



ARBORICULTURAL SURVEY REPORT (BS:5837)

LOCATION: Land to north of 43 Caernarvon Dr, Maidstone ME15 6FJ

CLIENT: Anthony Dean

AUTHOR: Oliver Tong ND Arb TechArborA

DATE: 19th July 2023

REF: GEL00072



EXECUTIVE SUMMARY

Greenwood Environmental Ltd has been commissioned by Anthony Dean, to carry out a survey of trees located on land to north of 43 Caernarvon Dr, Maidstone ME15 6FJ.

A survey was carried out by the author on the 6th of July 2023, in accordance with British Standard 5837:2012 'Trees in Relation to design, demolition, and construction – Recommendations'.

The land contains a single mixed species group of trees, which has been categorised in accordance with BS 5837:2012 Table 1 Cascade chart for tree quality assessment.

Trees are a material consideration for Local Planning Authorities (LPAs), when determining planning applications, whether they are afforded the statutory protection of a Tree Preservation Order (TPO) or Conservation Area (CA) or not.

BS5837:2012 sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and new developments.





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1. INTRODUCTION

1.1 Instruction

- 1.1.1 Greenwood Environmental Ltd has been commissioned by Anthony Dean, to carry out a survey of trees located on land to north of 43 Caernarvon Dr, Maidstone ME15 6FJ.
- 1.1.2 This report considers all significant trees on the site or other areas as designated within our instructions. Land adjacent to the site may also contain trees that pose a constraint on development and where necessary their details have been included.
- 1.1.3 The tree survey is not intended to be a detailed risk assessment of trees. Where the structural integrity of trees has been noted and the trees' condition is such that imminent remedial works are recommended, these should be arranged by the landowner or manager responsible for the safety of the site, as soon as is practically possible.
- 1.1.4 Comments relating to non-arboricultural matters may be made throughout this report. Making comments on such matters is within the normal remit of our instructions and the range of the author's experience. Any opinion thus expressed should be deemed as provisional and confirmation sought from an appropriately qualified professional.

1.2 Limitations

- 1.2.1 Any other planning issues related to the subject trees were not investigated. Greenwood Environmental Ltd are under no obligation to provide further advice that is subsequently required as part of the planning process or assist with planning appeals unless further instructions are given, and terms agreed.
- 1.2.2 The information contained in this report may be relied upon for a period of up to two years, after which time a further assessment of the site will be required.
- 1.2.3 The content and presentation of this report are copyright of Greenwood Environmental Ltd and may not be copied or distributed to third parties not directly involved in the subject matter without the written consent of the author.
- 1.2.4 Greenwood Environmental Ltd's standard terms of business apply, which we provided along with our fee proposal, further copies of which are available on request.
- 1.2.5 All observations were made from ground level without detailed investigations and all measurements are estimated unless otherwise indicated.

1.3 Methodology

- 1.3.1 Trees are a material consideration for Local Planning Authorities (LPAs), when determining planning applications, whether they are afforded the statutory protection of a Tree Preservation Order (TPO) or Conservation Area (CA) or not. British Standard BS 5837:2012 Trees in Relation to Design, Demolition and Construction sets out the principles and



procedures to be applied to achieve a harmonious and sustainable relationship between trees and new developments.

- 1.3.2 The Standard recommends a sequence of activities (appendix a), that starts in the initial feasibility and design phase (RIBA Stage 2 'Concept Design'), with a survey to qualify and quantify the trees on site and establish the arboricultural constraints to development (above and below-ground), to inform the design in an iterative process, and continues with an assessment of the arboricultural impacts of the final design and measures to mitigate such impacts should they be negative.
- 1.3.3 Detailed technical specifications for mitigation and protection measures are devised in the design phase that follows (RIBA Stage 3-4 'Developed and Technical design'), and the sequence ends with the Implementation and Aftercare phase (RIBA Stages 5-7) with the implementation of those measures once planning permission is granted, guided by Arboricultural Method Statements (RIBA Stage 4-5, 'Technical Design and Construction) and professional guidance where appropriate.

1.4 Legal protection status of trees

- 1.4.1 We have **not** made any formal enquires with the Local Planning Authority (LPA) regarding the legal protection status of trees.
- 1.4.2 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 individually, on groups and areas of trees and woodlands.
- 1.4.3 An Order prohibits the: cutting down, topping, lopping, uprooting, wilful damage or wilful 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.
- 1.4.4 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 Tree Preservation Order (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.
- 1.4.5 The authority's consent is not required for carrying out work on trees subject to an Order so far as such work is necessary to implement a full planning permission. For example, the Order is overridden if a tree must be removed to make way for a new building for which full planning permission has been granted.
- 1.4.6 Conditions or information attached to the permission may clarify what work is exempt. However, the authority's consent is required for work on trees subject to an Order if: development under a planning permission has not been commenced within the relevant time limit (i.e., the permission has 'expired'); only outline planning permission has been granted; and it is not necessary to carry out works on protected trees to implement a full planning permission.



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- 1.4.7 The authority's consent is also required, for example, for work on trees protected by an Order that is necessary to implement permitted development rights under the Town and Country Planning (General Permitted Development) Order 2015.
 - 1.4.8 As the protection status of trees can change very quickly, it is recommended that enquiries be made with the LPA each time before carrying out any works to trees.

2. TREE ASSESSMENT SUMMARY

- 2.1 The condition and quality of the existing trees has been assessed in accordance with British Standard 5837:2012 'Trees in Relation to design, demolition, and construction – Recommendations'.
- 2.2 A survey was carried out by the author on the 6th of July 2023, in accordance with British Standard 5837:2012 'Trees in Relation to design, demolition, and construction – Recommendations'.
- 2.3 The land contains a single mixed species group of trees, which has been categorised in accordance with BS 5837:2012 Table 1 Cascade chart for tree quality assessment.

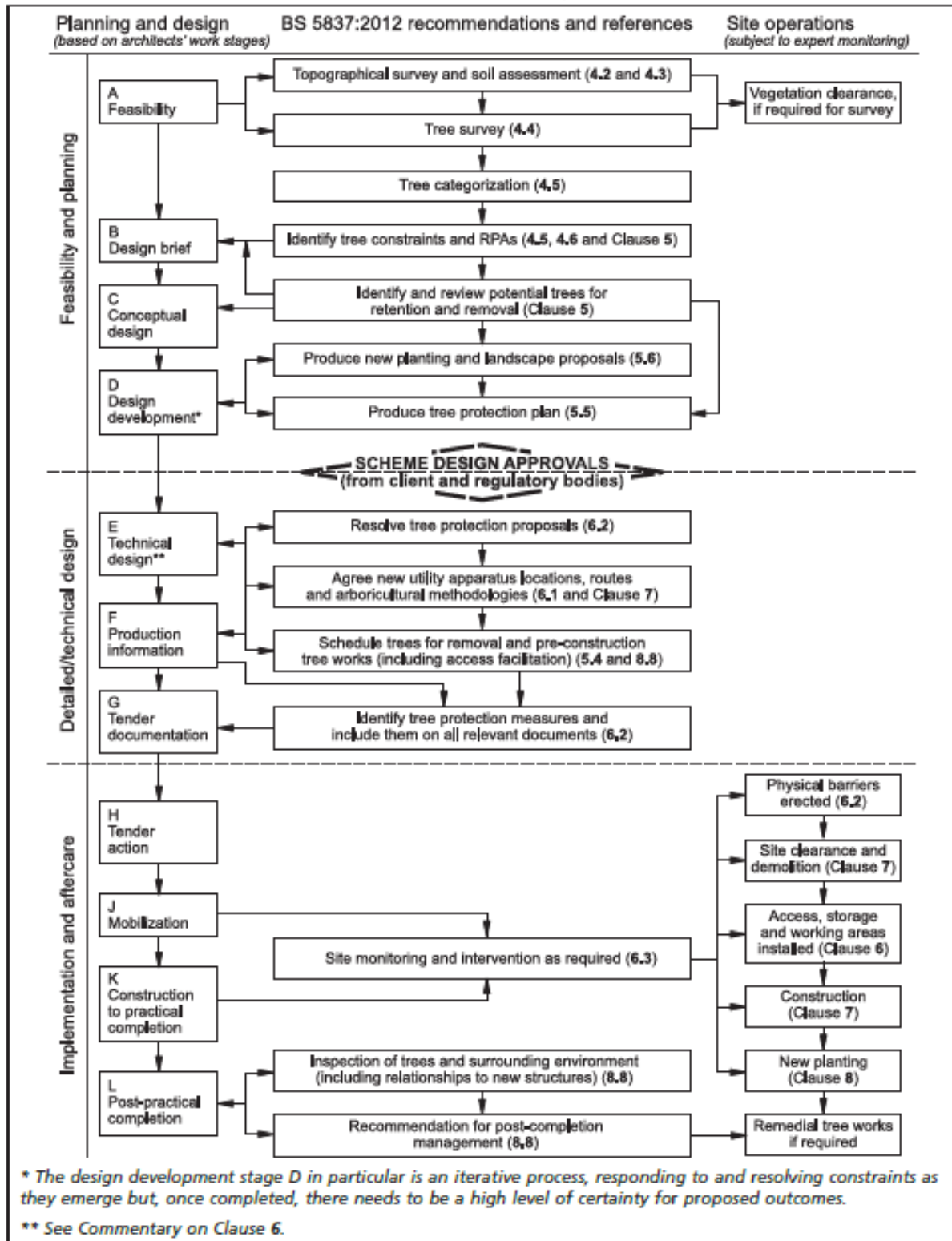


Appendix A

BS 5837:2012 FIGURE 1



Figure 1 The design and construction process and tree care





Appendix B

BS 5837:2012 TREE ASSESSMENT SCHEDULE



Tree ID	Common Name	Stem Diameter [mm]	Tree Height [m]	(N) Branch Spread [m]	(S) Branch Spread [m]	(E) Branch Spread [m]	(W) Branch Spread [m]	Life Stage	Physiological Condition	Structural Condition	Height of Canopy Above Ground Level [m]	Comments	Recommendations	Estimated Remaining Life Expectancy	Quality Category	Quality Sub-Category
G1	Elder, English elm, Goat willow, Sycamore	10 to 500	1 to 18	See plan	See plan	See plan	See plan	Early mature	Mixed	Mixed	0.5	Mixed group, etiolated growth, on steep slope, previously felled and regrown from stumps, canopy overhanging adj. properties, approx. 25 no. sycamore coppice stools and 5 no. maiden trees	Coppice all trees to ground level during dormant winter period Dec-Feb	Long (>40 years)	B	2



Key

No.: This number identifies the trees and corresponds with the provided plans. Trees are prefixed: T (trees); G (groups) and H (hedges).

Species: The common name is given for each tree.

Stem Diameter (Ø): Taken with a diameter measuring tape at 1.5m above ground level as per Figure C1 of BS5837:2012 and recorded in millimetres. Where access has prevented direct measurement of a tree's trunk diameter, the value is estimated.

Height: Measured with a laser clinometer in metres.

Crown Clearance: Distance between the lowest point of the crown and ground level, measured with a laser clinometer in metres.

Radial Crown Spread: Measured with a laser clinometer in metres and given at cardinal compass points. Where access has prevented direct measurement, the value is estimated.

Life Stage: This refers to the age of the individual tree relating to the average life expectancy of each species in a similar environment:

- Y (Young): Recently planted or establishing tree that could be transplanted without specialist equipment i.e., up to 12-14cm stem girth.
- SM (Semi mature): An established tree but one which has not reached its potential ultimate height and has significant growth potential.
- EM (Early mature): A tree reaching its ultimate potential height, whose growth rate is slowing down but will increase in stem diameter and crown spread and has a safe useful life expectancy.
- M (Mature): A mature specimen with limited potential for any significant increase in size but with a reasonable safe useful life expectancy.
- LM (Late mature): A senescent specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.
- V (Veteran): Veteran trees are trees which have features of ancientness but at a younger age. These features include missing branches, hollow trunks and habitat features.
- A (Ancient): An ancient tree is a tree which is remarkably old for its species, which can vary dramatically depending on the species. All ancient trees are also veterans.

Physiology: Overall physiological condition of tree: Good; Fair; Poor; Dead

Structure: Overall structural condition of tree: Good; Fair; Poor; Hazardous

Estimated Remaining Life Expectancy: is the life expectancy of the tree modified first by its age, health, condition, safety, and location (to give safe life expectancy), then by economics, effects on better trees and sustained amenity:

- <10 years
- 10+
- 20+
- 40+

Quality Category: See BS5837:2012 TABLE 1



Appendix C

BS 5837:2012 TABLE 1



Table 1		Cascade chart for tree quality assessment			
Category and definition	Criteria (including subcategories where appropriate)				Identification on plan
Trees unsuitable for retention (see Note)					
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	<ul style="list-style-type: none"> • 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 <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>				
		1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention					
Category A Trees of high quality 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)		
Category B Trees of moderate quality 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		
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	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		



Appendix D

GUIDANCE ON PLANNING AND LEGISLATION 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 tree, 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 its replacement [The National Planning Policy Framework and relevant planning practice guidance](#) document with particular reference to [Tree Preservation Orders and trees in conservation areas](#). You might also find it helpful to seek the advice of a tree surgeon prior to making an application. A directory of Arboricultural Association [Approved Contractors](#) can be found here.

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



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 E

REFERENCES AND BIBLIOGRAPHY



-
- BSI. BS 5837:2012: Trees in Relation to design, demolition and construction - Recommendations.
 - BSI. BS 3998: 2010: Tree work - Recommendations.
 - BSI. BS 8545:2014 - Trees: from nursery to independence in the landscape – Recommendations.
 - Department for Communities and Local Government (2014) Tree Preservation Orders and trees in conservation areas.
 - Department for Communities and Local Government (2021). National Planning Policy Framework.
 - John Roberts, Nick Jackson, Mark Smith, Centre for Ecology and Hydrology (Great Britain). Tree Roots in the Built Environment Issue 8 of Research for amenity trees. The Stationery Office, 2006.
 - Handley, P., Walker, H., Ansine, J., Baden, R., Craig, I., Dewhurst-Richman, N., Doick, K.J., Fay, L., Mackie, E., Parratt, M., Perez-Sierra, A., Sparrow, K., Wheeler, P. (2022) Individual Tree Data Standard. Forest Research, Farnham. p:52. ISBN: 978-1-83915-015-9
 - The Arboricultural Association (24/11/2015 - Last Modified: 01/07/2019) - A brief guide to legislation for trees.



Annex 1

BS 5837:2012 TREE SURVEY PLAN



Greenwood



Greenwood Environmental Ltd 10749899 GB328956949 Juniper House, Warley Hill
Business Park, The Drive, Brentwood, Essex, CM13 3BE
hello@greenwood-env.co.uk