Monks House, Surrey

Tree Survey & Arboricultural Implications Report

November 2023

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Ref: PCA23005

Prepared by:

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Calyx Environmental Ltd

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Contents

1.0 Introduction

1.1 Calyx Environmental Ltd was instructed by Paula Wilson via Paul Cashin Architects to carry out a tree survey and prepare an arboricultural implications assessment report for a proposed extension with associated landscaping at Monks House, 21 Queen Street, Gomshall, Guildford, GU5 9LU.

1.2 Specific objectives were to:

- carry out a survey of trees in accordance with BS5837: 2012; and
- provide a tree constraints plan showing the trees along with root protection zones; and
- assess any conflicts between trees and the proposals, evaluate the significance in terms of planning policies and advise on ways to avoid, mitigate and compensate impacts whilst meeting client objectives.

1.3 This report should be read in conjunction with the following associated drawing/s: CLX/PCA23005/TPP/1.

2.0 Methodology

2.1 The survey was undertaken by Mike Bird on 24 October 2023. Trees within the site, and adjacent to it (where potentially of significance to the proposals), were included in the survey. Arboricultural implications were assessed and the report and drawing prepared by Mike Bird. Experience and qualifications are included at Appendix 2.

2.2 Trees were surveyed in accordance with the current British Standard, BS5837: 2012 Trees in Relation to Design, Demolition and Construction. Root protection zones were calculated in accordance with this standard and an overlay drawing prepared based on a proposed site layout drawing by Paul Cashin Architects (2303-PCA-DR-A-010).

2.3 All survey work was from ground level. Trunk diameters were measured with a girth tape, except where indicated to have been estimated due to lack of access. Heights were measured using Arboreal Tree app. Crown spreads were recorded for each cardinal point using Leica Disto except where impractical to achieve line of sight, in which case they were estimated.

3.0 Limitations and Constraints.

3.1 Due to the fact that trees and site conditions change over time, the survey on which this report is based will gradually become out of date. Therefore, this report should not be relied upon for planning decisions after 24 months from the relevant survey dates or following significant site changes, unless the assessment and recommendations are verified by an update-survey.

4.0 Site and Context

4.1 The site comprises a large private garden containing a mature trees, shrubs and hedges set within the village of Gomshall surrounded by similar sized residential properities with mature trees. The larger trees within the site are clearly visible from outside and they make a valuable collective contribution to the character of the village. The Ordnance Survey grid reference is: TQ081475. The trees surveyed are within the redline shown in Figure 1 below and a couple of trees adjacent to the southern boundary were also recorded.

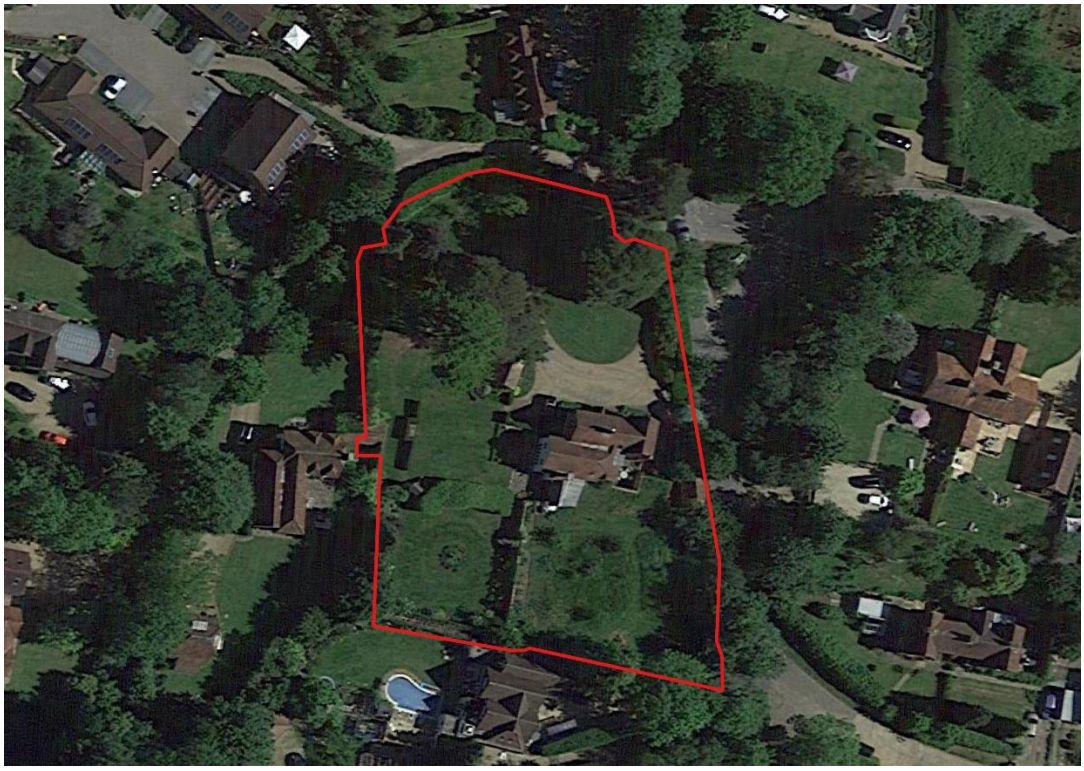

Figure 1: showing approximate site boundary. Source Google Earth Pro. Imagery date: 6 September 2021. © 2023 Google.

5.0 Survey Results and Implications for Site Planning

5.1 A table of surveyed trees with full details is given at Appendix 1. Ten individual trees were surveyed, including two on land adjacent to the southern boundary, the dimensions of which were estimated. Species include: a notable fern-leaved beech, 3 x Scots pine, magnolia, flowering cherry, common beech, Lawson's cypress, deodar cedar, and a tree cotoneaster. Most of these are classified as mature (x 8) with one middle-aged and one young. In terms of British Standard retention categories, one (the fern-leaved beech) is classified as an A grade tree and five are classified as B grade, all of which are considered important to protect, three as C grade which are worth retaining but not considered important enough to be a constraint to development proposals and one as U grade, which it is expected would be removed within the next ten years through the course of normal management due to its condition.

5.2 In addition to individual trees, a group of young trees in the rear garden was recorded as G1 containing apple, quince and other fruit trees along with an Indian bean tree.

6.0 Assessment of Proposals and Recommendations

6.1 An overlay of proposals (see drawing CLX/PCA23005/TPP/1) shows that the proposed extension will be outside of any root protection area. The only hard surface encroachment is an area of patio within the RPA of T09. This is very minor at 1.2m^2 representing a negligible amount of the RPA at 0.18%. Not significant impact on the health of the tree would be expected from this an no special hard surfacing is considered necessary.

6.2 A new area of fine lawn will be create that extends into the RPA of T09 by 20m^2 representing only 3%. It is considered that the tree is capable of tolerating replacement of turf and topsoil layers within this relatively small area without significant adverse impacts on its health.

6.3 The proposed extension is set back far enough away from any tree canopies, and would have a similar relationship to trees to that of the existing house and as such, no adverse conflicts from shading, debris or other proximity factors are anticipated that would result in tree removal or severe pruning as a result of the proposals.

6.4 In conclusion, it is assessed that the proposal would not harm the public realm due to impacts on trees within or adjacent to the site and that the private amenity provided by trees within the site can be conserved, subject to basic precautions to protect tree root areas from damage during construction.

6.5 Whilst risks to trees during construction activity are considered to be relatively low for a small-scale project such as this, to prevent inadvertent encroachment of construction activity, storage of materials etc. within the closest root protection areas, that could cause harmful soil compaction, it is recommended that temporary fencing is erected to form a barrier between the root protection areas and adjacent construction / hard landscaping work as indicated in Fig 2. Normal fencing specification would be for Heras-type temporary fencing with feet pinned into the ground and braces fitted as recommended in BS5837: 2012, but given the small scale of the proposals and householder presence to monitor activity, it is considered that a lower specification barrier tape could suffice in this situation so long as the purpose is made clear to construction personnel.

Fig 2: Recommended temporary barrier (dashed line) to prevent construction encroachment within root protection areas of adjacent trees.

6.6 Whilst ongoing tree maintenance and inspections are outside of the scope of this report, it was notes for T09 that a buttress root is damaged with bark missing. Whilst not cause for concern at present, this could lead to future decay so it is recommended that this be kept under review. Further advice on managing tree risk, aimed at householders, is given in the National Tree Safety Group leaflet, Managing Trees for Safety, available at: https://ntsgroup.org.uk/wp-content/uploads/2016/06/FCMS026.pdf. Also noted was a tight fork in T5 (a young beech), which could develop into a point of failure as the tree matures. Careful formative pruning phased over time, to reduce the size of one of the leaders and allow the other one to become the main leader, eventually removing it altogether, would be an option to prevent this. Care should be taken to remove no more than 30% of the foliage at any one time.

Appendix 1: Tree Survey Data

Ref	Species	Age class	Stem dia (cm)	Height (m)	Crown spread (N,E,S,W)	Life exp	Observations	BS cat	RPR
T1	Fern-leaved beech (*Fagus sylvatica var. heterophylla* 'Aspleniifolia')	M	110	18	7, 7.5, 7.5, 9	40+	Nice mature specimen. Forked at approx 4 m. No obvious bark inclusion but three cable braces present about 0.5m above drive height; exposed roots on bank; numerous semi-occluded old pruning wounds	A	13.2
T2	Scots pine (*Pinus sylvatica*)	M	64	21	5, 3.5, 3, 6	20+	Typical Scots pine; few snags and moderate deadwood present	B	7.7
T3	Magnolia (*Magnolia sp*.)	MA	16, 13, 11	7	4, 3.5, 4, 4	40+	Nice specimen but of private amenity value only	B	2.8
T4	Flowering cherry (*Prunus* 'Kanzan')	M	25	4	2, 2, 2, 2.5	<10	Very poor condition (likely bacterial canker); has been pruned back, presumably due to die-back but has died back further, numerous epicormic shoots indicative of stress	U	3
T5	Beech (*Fagus sylvatica*)	Y	20	8	3, 3, 3, 3	40+	Tight fork at 2 m, which could become a point of failure when tree is more mature; would benefit from phased formative pruning to encourage one leader to become dominant and gradually remove other in stages so as not to remove more than 30% foliage at any one time, as tree matures	C	2.4
T6	Lawson's cypress (*Chamaecyparis lawsoniana*)	M	60	18	3, 3.5, 3, 4	20+	Common garden conifer of no special merit	C	7.2

T7	Scots pine (*Pinus sylvatica*)	M	72	19	6.5, 5.6, 6, 4	20+	Tear-out wound from failed branch (partly occluded) and a few other superficial wounds; numerous old pruning wounds	B	8.6
T8	Scots pine (*Pinus sylvatica*)	M	84	20	6, 4.5, 4, 4.5	20+	A few old pruning wounds present and moderate deadwood (common for species at this age)	B	10.1
T9	Deodar (*Cedrus deodara*)	M	120	25	7, 7, 8.5, 8	20+	Numerous pruning wounds on main stem, and snag on E sided presumably from storms, wound occluding but slowly (some very flush to stem), one buttress root damaged with bark missing but not cause for concern at present, but could be a route of future decay so needs to be kept under review.	B	14.4
T10	Tree cotoneaster (*Cottonaster frigidus*)	M	25	6	4.5, 5, 4, 4.5	10+	Some dieback but mostly healthy	C	3
T11	Ash (*Fraxinus excelsior*)	MA	50	15	6, 7, 8, 7	<10	MA ash on adj property; some die-back; stem diameter and crown spread estimated (latter from aerial imagery)	B	6
T12	Deodar (*Cedrus deodara*)	M	50	18	4.5, 4.5, 3.5, 4.5	20+	M cedar on adj property; stem diameter and crown spread estimated (later from aerial imagery)	B	6

Key

Ref	Reference code as shown on associated Tree Survey Plan / Arboricultural Implications Plan / Tree Protection Plan.
Age class	Y – Young SM - Semi-mature EM – Early maturity M – Mature LM – Late maturity S – Senescent
T/dia (cm)	Stem diameter measured at 1.5m from ground level or, where there is an obstruction or localised swelling, as close to this height as possible to give a representative stem diameter.
Ht & CC	Total height of tree to nearest metre and crown clearance from ground level (estimated unless otherwise stated in the methodology).
CSpr N etc	Canopy radius from stem to branch tip given for each cardinal point ie. North, East, South and West.
RPZ and RPA	Root protection zone as a radius from the centre of the trunk of each tree and root protection area (generally circular unless localised soil conditions indicate otherwise).
Life expectancy	Potential future life expectancy, assuming continuation of current / similar growing conditions, given in the following bands: < 10 years 10+ years 20+ years 40+ years
BS Cat	Category U - trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Category A - trees of high quality with an estimated remaining life expectancy of at least 40 years. Category B - trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Category C - trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.

Appendix 2: Experience and Qualifications of Personnel

Mike is an experienced and qualified arboriculturist and ecologist with over 20 years of experience within the planning sector. He holds a BSc (Hons) in Environmental Land Management, an MSc in Ecology and Management of the Natural Environment and an HND in Arboriculture. He has worked in local authority planning both as a tree officer and as a biodiversity officer. Between 2008 and 2012 he was the Principal Officer in charge of the Trees and Ecology team at Basingstoke and Deane Borough Council. He left local government in early 2013 to start an environmental consultancy practice, which became incorporated as Calyx Environmental Ltd in August 2013