

# BS5837:2012

## Tree Survey

London Lodge  
Bedwell Park, Essendon  
Herts, AL9 6HY

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## **1. Introduction**

- 1.1. TGA Ltd was instructed by Essendon Property Ventures Ltd in May 2023 to survey the trees at London Lodge, Bedwell Park, Essendon, Herts, AL9 6HY in accordance with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.
- 1.2. The survey was carried out on 16<sup>th</sup> May 2023 to record the species and dimensions of the trees, and to assess the trees on site for their quality and benefits within the context of proposed development.
- 1.3. The reference for the Tree Survey Plan that accompanies this report is TGA.2552.TSP.001.
- 1.4. The survey plan is based on the supplied topographical ground survey by Greenhatch Group drawing number 31261D\_01 dated 15/06/2022.
- 1.5. According to a search of the Welwyn Hatfield Borough Council online mapping service on 17<sup>th</sup> May 2023 there are no TPOs at the site, and the site is not within a conservation area.
- 1.6. The controlling authority is Welwyn Hatfield Borough Council who can be contacted at: [www.welhat.gov.uk](http://www.welhat.gov.uk).

## 2. Survey method & limitations

- 2.1. The survey has been carried out following BS5837:2012 Trees in relation to design, demolition and construction – Recommendations. Further notes on survey method are included in the comments section of the schedule where required.
- 2.2. Trunk diameters were measured at 1.5m above ground level using a diameter tape. For trees that were offsite or inaccessible at the time of survey, stem diameters may be estimated. Multiple stemmed trees are measured according to section 4.6 of BS5837:2012. For groups of trees the diameter given may be an estimated average or an estimated maximum.
- 2.3. Tree heights were measured with a Hagloff clinometer or estimated in relation to those measured with the clinometer.
- 2.4. Crown clearance is interpreted as the height of lowest foliage from the crown above ground level.
- 2.5. Tree canopies were measured in four directions using a Leica Deisto laser measure. Where required dimensions were estimated by pacing. Symmetrical canopies are measured in one direction only, with dimensions in the remaining directions assumed to be similar. The canopy extent of tree groups will be based on the topographical survey, or by measuring a maximum canopy radius for each tree.
- 2.6. Categories are based on the Table 1 - Cascade chart for tree quality assessment from BS5837:2012. A is high quality; B is moderate quality; C is low quality, and U category trees are in such a condition that they cannot realistically be retained for longer than 10 years.
- 2.7. Where trees are located on neighbouring land dimensions are estimated.
- 2.8. Where stems or branches are obscured by ivy or other materials a full assessment of those parts was not possible.
- 2.9. Where trees were not plotted on the topographical survey their positions must be considered as estimated.
- 2.10. This report provides tree survey data in accordance with BS5837:2012. The survey was not carried out for health and safety purposes.
- 2.11. Information from this survey may be used for NHBC chapter 4.2 foundation calculations with the limitation that the survey was not carried out explicitly for that purpose. It is recommended that further advice is sought from the author prior to use of this report for this purpose.

### 3. Site overview

- 3.1. The site comprises a single residential address with a single detached house.



**Overview of site included in survey – Google imagery**

- 3.2. The site is accessed from a private drive from Cucumber Lane at the southern corner of the property. There is a pedestrian entrance from the driveway into Bedwell Park at the north. To the north east of the site is open parkland, part of Bedwell Park.
- 3.3. The site is bounded by post and chain link fence, though this is incomplete in places. There are dense hedges on the boundaries, comprising mainly laurel on the boundary with Cucumber Lane, and to the northeast. There are formal hedges at the front (north) of the house. These are mainly C category as individual trees but have landscape value as screening.
- 3.4. T6 is a common ash tree located on the site interior. This tree has little landscape value as it is not notably visible from the outside of the site, and therefore of low category in terms of constraint. Ash dieback disease is visibly present within trees on site within the G15 group, and therefore T6 will also have a limited life expectancy due to the impact of the disease.
- 3.5. There are two individual B category trees included in the survey – these are field maple and holly present on the site boundaries with landscape value as part of the screening. The group of trees forming the hedgerow on the southwest boundary has value as screening such that it has been afforded B category.

- 3.6. There are three trees included in the survey which are 'A' category. These are all trees with high individual quality and landscape value. Two of these are mature Lime trees just offsite within the grounds of Bedwell Park.
- 3.7. There is one A category veteran oak tree at the east of the site. The tree fulfils a high number of features which would categorise it as a veteran, principally a great age and size (2.5m diameter trunk), an ancient appearance, hollow stem, retrenched crown forming a low squat canopy, as well as large attached dead material.<sup>1</sup> Veteran trees are given specific reference in the National Planning Policy Framework as being a constraint in development terms, however there is scope for development of the site outside of the RPA of the tree.



**T2 Sycamore (left) T1 oak (right)**



**View of site from north T2, T5, G7, T19 & T20 (left-right)**

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<sup>1</sup> Veteran trees: A Guide to Good Management.



**Rear garden area at south of site G15 left, T6 right**



**Front garden area G12, T8 – 11 right**



**Rear garden area T6 left, G16 right**

## 4. Recommendations

- 4.1. Trees of A and B category are a constraint to development, and their retention is recommended as part of any proposed development layout.
- 4.2. BS5837:2012 recommends that tree constraints should be considered both above and below ground. Damage to trees below ground occurs when tree roots are severed during excavation, or when soil is compacted such that roots will not grow. BS5837:2012 therefore gives a 'default position' that the proposed layout should be designed to ensure that structures are located outside the RPAs of trees to be retained.
- 4.3. When a final layout design is produced, an Arboricultural Impact Assessment (AIA) should be completed to evaluate the direct and indirect effects of the proposed design, and where necessary recommend mitigation. Where such mitigation is required, an Arboricultural Method Statement and Tree Protection Plan should be produced to provide protection measures as per BS5837:2012 recommendations.

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22 May 2023

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## 5. BS5837:2012 Summary of categories

BS5837:2012 Table 1 - Cascade chart for tree quality assessment			
Category and definition	Criteria (including subcategories where appropriate)		
<b>Trees unsuitable for retention (see Note)</b>			
<b>Category U</b> 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	*Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) *Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline *Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality  <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>		
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>
<b>Trees to be considered for retention</b>			
<b>Category A</b> <b>Trees of high quality</b> with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
<b>Category B</b> <b>Trees of moderate quality</b> with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
<b>Category C</b> <b>Trees of low quality</b> with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

## 6. Tree Survey Schedule

No.	Species	Ht (crown)	Dia (stems)	Crown spread (NESW)	Life stage	ERC	Comments & preliminary recommendations	BS Cat
T1	Quercus robur (Common Oak)	12(1)	2490(1)	6, 6, 6, 6	V	40+	High individual quality and landscape value. Veteran tree. Hollow trunk. Cracks splits and hollows. Great age and size. Attached major deadwood present.	A2
T2	Acer pseudoplatanus (Sycamore)	13(1)	350 340 330 100(4)	5, 5, 5, 5	M	40+	Multi stem from ground level. Landscape value as part of boundary screening. Ivy on main stem.	B2
T3	Ilex aquifolium (Holly)	10(0)	240 260 230(3)	3, 3, 3, 3	M	40+	Landscape value as part of boundary screening. Ivy on main stem. Triple stem.	C2
T4	Ilex aquifolium (Holly)	10(0)	180(1)	3, 3, 3, 3	EM	20+	Low individual quality but landscape value as part of boundary screening.	C2
T5	Acer campestre (Field Maple)	10(0)	250 260 200 150(4)	7, 7, 2, 2	M	40+	Multi stem from ground level. Unbalanced crown shape.	B2
T6	Fraxinus excelsior (Ash)	13(5)	490(1)	5, 7, 7.5, 7.5	M	10+	Limited life expectancy due to Ash dieback disease. Sparse crown. Major deadwood in crown. Low landscape significance on interior of site.	C1

No.	Species	Ht (crown)	Dia (stems)	Crown spread (NESW)	Life stage	ERC	Comments & preliminary recommendations	BS Cat
G7	Prunus laurocerasus (Cherry Laurel), X Cupressocyparis leylandii (Leyland Cypress), Chamaecyparis lawsoniana (Lawson Cypress)	5(0)	150(1)	3, 3, 3, 3	SM	20+	Canopy extents as indicated on topographical survey. Average estimated dimensions given for group. Mainly laurel. Dense boundary screening.	C2
T8	Ilex aquifolium (Holly)	5(1)	100 100(2)	1.5, 1.5, 1.5, 1.5	SM	10+		C2
T9	Chamaecyparis lawsoniana (Lawson Cypress)	8(0)	220(1)	1, 1, 3, 3	EM	20+	Consistent with having been planted as part of hedge, but not trimmed.	C2
T10	Chamaecyparis lawsoniana (Lawson Cypress)	10(0)	370(1)	3, 3, 3, 3	EM	20+	Consistent with having been planted as part of hedge, but not trimmed.	C2
T11	Prunus lusitanica (Portugal Laurel)	10(0)	150 150(2)	3, 3, 3, 3	EM	20+	Part of boundary screening.	C2
G12	Chamaecyparis lawsoniana (Lawson Cypress)	1.5(0)	100(1)	0.5, 0.5, 0.5, 0.5	SM	10+	Formal hedge	C2
G13	Chamaecyparis lawsoniana (Lawson Cypress)	1.5(0)	100(1)	0.5, 0.5, 0.5, 0.5	SM	10+	Formal hedge	C2
T14	Acer pseudoplatanus (Sycamore)	8(0)	150 150 150 150(4)	3, 3, 3, 3	EM	20+	Stem diameter estimated. Multi stem from ground level. Pruned hard at 3m height as per pollard.	C2

No.	Species	Ht (crown)	Dia (stems)	Crown spread (NESW)	Life stage	ERC	Comments & preliminary recommendations	BS Cat
G15	Prunus laurocerasus (Cherry Laurel), Ilex aquifolium (Holly), Acer pseudoplatanus (Sycamore), Fraxinus excelsior (Ash), Chamaecyparis lawsoniana (Lawson Cypress), Crataegus monogyna (Hawthorn)	6(0)	150(1)	2, 2, 2, 2	EM	20+	Canopy extents as indicated on topographical survey. Mixed species group with value as boundary screening. Scope to trim height and sides to maintain as a large hedge.	B2
G16	Prunus laurocerasus (Cherry Laurel)	5(0)	150(1)	4, 4, 4, 4	SM	20+	Stem position estimated as not indicated on topographical survey.	C2
T17	Salix caprea (Goat Willow)	6(0)	450(3)	6, 6, 6, 6	OM	10+	Stem diameter estimated. 27m from T1. Large multi-stemmed tree collapsed at base. Limbs lying on ground but still growing.	C2
G18	Crataegus monogyna (Hawthorn), Prunus spinosa (Blackthorn), Ulmus procera (English Elm)	4(0)	150(1)	3, 3, 3, 3	SM	20+	Mixed low quality scrubby trees with dead Elm also present. Appropriate area of group shown as not indicated on topographical survey.	C2
T19	Tilia X europaea (Common Lime)	20(3)	640(1)	6, 6, 6, 6	M	40+	No visible significant defects. High individual quality and landscape value.	A2
T20	Tilia cordata (Small-leaved Lime)	18(3)	520(1)	6, 6, 6, 6	M	40+	No visible significant defects. High individual quality and landscape value.	A2