

**GHA Trees
5 South Drive
High Wycombe
Bucks
HP13 6JU**



**Glen Harding MICFor
MSc (Forestry), MArborA
t: 07884 056025
e: info@ghatrees.co.uk
www.ghatrees.co.uk**

**BS5837:2012 TREE SURVEY AND
ARBORICULTURAL IMPACT ASSESSMENT:
47 Copse Wood Way, Northwood, HA6 2TZ**

Dated: 30th March 2026

Our reference: GHA/DS/160245:26

CONTENTS

Section	Subject	Page
	Instructions	3
	Executive Summary	3
	Documents Supplied	4
	Scope of Survey	4
	Survey Method	5
	The Site	6
	Subject Trees	6
	The Proposal	6
	Arboricultural Impact Assessment	6
	Post Development Pressure	8
	Tree Protection Measures and Preliminary Method Statement for Development Works	8
	Conclusion	10
	Recommendations	10
Appendix A	Site Plan / Arboricultural Impact Plan (Attached as a separate PDF file to maintain its integrity / accuracy)	
Appendix B	Tree Table	
Appendix C	Extract from BS5837:2012 – Protective Fencing	

Arboricultural Impact Assessment

Location: 47 Copse Wood Way, Northwood, HA6 2TZ
Our reference: GHA/DS/160245:26
Dated: 30th March 2026
Prepared by: Glen Harding MICFor, MSc (Forestry), MArborA
Date of Inspection: 24th March 2026

Instructions

TERMS OF REFERENCE – GHA Trees were instructed to survey the subject trees within and adjacent to 47 Copse Wood Way, Northwood, in order to assess their general condition and to provide a planning integration statement for the indicative proposed development that safeguards the long term wellbeing of the retained trees in a sustainable manner.

The writer retains the copyright of this report and its content is for the sole use of the client(s) named above. Copying of this document may only be undertaken in connection with the above instruction. Reproduction of the whole, or any part of the document without written consent from GHA Trees is forbidden. Tree work contractors, for the purpose of tendering only, may reproduce the Schedule for tree works included in the appendices.

Executive Summary

The proposal for the site is to renovate the existing house, work that will include a new rear extension. The driveway will also be amended to improve site access. The proposed scheme requires the removal of a small number of relatively insignificant (C and U category) trees, which will not significantly impact the local or wider landscape. The retained trees require protection in accordance with industry best practice and BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations, in order to ensure their longevity.

Documents Supplied

The client supplied the following documents:

- Topographical survey
- Existing layout plans
- Proposed layout plans

Scope of Survey

- 1.1 The survey is concerned with the arboricultural aspects of the site only.
- 1.2 This is **not** a full tree safety survey and should not be viewed or used as such.
- 1.3 The planning status of the subject property was not investigated in detail.
- 1.4 A qualified Arboriculturist undertook the report and site visit and the contents of this report are based on this. Whilst reference may be made to built structure or soils, these are only opinions and confirmation should be obtained from a qualified expert as required.
- 1.5 Trees in third party ownership were surveyed from within the subject property, therefore a detailed assessment was not possible and some (if not all) measurements were estimated. Where the stem location of a third party tree has been estimated, this is noted on the plan.
- 1.6 Dense vegetation or climbers (such as ivy) also prohibited full inspections for some trees; this is noted where applicable.
- 1.7 No discussions took place between the surveyor and any other party.
- 1.8 The trees were inspected on the basis of the Visual Tree Assessment method expounded by Mattheck and Breleor (The body language of tree, DoE booklet Research for Amenity Trees No. 4, 1994)
- 1.9 The survey was undertaken in accord with British Standard 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.
- 1.10 The client's attention is drawn to the responsibilities under the Wildlife and Countryside Act (1981).

Survey Method

- 2.1 The survey was conducted from ground level with the aid of binoculars if needed.

- 2.2 No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- 2.3 No soil samples were taken.
- 2.4 The height of each subject tree was estimated using a clinometer and recorded to the nearest half metre.
- 2.5 The stem diameter for each tree was measured in line with the requirements set out in BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.
- 2.6 The crown spreads were measured with an electronic distometer and recorded to the nearest half metre. Where the crown radius was notably different in any direction this has been noted on the Plan (appendix A) and within the tree table (Appendix B). The crowns of those trees that are proposed for removal, or trees where the crown spread is deemed insignificant in relation to the proposed development are not always shown on the appended plan; however their stem locations are marked for reference.
- 2.7 The Root Protection Area (RPA) for each tree is included in the tree table, both as an area, and as the radius of a circle.
- 2.8 The crown clearance was measured using a clinometer and recorded to the nearest half metre. Where it is significantly lower in one direction, this is noted within the tree table at appendix B.
- 2.9 All of the trees that were inspected during the site visit are detailed on the plan at Appendix A; this plan was produced in colour and **MUST** only be scanned or reproduced in colour. The trees on this plan are categorised and shown in the following format:

COLOUR CODING AND RATING OF TREES:

Category A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. Colour = light **green** crown outline on plan.

Category B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Colour = mid **blue** crown outline on plan.

Category C – Trees of low quality with an estimated remaining life expectancy of at least 10 to 20 years, or young trees with a stem diameter below 150mm. Colour = uncoloured crown outline on plan.

Category U – Those 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. Colour = **red** crown outline on plan.

All references to tree rating are made in accordance with BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations’, Table 1.

The Site

- 3.1 The site is located on Copse Wood Way, a residential through road located to the south of Northwood.
- 3.2 A good tree cover is present on the site itself as well as adjacent sites, with many semi-mature and mature trees of both native and exotic origin characterising the local area.
- 3.3 Access to the property is currently gained via a driveway to the front of the site.

The Subject Trees

- 4.1 The details of the subject trees are set out in the Schedule at Appendix B.

The Proposal

- 5.1 The proposal for the site is to renovate the existing house, work that will include a new rear extension.
- 5.2 The driveway will also be amended to improve site access.
- 5.3 The proposed location of the above structures can be seen on the appended plan.

Arboricultural Impact Assessment

PROPOSED TREE REMOVAL:

- 6.1 T4 and T9 are proposed for removal as part of the new development, as these specimens could not be effectively retained as they are located within the outline of the new structures, or located too close to make their retention feasible / sustainable.
- 6.2 All of the trees to be removed have been given either a C or U category grading in accordance with BS 5837. It is therefore felt that these trees should not act as a limitation on the effective use of the site, or impose any significant constraints on the layout (see table 1 BS5837).
- 6.3 The assessed grading (as per BS5837 table 1) of each of the trees to be removed, as well as any relevant comments on their condition can be seen in the tree table at appendix B.

TREE PRUNING TO ACCOMODATE THE PROPOSAL OR ACCESS TO THE SITE

- 6.4 G5 will be pruned to improve clearances from the structure. The proposed tree work is assessed to be minor and will not adversely impact the health or amenity value of this tree. This is work that would be desirable regardless of the proposals.

ASSESSMENT OF RETAINED TREES ROOT PROTECTION AREAS

- 6.5 Section 4.6.3 of BS 5837: 2012 states that the Root Protection Area (RPA) of each tree should be assessed by an arboriculturalist considering the likely morphology and disposition of the roots, when known to be influenced by past or existing site conditions.
- 6.6 The assessed RPAs (excluding the RPAs of U category trees and those trees which are proposed for removal) can be seen on the appended plan where some have amended to take account of the existing structures.

ASSESSED IMPACT ON RPAS BY PROPOSED STRUCTURES

- 6.7 There is a small encroachment into the RPA of T7; this encroachment equates to 0.1% and is therefore assessed to be within acceptable levels. This is a healthy tree which will tolerate this small amount of root loss and recover quickly, especially when considering no other part of the RPA is affected and there are large areas of open ground to the other side of the RPA for compensatory root growth to develop. A traditional foundation can be installed without contributing significant damage to the longevity of the tree. The foundation is to be installed using manual excavation techniques under arboricultural supervision. Prior to concrete being poured to form the foundations within or immediately adjacent to the RPAs of retained trees, the excavation is to be lined and sealed with a non-permeable membrane to prevent any leaching of the concrete into the soil and causing desiccation of retained roots by concrete run off.
- 6.8 The proposed new extensions are situated outside of the assessed RPAs of all of the other trees proposed for retention; therefore, these trees pose no below ground constraints on the new structures or vice versa.

HARD LANDSCAPING IN RPAS

- 6.9 Where sections of the new patio are within the RPA of T7, a no-dig construction will be necessary, to ensure that all existing ground levels are retained in their current form, as well as ensuring that satisfactory moisture and oxygen can be obtained from the underlying soil by any tree roots in this area. A design for this proposed access route must be drawn up by a structural engineer, in close co-ordination with the retained arboriculturalist. Porous materials must be used to ensure rainwater can penetrate the soil beneath the new patio.

INSTALLATION OF SERVICES

- 6.10 The full details of existing and proposed new services have not been made available at the time of writing.
- 6.11 New services must be routed to avoid all RPAs of retained trees on site and within nearby sites. From an assessment of the subject site, undertaken in conjunction

with the project architect, there is no reason to assume this isn't possible. Inspection chambers must also be sited outside the RPAs of any nearby trees.

Post Development Pressure

FUTURE TREE AND STRUCTURE RELATIONSHIPS

- 7.1 The retained trees are at a satisfactory distance from the proposed new building outline and highly unlikely to give rise to any inconvenience.
- 7.2 Some minor lateral pruning of T7 may be required in the medium term; however, any such work would not have a significant impact on the health or amenity value of the tree.
- 7.3 The trees on site are protected by Tree Preservation Orders (TPOs). These designations will ensure that the local planning authority retain full control over all future works to these trees, ensuring any future occupants are unable to undertake any inappropriate works to these trees.
- 7.4 Regular inspections of the retained trees by a suitably qualified Arboriculturalist and subsequent remedial works will ensure that the trees are maintained in a suitable manner, to exist in harmony with the new structures and its occupants for many years to come.

Tree Protection Measures and Preliminary Method Statement for Development Works

8.1 TREE PROTECTION BARRIERS

It is essential for the future health of the trees to be retained on site, that all development activity is undertaken outside the root protection zone of these trees. The position of the fence **MUST** be marked out with biodegradable marker paint on site and agreed with appropriate representatives from the contractor. The fencing **MUST** be erected **prior** to any works in the vicinity of the trees and removed only when all development activity is complete. The protective fencing **MUST** be as that shown in BS 5837 (see Appendix C). The herras panels **MUST** be joined together using a minimum of two anti-tamper couplers which **MUST** be installed so they can only be removed from the inside of the fence. The panels **MUST** supported by stabilizer struts, which **MUST** be installed on the inside and secured to the ground using pins or appropriate weights.

The Fence must be marked with a clear sign reading:

“Construction Exclusion Zone – No Access”

8.2 GROUND PROTECTION – LIGHTWEIGHT ACCESS ONLY

Where any additional ground protection is required, these areas **MUST** be covered with a permeable membrane, with 150mm layer of compressible woodchip

overlaying it; an 18mm marine ply boards will then be secured on top of the woodchip to allow a 1.5tonne mini-digger to access the area without causing major compaction or soil erosion.



Above: ground protection make-up

8.3 SITE HUTS, WELFARE FACILITIES AND STORAGE OF EQUIPMENT, MATERIALS AND CHEMICALS

All site huts **MUST** be positioned outside of the retained trees RPAs.

8.4 MIXING OF CONCRETE

All mixing of cement / concrete **MUST** be undertaken outside of the RPA of all of the retained trees.

8.5 INCOMING SERVICES, DRAINAGE AND SOAKAWAYS

New services **MUST** be routed to avoid all RPAs of retained trees on site and within nearby sites. From an assessment of the subject site, undertaken in conjunction with the project architect, there is no reason to assume this isn't possible. Inspection chambers **MUST** be sited outside the RPA.

8.6 ON SITE SUPERVISION

Regular site supervision is essential to ensure all potentially damaging activities near to trees are properly supervised. A pre start site meeting **MUST** occur to ensure all parties are aware of their responsibilities relating to tree protection on site; this **MUST** include a site induction for key personnel.

Key personnel:

Name	Position	Contact number / email:
Glen Harding	Retained arboriculturalist	07884 056 025 Or info@ghatrees.co.uk
TBC	Site manager	TBC

8.7 OTHER TREE PROTECTION PRECAUTIONS

- **NO** fires lit on site within 20 metres of any tree to be retained.
- **NO** fuels, oils or substances with will be damaging to the tree shall be spilled or poured on site.
- **NO** storage of any materials within the root protections zone.

8.8 HARD LANDSCAPING NEAR RETAINED TREES

All new pathways and hard landscaping areas within the Root Protection Areas (RPAs) of the retained trees **MUST** be designed using no-dig, up and over construction techniques, and be specified in close co-ordination with the retained Arboriculturalist. Porous materials **MUST** also be used when surfacing near the trees. No machinery will be used for this work, which **MUST** all be done by hand.

8.9 DISMANTLING PROTECTIVE BARRIERS

Protective barriers must only be completely removed when all machinery, and equipment has left site.

Conclusion

- 9.1 In conclusion, the principal arboricultural features within the site can be retained and adequately protected during development activities.
- 9.2 No significant or important trees will be lost to facilitate the proposed scheme.
- 9.3 Subject to precautionary measures as detailed above, the proposal will not be injurious to trees to be retained.

Recommendations

- 10.1 Site supervision – An individual e.g. the Site Agent, must be nominated to be responsible for all arboricultural matters on site. This person must:
 - a. Be present on the site the majority of the time.
 - b. Be aware of the arboricultural responsibilities.
 - c. Have the authority to stop any work that is, or has the potential to cause harm to any tree.
 - d. Be responsible for ensuring that all site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
 - e. Make immediate contact with the local authority and / or retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.
- 10.2 It is recommended, that to ensure a commitment from all parties to the healthy retention of the trees, that details are passed by the architect or agent to any contractors working on site, so that the practical aspects of the above precautions are included in their method statements, and financial provision made for these.

30th March 2026

Signed:



Glen Harding MICFor, MSc (Forestry), MArborA
For and on behalf of GHA Trees

Appendix A
TREE PLAN
(see separate PDF)

Appendix B
TREE TABLE

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T1	Silver birch	10	220	1	2.64	3.5	3.5	3.5	3.5	M	4	10-20	C1	Street tree. Slightly sparse crown. Some stem damage at ground level.
T2	Hornbeam	8	120	1	1.44	2	1	2.5	3	M	3	10-20	C1	Small tree of limited value in the wider landscape.
T3	Cedar	13	610	1	7.32	5	5	5	5	M	6 south	40+	A1	Ivy prevented full inspection. Recommend: remove ivy and reinspect.
T4	Olive	2	208	3	2.49	1	1	1	1	M	1	10-20	C1	Small tree of limited value in the wider landscape. Recommend: to be removed.
G5	Hornbeam	8	150	1	1.80	2.5	2.5	2.5	2.5	M	6 over site	10-20	C2	Off site - full inspection not possible. Some measurements estimated.
T6	Oak	10	400	1	4.80	6	6	6	6	M	5	20-40	B1	Off site - full inspection not possible. Some measurements estimated.
T7	Oak	16	550	1	6.60	5	5	5	4	M	7 plus epicormic	20-40	B1	No significant / notable defects observed during inspection.
T8	Larch	16	250	1	3.00	1	2	2	1	OM	5	Less than 10	U	Dead tree.

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T9	Willow	13	665	2	7.98	5	5	5	5	OM	3	Less than 10	U	North stem completely decayed / hollow. Notable decay in south stem. Topped at 4m in past. Recommend: to be removed.
G10	Leyland cypress	13	260	1	3.12	2.5	2.5	2.5	2.5	M	0	10-20	C2	Lapsed hedge.
T11	Cedar	24	470	1	5.64	4	4	4	4	M	4	40+	A1	No significant / notable defects observed during inspection.
T12	Oak	16	580	1	6.96	7	5	6	5	M	6	20-40	B1	No significant / notable defects observed during inspection.
T13	Oak	16	640	1	7.68	2	6	6	1	M	6	20-40	B1	No significant / notable defects observed during inspection.
T14	Lawson cypress	9	100	1	1.20	2.5	2.5	2.5	2.5	M	4	10-20	C1	Unremarkable tree of modest quality and of limited value in the wider landscape.
T15	Hornbeam	16	486	3	5.83	4	6	6	4	M	6	20-40	B1	No significant / notable defects observed during inspection.
G16	Hornbeam	14	300	1	3.60	6	2	4	6	M	6 over site	20-40	B1	Off site - full inspection not possible. Some measurements estimated.

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
G17	Scrub / self sets - hornbeam, cypress, holly	6 to 10	120	1	1.44	1.5	1.5	1.5	1.5	MA	2	10-20	C2	Small trees of limited value in the wider landscape.

KEY :

Tree No: (T= individual tree, G= group of trees, W= woodland)
Age class: Young (Y), Middle aged (MA), Mature (M), Over mature (OM),
Veteran (V)
Height (Ht): Measured in metres +/- 1m

Appendix C
TREE FENCING DETAIL

Figure 3 Examples of above-ground stabilizing systems



