommendations in this report are only valid for one year. This report will be invalidated if there are any changes to the site as it stands at present, e.g., building of extensions, excavation works, importing of soils, extreme weather events etc.
- 1.5.6** The survey findings are of a preliminary nature regarding assessment of risk of direct damage (by contact) from trees to built structures. No soil samples were taken, or trial pits were dug, therefore no risk assessment was conducted regarding subsidence (indirect damage). No parts of the drainage or service systems were inspected on site as I am not qualified to do so.
- 1.5.7** If you, or your advisers, have at your disposal any information to suggest that the existing property is or has been suffering any tree related structural defect, I would ask that you release the information to us. All relevant data is presented within this report together with any recommendations for further analysis, as appropriate.
- 1.6** A principal aspect of tree inspections in relation to proposed developments is an assessment of the risk posed by trees in proximity to people or property. Generally, tree risk will increase with the age of the trees. The benefits afforded by the trees will also increase with age. The management recommendations will be guided by an analysis of the risk posed by the trees and the benefits afforded by them.

1.7 Documentation

1.7.1 The following documentation was provided when the work was commissioned.

- Letter/Email to confirm commission of the work.
- Plan of the site, Ref 5488 - 104, received on 13th June 2024, showing the existing and proposed layout.

1.8 Disclaimer

1.8.1 I have no connection with any of the parties involved in this situation that could influence the opinions expressed in this report.

1.8.2 Following an initial site meeting with Mr Somesh Mitra to discuss the likely position of the proposed development, the following arboricultural information is provided in support of the application.

2. Introduction

2.1 Site

2.1.1 The site of the proposed development is within the current boundary of 66 Mount Ararat Road, Richmond TW10 6PJ, and will be adjacent to several currently unprotected but significant trees. Following the site meeting the measures identified in this report are designed to minimise any likely impacts of the trees on the new structure and its foundations and any likely impacts of the construction on the retained trees, see plan AC.2024.411 TPP-01 Rev A attached.

2.2 Trees

2.2.1 The trees are in the rear garden with two of them in the adjacent property and five in the applicant's property. They collectively provide a contribution to the appearance and character of Mount Ararat Road and soften the views from the road frontage. A schedule of the significant trees, their condition and category of retention is attached as Appendix IV.

2.2.2 An accurate topographical survey of the site was not provided. The tree locations were measured in relation to the site boundaries and other known features and triangulated and are accurate to +/-1.5m. So, the drawing number AC.2024.411 TPP-01 Rev A provides a good representation of the tree location in relation to the site and the proposed development.

- 2.2.3** The trees have been assessed and categorised in relation to the methodology in Table 1 of BS 5837 (2012) Trees in Relation to Design, Demolition and Construction, as specified in Appendix II. The results are recorded in Appendix IV.
- 2.2.4** There were a total of seven individual trees and one group of shrubs surveyed. This comprised of C1/2 category sycamore that was a lapsed pollard and had been recently crown reduced, See Images 1 and 2 in Appendix III. This tree has some deadwood and necrotic bark, and there is some crown dieback, see Images 3 and 4.
- 2.2.5** There was a small holly, a small Chinese fan palm, a small yew tree, and a small Portuguese laurel, all C1 category trees, see Images 5, 6, and 7. There is a large multi stemmed pear tree T05 on the adjacent property that was categorised as a B1 tree, see Images 8 and 9. The small group of shrubs was categorised as C2, see Image 10.
- 2.2.5** Any trees not included individually in the survey were either in groups or had other trees whose constraints exceeded theirs in respect to the proposed development and all associated works.
- 2.2.6** All tree works considered necessary for health and safety reasons or to facilitate the development will be agreed with the Local Planning Authority and undertaken in accordance with the planning conditions attached to the planning consent.
- 2.2.7** They will be undertaken in accordance with British Standard 3998 (2010) Recommendations for Tree Works, unless otherwise specified with clear justification for any deviation from the British Standard. This will be undertaken by an arboricultural contractor approved by the Local Authority Tree Officer.

2.2.8 If at any time additional pruning works are required permission must be sought from the Local Planning Authority first and then conducted in accordance with BS 3998 Recommendations for Tree Works (2010), unless otherwise specified with clear justification for any deviation from the British Standard. This will be undertaken by an arboricultural contractor approved by the Local Authority Tree Officer.

2.3 Proposed Development

2.3.1 The proposed works consist of the single storey rear extension to the existing semi-detached residential dwelling.

2.4 Issues of Light and Shading

2.4.1 The proposed position of the new extension will result in some morning shade from the sycamore tree T01.

2.4.2 This will be addressed with adequate windows and sky lights to maximise the natural light yield.

2.4.3 It is not anticipated that the proposed development will increase pressure for tree pruning or tree removal due to shading or the loss of natural light.

2.5 Description (including levels)

2.5.1 This is currently a semi-detached residential dwelling to the southwest of the site, with existing hard standing and outbuildings to the front and rear. The front garden extends to the southwest. The site is on a slight slope increasing in height from southwest to northeast.

2.6 Soils

2.6.1 There is no information provided about the soils and there was no on-site investigation undertaken but the British Geological Society (BGS) viewer indicates that the sub soil is London Clay, (BGS Viewer, 2024).

2.6.2 The BGS viewer has no information about the likely drift layer, (BGS Viewer, 2024).

2.6.3 A soil compaction test was undertaken using a Dickey John penetrometer to assess the soil compaction at various locations around the site.

2.6.4 The Dickey John returned readings of up to 300lb/in² for the first 1-200mm. This then hit solid ground.

2.6.5 It is likely that the soil below foundation depth will be of a shrinkable nature.

3 Arboricultural Impact Assessment

3.1 Presence of Tree Preservation Orders (TPO) or Conservation Area

3.1.1 The Local Planning Authority has not yet been contacted to establish whether any Tree Preservation Order (TPO) covers any of the trees, or to determine if the site is situated within a Conservation Area (CA). It would be necessary to determine whether either of these planning controls are in operation before commencement of any tree works.

3.1.2 The client has informed me that there are no TPOs in place on or adjacent to the site. It is not possible to check this online.

3.1.2 The property is within a Conservation Area.

3.1.2 Exemptions

There are two exemptions when this notification or permission are not required. They are detailed below:

- Removal of an imminent threat to people or property
- Removal of deadwood or dead trees

3.2 Effects on Amenity Value of Trees by Development and Facilitation Pruning

3.2.1 There are only three small trees and a group of shrubs that are proposed for removal as part of this application. These are T03 a small palm tree, T04 a small low spreading yew tree and T06 a small Portuguese laurel.

3.2.2 The shrubs G01 include, laurel, cherry laurel, hazel, holly, privet dogwood, and elder. T03, T04, and T06 are all C1 category trees and the shrubs G02 are C2 category. Consequently, there will be a minimal effect to the amenity value of the area.

3.3 Potential incompatibilities between layout and trees proposed for retention.

3.3.1 There is no proposed construction of foundations within the RPA of any retained trees. The only exception to this is T07 the Chinese fan palm on the adjacent property. There is an incursion into the calculated RPA of T07, but this is a palm tree with a dense fibrous rooting system, and it is more like a giant grass plant. This will not be impacted by the encroachment to any great extent.

3.3.2 There will not be any services installed within any Root Protection Area (RPA). The services will be taken of the existing supply to the main house.

3.3.3 The crowns of all retained trees will remain unaffected by the proposed development as they do not extend over the footprint and there is no further tree surgery proposed to any retained trees. All tree surgery works will be undertaken prior to construction activity and in accordance with the Arboricultural Method Statement Section 12 Remedial Tree Works.

3.3.4 Site access will be from the south-western end of the site, which is the existing entrance and driveway.

3.4 Infrastructure requirements – Highway Visibility, Lighting, CCTV, Services

3.4.1 There is no requirement for any tree removal or pruning to create adequate highway visibility. There will be no requirement for street lighting or CCTV visibility, or services close to any of the trees.

3.4.2 No services or other infrastructure requirements will have any impact on the retained trees.

3.5 Mitigating tree loss and new planting

3.5.1 There is limited space for new tree planting, but the garden area is being re-landscaped to improve the general appearance of the site.

3.6 Proximity of trees to structures

3.6.1 The impact of trees on buildings and vice versa and allowance for future growth have all been considered in the siting of the new buildings and structures. Tree size, future growth, light/shading, leaf, and fruit nuisance etc. have received due attention and are not considered to be an issue. This is due to the considerable distance of the retained trees from the development and the protection measures proposed within this report.

3.6.2 The structure has been placed well outside of the RPAs of trees and therefore exceeds the recommendations of BS 5837.

3.6.3 Overall, the processes of construction are highly unlikely to have a detrimental effect upon the health of the retained trees assuming recommendations made in this report are adhered to at all times by the contractors e.g., the positioning of a stout fence is placed between the retained trees and all construction activities prior to commencement of any works and for it to remain intact and in position throughout the duration of the construction activities.

3.7 Issues to be addressed by the arboricultural method statement.

- **Protective fencing to be established around the retained trees.**
- **Ground protection measures around the RPA of retained trees where work access is required.**
- **Site access**
- **Contractor's parking, welfare facilities and storage areas**
- **Remedial tree work**

References and Bibliography and Glossary of Terms

References and Bibliography

- Anon, British Standard BS 5837 (2012), "Guide for Trees in Relation to Construction", British Standards Institute. London.
- Anon, British Standard BS 3998 (2010), "Recommendations for Tree Work", British Standards Institute. London.
- Biddle, PG., (1998), "Tree Root damage to Buildings", Willowmead Publishing Ltd. 2 Volumes, 376 & 299 pp.
- Building Research Establishment, BRE Digests 63, 64, 67, Soils & Foundations, 240, 241 & 242, Low Rise Buildings on Shrinkable Clay Soils.
- Cutler, D.F., (1995), "Interactions of Tree Roots & Buildings", In Watson, G., and Neely, D., (Eds.), Proceedings of Trees & Buildings Conference, Lisle, Illinois, ISA Publications.
- Cutler, D. F., and I.B.K. Richardson, (1989). Tree Roots and Buildings. Longman Scientific and technical. 2nd Ed. 71pp.
- DOE, "Tree Preservation Orders – A guide to the law and good practice," Department of Environment, 1994.
- Gasson, P.E. and Cutler, D.F. (1990) Tree root plate morphology. *Arboricultural Journal* 14, 193-264
- Mercer G., Reeves A., and O'Callaghan D. (2012) The Relationship between Trees, Distance to Buildings and Subsidence Events on Shrinkable Clay Soil, *Arboricultural Journal: The International Journal of Urban Forestry*, 33:4, 229-245
- National House Building Council, (1992) Building near trees. NHBC Standards, Chapter 4.2
- Town & Country Planning Act Part VIII (1990). Issued by the Secretary of State for the Environment, HMSO.

Glossary of Terms

Bacterial canker	Has lesions on the stems that can exude a gum like exudate that carries the bacteria.
Brash	Thin wood removed from trees.
Chlorosis/Chlorotic.	An abnormal yellowing or blanching of the leaves due to lack of chlorophyll.
Canopy/Crown	Foliage bearing part of the tree.
Crown lifting.	The removal of the lower branches of the tree.
Crown thinning.	The complete removal of selected limbs/lateral branches to thin the density of the crown.
Dysfunctional wood	Woody tissues no longer function.
Epicormic growth	Young, vigorous shoots arising from the external tissues of a stem. Epicormic growth is usually induced if a limb is removed or is broken off and the light factor changes (sprouts) or if a woody plant is coppiced or pollarded.
Flush cut	A pruning cut close to the parent stem which removes part of the branch bark ridge.
Heartwood	The heartwood is the dark area in the centre of the tree.
Lateral branch	A side branch which arises from a main stem.
Mulch	A layer of bulky organic material placed around the stem.
Occlusion (Occluded)	The process of wound wood closing a wound.
Parasitic	Organisms that live off other organisms, or hosts, to survive
Pathogen	A micro-organism which causes disease in another organism.
Reaction Wood	Additional wood that is put on by a tree to address increased loads.
Reaction Zone	An area where reaction wood is formed.

Glossary of Terms Continued

Saprotrophic	Organisms that obtain their nutrition from non-living organic materials.
Soft rot	A kind of wood decay in which a fungus degrades cellulose within the cell walls, without causing overall degradation of the wall.
Stem	Principal above ground structural component(s) of a tree that supports its branches.
White rot	Various kinds of wood decay in which lignin, usually together with cellulose and other wood constituents is degraded.
Wound	Injury in a tree caused by a physical force.
Wound Wood	Additional wood that is put on by a tree in reaction to damage or wounding, with the aim of healing over the wound.

Appendix I Abridged CV: Qualifications and Experience

I S Tom Thompson BSc (Hons Arb), MSc eFor, MArborA Cert Arb

1 Qualifications

Subjects	Level	Dates	
Bond Solon Expert Witness Training (CUBS)	Pass		2017
International Society of Arboriculture Certified Arborist	Pass	May	2012
Professional Tree Inspection Course (LANTRA)	Pass	April	2011
BSc Hons Arboriculture	(2.1)	2008	2009
FdSc Arboriculture	Distinction	2004	2007
MSc. Environmental Forestry (MSc eFor)	Pass	2001	2002
BSc. Hons Env Science (Conservation Management)	(2.2)	1997	2000
Environmental Studies	Access Course	1996	1997
Forestry & Practical Environmental Skills	NVQ I & II	1996	1997

2 Career Summary

Tom Thompson is a professional member of the Arboricultural Association (AA), an International Society of Arboriculture (ISA) Certified Arborist, Chairman of the Consulting Arborist Society (CAS), and an associate member of the Institute of chartered Foresters (ICF).

He was worked in the private and public sector, before setting up Arbor Cultural in 2014, to promote the value and benefits of trees.

He currently heads up the BIM4Arb group promoting Building Information Modelling (BIM) to the arboricultural industry.

He then spent five years working in new woodland creation, firstly for ADAS in the National Forest and then for 18 months with the Forestry Commission in Cobham, Kent. During this time, he began a degree in Arboriculture through Myerscough College.

This course enabled him to make the transition from forestry to arboriculture where he spent 5 years as a tree officer, firstly at St Albans and then more recently at King’s Lynn and West Norfolk. He joined Connick Tree Care in May 2012, where he worked as their Principal Arboricultural Consultant.

Having worked as the principal tree consultant at Connick tree care for two years he left to established Arbor Cultural Ltd. In 2014, with the intent to provide professional advice in all aspects of tree consultancy, to enable clients to obtain planning permission, house purchase completion, and successfully address all tree related health and safety matters. He is passionate about trees, and he is keen to promote the economic value and benefits of the urban forest.

3 Areas of Competence

- Tree hazard risk assessments for tree owners
- Decay assessment and mapping
- Mortgage and Insurance reports to assess the influence of trees on buildings.
- Pre-development site surveys and arboricultural implication studies
- Tree management reports to prioritise maintenance programs.
- Tree related insurance claims
- Diagnosis of tree disorders
- Arboricultural Expert Witness

4 Selected Continual Professional Development

Tom continually keeps up to date with regular in person and online training to exceed the requirements of all his professional membership.

These are UK, European, and American based trainings.

He regularly attends conferences, and networking events to share and discuss current and future developments on the arboricultural industry and associated industries.

Subjects covered include:

- Tree Risk Assessment
- Decay Detection Equipment
- Tree Biomechanics
- Tree Pull Testing
- Expert Witness
- Pest and Diseases
- Tree Valuation and Economics
- Veteran Tree Management
- Tree Population Management
- Building Information Modelling
- Digital Practice
- Business Management
- Trees and Buildings
- Tree Law and Policy
- Soil and Tree Interaction
- Tree Pruning Practices
- Biodiversity and Wildlife
- Designing with Trees
- Young Tree Establishment

Training Providers Include but are NOT Limited to:

- Arboricultural Association
- Consulting Arborist Society
- International Society of Arboriculture
- Municipal Tree Officers
- London Tree Officers
- LANTRA
- Rinttech
- Claus Mattheck
- Landscape Institute

5. Professional Affiliations

Arboricultural Association (AA) Professional Member	since 2008
International Society of Arboriculture (ISA) Certified Arborist	since 2012
Consulting Arborists Society (CAS)m Professional Member	since 2014
Institute of Chartered Foresters Associate Members	since 2018
Royal Forestry Society	since 1999

Appendix II Key to BS5837 Tree Survey Records

Tree No. Tree numbers applied as T1 etc. to each tree are as per the Tree Survey Plan and subsequent drawings, where trees occur as a cohesive group these are suffixed with a G, they are assessed as such, with all size data being given as mean figures unless otherwise stated. Any trees on-site and off-site that are appropriate to be included but are omitted from the topographical survey supplied are included in the schedule, though their positions are shown only indicatively.

The measurement conventions are as follows.

- a) Height, crown spread, and crown clearance are recorded to the nearest half metre (crown spread is rounded up) for dimensions up to 10 m and the nearest whole metre for dimensions over 10 m.
- b) Stem diameter is recorded in millimetres, rounded to the nearest 10 mm (0.01 m).
- c) Estimated dimensions (e.g., for off-site or otherwise inaccessible trees where accurate data cannot be recovered) should be clearly identified as such (e.g., suffixed with a “#”).

Height (m) Tree height measured in metres.

Stem Diameter (mm) Stem diameter in millimetres measured at 1.5m above ground level. Where the stem is divided below 1.5m, measurement is taken as directed by BS 5837 Annex C.

Branch Spread (m) Radial crown spread in metres, measured for each of the four cardinal points of the compass from the centre of the trunk.

Height of Lowest Branch (m)

& Direction of growth Height above ground in metres of the lowest branch and use of the four cardinal points of the compass.

Life Stage:

- Y Young** A recently planted or establishing tree that could be transplanted without specialist equipment, i.e., up to 12-14cm stem diameter.
- SM Semi-Mature.** An establishing tree which is still exhibiting apical dominance and has significant growth potential.
- EM Early Mature.** A tree that has reaching its ultimate potential height and has lost its apical dominance, and whose growth rate is slowing down but will still has potential for a significant increase in stem diameter and crown spread and has a significant safe life expectancy remaining.
- M Mature** A tree with limited potential for any increase in size but with reasonable safe useful life expectancy.
- OM Over Mature** A senescent or moribund specimen with a limited safe useful life expectancy.
- V Veteran** A tree of great age for species with important biological, aesthetic, conservation, or cultural value. Trees are in a state of decline due to old age.

Condition of Trees

Physiological Condition (P) An assessment of the physiological condition (i.e., health/vitality) of the tree categorised into:

- Good** A tree in a healthy condition with no significant problems
- Fair** A tree generally in good health with some problems that can be remediated.
- Poor** A tree in poor health with significant problems that cannot be remediated.
- Dead** A tree without enough live material to sustain life.

Structural Condition (S) An assessment of the structural/safe condition of the tree categorised into:

- Good** A tree in a safe condition with no significant defects.
- Fair** A tree in a safe condition at present but with defects or with significant defects that can be remediated.
- Poor** A tree with significant defects that cannot be remediated.

Notes related to both physiological and structural condition follow the categorization in order support the statement and give greater detail on the true quality and value of the tree.

Preliminary Management Recommendations

These may include further investigations for the presence or extent of decay or climbed inspections, ivy removal or pruning works when access is a non-moveable aspect etc. (NB this is not intended to be a specification for tree work and further advice maybe required prior to implementation). Trees assessed as being in apparently immediately hazardous condition will be notified to the client separately as soon as practicable.

Estimated Remaining Life Contribution

This is an estimate of the remaining life contribution in years that the tree or group of trees is expected to have based on species, condition on the site in its current context. The following bands are used:

- <10** Tree is dead or dying and unlikely to contribute beyond 10 years.
- 10+** Tree is assessed as being able to contribute to the site for 10+ years.
- 20+** Tree is assessed as being able to contribute to the site for 20+ years.
- 40+** Tree is assessed as being able to contribute to the site for 40+ years.

Quality and Value Category Grade

U	Trees that cannot be realistically retained	Dark red
A	Those trees of HIGH value quality to retain	Light green
B	Those trees of MODERATE quality to retain	Mid blue
C	Those trees of LOW quality to retain	Grey

Deadwood Categorisation

Minor Deadwood Less than 50mm in diameter or less than 3m in length

Major Deadwood Greater than 50mm in diameter or greater than 3m in length

Appendix III Images



Image 1 Multi stemmed sycamore tree T01, which is a lapsed pollard.



Image 2 T01 a sycamore tree, at the rear.



Image 3 Deadwood and necrotic bark in the crown of T01.



Image 4 dieback in the crown of T01.



Image 5 T02 a small holly tree growing under the sycamore T01.



Image 6 T03 a Chinese fan palm in the foreground with T01 behind it.



Image 7 T04 a small yew tree near to the existing building.



Image 8 Multiple stems of T05 a pear tree on the adjacent property.



Image 9 Crown of T05 a pear tree on the adjacent property.



Image 10 T06 a Portuguese laurel in the foreground with G01 behind it and to the left.



Image 11 T07 a Chinese fan palm in conflict with the roof.



Image 12 Storage area in the front garden.

Appendix IV - Tree Survey Records

Date of Survey - 13th June 2024

Ref	Species	Measurements	Spread	General Observations	Retention Category	RPA	Recommendations	Condition	Reinspect
Ref.	Species	Measurements	Spread	Survey Notes	Retention Category	RPA	Comments	Measurements2	Recommen dations
G01	Mixed species (Mixed species)	Height (m): 5 Stem Diam(mm): 70 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 0 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:2 E:2 S:2 W:2	Species including elder dogwood and laurel at the rear, at up to 5. M. Species including laurel, holly cherry laurel along the side up to 2 m.	C2	Area: 55 sq. m.	Remove in order to landscape the garden.	Physiological Cond: Good Structural Cond: Fair Bat Habitat: None	3 Yrs.
T01	Sycamore (<i>Acer pseudoplatanus</i>)	Height (m): 15 Stem Diam(mm): 660 Spread (m): 7.5N, 8E, 7S, 7.5W Crown Clearance (m): 6 Lowest Branch (m): 4(E) Life Stage: Early Mature Rem. Contrib.: 10+ Years	N:7.5 E:8 S:7 W:7.5	Ivy covered trunk. Growing through the fence, mostly on the clients side. Long since lapsed pollard from around 6 m. Major deadwood in the crown. Previously crown reduced with around 4 m of regrowth. Minor crown dieback.	C1,2	Radius: 7.8m. Area: 191 sq. m.	Remove the deadwood. Monitor for further decline.	Physiological Cond: Fair Structural Cond: Fair Bat Habitat: Medium	3 Yrs.
T02	Common holly (<i>Ilex aquifolium</i>)	Height (m): 5 Stem Diam(mm): 110 Spread (m): 1N, 2E, 3S, 3W Crown Clearance (m): 2 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:1 E:2 S:3 W:3	Suppressed by the sycamore tree.	C1	Radius: 1.3m. Area: 5 sq. m.		Physiological Cond: Good Structural Cond: Fair Bat Habitat: None	3 Yrs.

Appendix IV - Tree Survey Records

Date of Survey - 13th June 2024

Ref	Species	Measurements	Spread	General Observations	Retention Category	RPA	Recommendations	Condition	Reinspect
T03	Chinese fan palm (<i>Livistona chinensis</i>)	Height (m): 6.5 Stem Diam(mm): 190 Spread (m): 2N, 2E, 2S, 2W Crown Clearance (m): 4 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:2 E:2 S:2 W:2	Chinese fan palm in the centre of the garden.	C1	Radius: 2.3m. Area: 17 sq. m.	Remove this tree.	Physiological Cond: Good Structural Cond: Fair Bat Habitat: None	N/A
T04	English yew (<i>Taxus baccata</i>)	Height (m): 2 Stem Diam(mm): 10 Spread (m): 1N, 1E, 0S, 1.5W Crown Clearance (m): 0 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:1 E:1 S:0 W:1.5	Low growing shrub	C1	No RPA.	Remove as in footprint	Physiological Cond: Good Structural Cond: Fair Bat Habitat: None	N/A
T05	Common pear (<i>Pyrus communis</i>)	Height (m): 11 3 stems (mm): 310,300,270 Spread (m): 5N, 5E, 3S, 5W Crown Clearance (m): 3 Lowest Branch (m): 4(W) Life Stage: Early Mature Rem. Contrib.: 20+ Years	N:5 E:5 S:3 W:5	On the adjacent property. Multi stemmed from around 1 m. Formatively pruned for fruit production.	B1,2	Radius: 6.1m. Area: 117 sq. m.	NAR	Physiological Cond: Good Structural Cond: Fair Bat Habitat: Low	3 Yrs.
T06	Portuguese laurel (<i>Prunus lusitanica</i>)	Height (m): 4.5 Stem Diam(mm): 80 Spread (m): 1N, 2E, 2S, 2W Crown Clearance (m): 2 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:1 E:2 S:2 W:2	No significant observations	C1	Radius: 1.0m. Area: 3 sq. m.	Remove this shrub	Physiological Cond: Good Structural Cond: Good Bat Habitat: None	N/A

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Date of Survey - 13th June 2024

Ref	Species	Measurements	Spread	General Observations	Retention Category	RPA	Recommendations	Condition	Reinspect
T07	Chinese fan palm (<i>Livistona chinensis</i>)	Height (m): 9 Stem Diam(mm): 200# Spread (m): 2.5N, 2.5E, 2.5S, 2.5W Crown Clearance (m): 7 Life Stage: Semi Mature Rem. Contrib.: 10+ Years	N:2.5 E:2.5 S:2.5 W:2.5	Chinese fan palm in the adjacent garden. Conflict with the roof.	C1	Radius: 2.4m. Area: 18 sq. m.	Cut clear of the roof.	Physiological Cond: Good Structural Cond: Fair Bat Habitat: None	3 Yrs.