

TREE SURVEY & CONSTRAINTS PLAN IN ACCORDANCE WITH BS 5837:2012

Proj. No 4991	Land to rear of	Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB					
C	Client:	Wingfield Planning Consultancy					
Date	of Report:	23/10/2015					

Contact Details

Client – Wingfield Planning Consultancy								
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1.0 Introduction

1.1 Terms of Reference

- 1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Wingfield Planning Consultancy to prepare a Tree Survey and Constraints Plan for the existing trees at Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB.
- 1.1.2 The site survey was carried out on the 29/09/2015. The relevant qualitative tree data was recorded in order to assess the condition of the existing trees, their constraints upon the prospective development and the necessary protection required to allow their retention as a sustainable and integral part of any future permitted development.
- 1.1.3 Information is given on condition, age, size and indicative positioning of all the trees, both on and affecting the site. This is in accordance with the British Standard 5837:2012 *Trees in relation to design, demolition and construction Recommendations.*

1.2 Scope of Works

- 1.2.1 The survey of the trees and any other factors are of a preliminary nature. The trees were inspected on the basis of the Visual Tree Assessment (VTA) method as developed by Mattheck and Breloer (1994). The trees were inspected from ground level with no climbing inspections undertaken. It is not always possible to access every tree and as such some measurements may have to be estimated. Trees with estimated measurements are highlighted in the schedule of trees. No samples have been removed from the site for analysis. The survey does not cover the arrangements that may be required in connection with the removal of existing underground services.
- 1.2.2 Whilst this is an arboricultural report, comments relating to non arboricultural matters are given, such as built structures and soil data. Any opinion thus expressed should be viewed as provisional and confirmation from an appropriately qualified professional sought. Such points are clearly identified within the body of the report.
- 1.2.3 An intrinsic part of tree inspection in relation to development is the assessment of risk associated with trees in close proximity to persons and property. Most human activities involve a degree of risk with such risks being commonly accepted, if the associated benefits are perceived to be commensurate. In general, the risk relating to trees tends to increase with the age of the trees concerned, as do the benefits. It will be deemed to be accepted by the client that the formulation of the recommendations for all tree management will be guided by the cost-benefit analysis (in terms of amenity), of the tree work.



1.2.4 Where the trees inspected stand within woodland, the frequency with which these trees/woodlands are accessed, or will be accessed, must be considered as an integral part of the recommendations given for the future management of these trees/woodlands. Priority will be given to those trees near existing and proposed footpaths, public highways and the site boundaries where it is assumed that the presence of persons and property will be more frequent and therefore of a potentially higher risk. Many of the trees surveyed within the woodland areas present little or no risk (barring exceptional circumstances) to site users and could therefore be left unmanaged. The decision regarding the frequency of use of these areas within the site, and the management decisions taken based on this frequency, must ultimately be the responsibility of the client

1.3 **Documentation**

- 1.3.1 The following documentation was provided prior to the commencement of the production of this report;
 - Email of instruction from Mr Ben Willis dated 24th September 2015
 - Definition of site boundary
 - Topographical survey

2.0 The Site

2.1 Site Overview

2.1.1. The site is Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex. The site was formerly used as a nursery although this use has lapsed for a number of years.

2.2 Soils

- 2.2.1 The soils type commonly associated with this site are slightly acidic loams and clays with impeded drainage. They are of moderate to high fertility and support a wide range of pasture and woodland type habitats. This soil type constitutes approximately 10.6% the total English land mass.
- 2.2.2 The data given was obtained from a desk top study which provides indications of likely soil types. By definition, this information is not comprehensive and therefore any decisions taken with regards the management, usage or construction on site should be based on a detailed soil analysis.
- 2.2.3 Further to item 2.2.2, this report provides no information on soil shrinkability. It may be necessary for practitioners in other disciplines (e.g. engineers considering foundation design) to obtain this data as required.

2.3 **Statutory Tree Protection**

2.3.1 Hayden's Arboricultural Consultants Limited have been informed that at the date of the tree inspection the trees concerned were not located within a Conservation Area or the subject of a Tree Preservation Order. As such, no written permission would be required from the local planning authority Brentwood Borough Council prior to commencing works to trees.



It should be noted however, that Brentwood Borough Council have the power to serve Tree Preservation Orders very rapidly, and therefore it is incumbent upon owners, managers or any persons wishing to undertake work to any trees to contact the local planning authority prior to commencing works to ensure that the situation has not changed.

2.3.2 Felling License

All trees within the United Kingdom are protected under the Forestry Acts. In general, anyone felling more than 5 cubic metres of timber in any calendar quarter requires a Felling License from the Forestry Commission. There are exemptions however and these are as follows:-

A Felling License is not required in the following instances:

- To fell trees in a garden, an orchard, a churchyard, or a designated open space (Commons Act 1899).
- To carry out surgery operations such as pruning, reduction, dead wooding or pollarding.
- To fell less than 5 cubic metres in a calendar quarter. (Please note that not more than 2 cubic metres in a calendar quarter may be sold).
- To fell trees that are 8 centimetres or less in diameter when measured 1.3 metres from the ground. Trees removed for thinning may have a diameter of up to 10 centimetres and trees managed under a coppice regime may have a diameter of up to 15 centimetres.
- To fell trees previously approved for removal under a Dedication Scheme, or where Detailed Planning Permission has been granted.

Substantial fines exist for not complying with the requirements of a Felling License.

2.3.3 Hedgerow Regulations and Inclosure Act

Certain hedgerows within the United Kingdom are protected under The Hedgerow Regulations 1997. The regulations apply to any hedgerow growing in, or adjacent to, any common land, protected land (local nature reserves and SSSI"s), or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, if it: (a) has a continuous length of, or exceeding 20m; or (b) it has a continuous length of less than 20m and, at each end, meets another hedgerow. The regulations do not apply to hedgerows within the curtilage of, or marking a boundary of the curtilage of, a dwelling house.

Anybody wishing to remove or destroy a hedge must apply to their Local Planning Authority (LPA) for consent. Substantial fines exist for not complying with the requirements The Hedgerow Regulations.

Older hedges could be protected by old Inclosure Acts. These Acts may require that hedges are retained and managed forever more.

It is recommended professional legal advice be sought before removing hedgerows to determine whether the hedgerow might be protected by an Inclosure Act. Many Inclosure Acts are deposited in Local Records Offices.



3.0 Tree Survey

- 3.1 As part of this survey a total of thirteen individual trees, six groups of trees, five areas of trees have been identified. These have been numbered T001 T013, G001 G006 and A001 A005 respectively.
- 3.2 A topographical survey was provided which showed the position of the trees on site. It should be noted however that topographical surveys are not always comprehensive and sometimes it is considered appropriate to record details of trees and landscape features omitted from or beyond the scope of the plan. If this circumstance occurs, the location of the individual tree or landscape feature is estimated. The position of each tree is shown on the attached drawing no. 4991-D.
- 3.3 In order to provide a systematic, consistent and transparent evaluation of the trees included within this survey, they have been assessed and categorised in accordance with the method detailed in item 4.3 of BS 5837:2012 "Trees in Relation to Design, Demolition and Construction Recommendations". For further information, please see the attached Explanatory Notes.
- 3.4 The detailed assessment of each tree and its work requirements with priorities are listed in the attached Schedule of Trees.
- 3.5 In accordance with item 4.2.4 (c) of BS 5837:2012, the items inspected and detailed within this report have been selected for inclusion due to the likely influence of any proposed development on the trees, rather than strictly adhering to the curtilage of the site. However, it must be understood that there may be trees beyond the site and not included in this survey which may exert an influence on the development. Where works for cultural, health and safety, quality of life, or development purposes have been recommended on trees outside the ownership of the site, these can only progress with the agreement of the owner, except where it involves portions of the trees overhanging the boundary.

4.0 Constraints Upon Proposed Development

4.1 Physical Extent of the Trees

- 4.1.1 The Root Protection Areas (RPA) for the trees deemed worthy of retention are indicated on the attached Drawing No.4991-D. These define the below ground constraints of the trees.
- 4.1.2 The crown spreads of the trees deemed worthy of retention are also indicated on the attached Drawing No.4991-D. These define the above ground constraints of the trees.

4.2 Design Considerations

4.2.1 The combination of the above and below ground constraints outlined at 4.1 above, should be used to inform the layout and design of any proposed development by considering the following principal factors;



- 4.2.2 **Shade.** Consideration will be needed regarding the size, positioning and aspect of windows, together with the internal layout of dwellings in close proximity to trees to ensure sufficient daylight enters rooms or buildings. Consideration should also be given to the future growth potential of trees in close proximity to prospective development.
- 4.2.3 **Water Demand.** The water demand of the trees deemed worthy of retention, as listed by the NHBC, is given in the attached *Schedule of Trees* in order to inform the foundation design process.
- 4.2.4 Siting. Ideally, the footprint of any proposed building should be no closer than 2 metres from the edge of any RPA or crown spread of any trees to be retained. This is to ensure that sufficient room is provided to allow the construction of the proposed development without any encroachment into the RPA or under the crown spread. If it is considered acceptable and appropriate to construct within the RPA, specialist engineering techniques (e.g. cantilever, piling, or pad and above ground beam foundations) and ground protection measures will be required to minimise the impact on the roots.
- 4.2.5 **Practicality.** It is important to ensure that any garden attached to a dwelling has a significant area of open ground that is not covered by the crowns of retained trees.

4.3 Construction Measures

- 4.3.1 In order to ensure that trees intended for retention are not harmed during the construction processes, the following matters require consideration and implementation as necessary. Please note that once the design is finalised, Hayden's Arboricultural Consultants will provide a Preliminary Arboricultural Method Statement & Tree Protection Plan that will satisfy the requirements for obtaining planning permission.
- 4.3.2 Protective Fencing. The trees to be retained will need to be protected by the use of stout barrier fencing. This fencing must be in accordance with the requirements of BS 5837:2012 and will be erected prior to any development on the site, therefore ensuring the maximum protection. All tree protection barrier fencing will be regarded as sacrosanct and, once erected, will not be removed or altered without the prior consent of the Local Planning Authority Arboricultural Officer.
- 4.3.3 **Services.** Ideally, all service runs will be routed outside of the RPA of any retained trees. If a service has to be installed across an RPA, works must be undertaken in accordance the guidance of the National Joint Utilities Group Guidance Note 4 "Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees" (NJUG 4 paragraph 4) and installation of such a method as to reduce any possible detrimental affect on roots to an absolute minimum.



4.3.4 **Hard Surfaces.** Hard surfaces may be constructed under the crown spreads of retained trees and within the RPA if specific detail is paid to the design and specification. In these areas, the design will comply with the principles of the Arboricultural Advisory Information Services (AAIS) Practice Note 12 "*Through the Trees to Development*" - the only difference being that instead of a geo-grid, a geo-textile base is provided, and the no-fines road stone is incorporated in, and retained by, a geo-web cellular confinement system. Given the individual requirements of each site, it is essential that a specialist engineer is consulted to specify the construction detail. Where the hard surface proposed is impermeable, it must not cover more than 20% of the RPA. Larger extents of permeable surfacing may be acceptable, dependant on the individual circumstances of the site.

5.0 Conclusions

- 5.1 The site is Pilgims Hatch Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB.This location has been subjected to a total health and safety inspection, together with a consideration of the tree related constraints on development.
- 5.2 Within the area specified for inspection, a total of thirteen individual trees, five areas of trees, six groups of trees and one woodlands have been surveyed. These were found to be of mixed condition and age providing a variety of amenity benefits.
- 5.3 Consideration is being given to undertaking development within the site, but no definite layout has as yet been determined.
- 5.4 Ideally, all development should take place outside the RPA of the trees considered most worthy or appropriate for retention thus allowing a traditional construction process. It is usually technically possible (though not necessarily desirable) to build within a very limited portion of the RPA of one or more trees using specialist engineering techniques, but inevitably this is more difficult and expensive than traditional construction methods and may not be acceptable to the local planning authority.

6.0 Recommendations

- 6.1 It is recommended that the siting and design of the layout considers the presence of trees, particularly the highest quality, and where feasible seeks to incorporate them within any proposed development.
- 6.2 Tree surgery should be completed as detailed in the *Schedule of Trees*. Where this has been identified for reasons other than to permit development, this work should be completed within the advised timescales irrespective of any development proposals.
- 6.3 The tree surgery works proposed as part of the Survey are recommended to mitigate any identified health and safety problems and to promote longevity in retained trees in the context of a potential development site. To this end, should these recommendations be overruled, this Survey stands as the opinion of Hayden's Arboricultural Consultants Limited, and therefore any damage or injury caused by trees recommended by this practice for felling or tree surgery works, to which the proposed schedule of works has been altered or the tree has been requested to be retained by the Local Planning Authority, cannot be the responsibility of this practice.



7.0 Limitations & Qualifications

Tree inspection reports are subject to the following limitations and qualifications.

General exclusions

Unless specifically mentioned, the report will only be concerned with above ground inspections. No below ground inspections will be carried out without the prior confirmation from the client that such works should be undertaken.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third party data will be undertaken. Hayden's Arboricultural Consultants Limited will not be responsible for the recommendations within this report where essential data are not made available, or are inaccurate.

This report will remain valid for one year from the date of inspection, but will become invalid if any building works are carried out upon the property, soil levels altered in any way close to the property, or tree work undertaken. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events.

If alterations to the property or soil levels are carried out, or tree work undertaken, it is strongly recommended that a new tree inspection be carried out.

It will be appreciated, and deemed to be accepted by the client and their insurers, that the formulation of the recommendations for the management of trees will be guided by the following:-

- 1. The need to avoid reasonable foreseeable damage.
- 2. The arboricultural considerations tree safety, good arboricultural practice (tree work) and aesthetics.

The client and their insurers are deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where sources are limited by time constraints or the client, this may lead to an incomplete quantification of the risk.



For and on Behalf of Hayden's Arboricultural Consultants Limited



8.0 References

British Standards Institute. (2010). *Recommendations for Tree Work BS 3998:2010* BSI, London.

British Standards Institute. (2012). *Trees in Relation to Design, Demolition and Construction – Recommendations BS5837:2012* BSI, London.

Tree Preservation Orders and trees in conservation areas (2014). Department for Communities and Local Government.

Mattheck & Breloer H. (1994). Research for Amenity Trees No.4: The Body Language of Trees, HMSO, London.

Forestry Commission (2007). *Tree Felling – Getting Permission*. Country Services Division, Forestry Commission, Edinburgh.

Lonsdale D. (1999). Research for Amenity Trees No 7: Principles of Tree Hazard Assessment and Management, HMSO, London.

DEFRA (1997). The Hedgerow Regulations 1997 – A Guide to the Law and Good Practice. Department of the Environment, Transport and the Regions, HMSO, London.

Roberts J., Jackson N. & Smith M. (2006). Research for Amenity Trees No.8: Tree Roots in the Environment. Department for Communities and Local Government, HMSO, London.

Strouts R.G. & Winter T.G. (1994). Research for Amenity Trees No.2: Diagnosis of Ill-Health in Trees. Department of the Environment, HMSO,



9.0 Appendices

Appendix Species List & Tree Problems Α **Appendix** Schedule of Trees В Appendix Schedule of Works - Irrespective of Development C Appendix D **Explanatory Notes Appendix** Ε Tree Preservation Order Enquiry/Response **Appendix** F Advisory Information & Sample Specifications 1. BS 5837:2012 Figure 1 - Flow Chart - Design and Construction & Tree Care 2. European Protected Species and Woodland Operations Decision Key to aid planning of woodland operations and protecting EPS (v.1) BS 5837:2012 Figure 2 - Default specification for protective barrier 3. 4. BS 5837:2012 Figure 3 - Examples of above-ground stabilizing systems **Appendix** G Drawing No 4991-D



Appendix A - Species List & Tree Problems

Species List:

Ash Fraxinus excelsior
Beech Fagus sylvatica
Blackthorn Prunus spinosa
Bullace Plum Prunus domestica
Elder Sambucus nigra
English Oak Quercus robur

Hawthorn Crataegus monogyna

Hazel Corylus avellana
Hornbeam Carpinus betulus
Oak Quercus robur
Silver Birch Betula pendula

Sycamore Acer pseudoplatanus

Wild Cherry Prunus avium

Tree Problems:

This gives a brief description of the problems identified in the attached Tree Survey.

Name: Artist's Fungus (Ganoderma applanatum & adspersum):								
Alternative or commo	Alternative or common names: "Ganoderma"							
Symptoms/Damage	It causes heart rot in the infected tree, turning the wood white and							
Type:	ultimately soft and spongy as the rot consumes the lignin.							
Consequence:	This rot causes the weakening of the tree and may eventually cause the tree to fall / snap or branches to break off. Some trees may remain structurally sound for many years depending upon the health of the affected tree and the rate and distribution of decay.							
Control Measures:	No control is available, severely affected trees should be felled where there is potential for harm to persons or property by a falling branch or tree.							

Name: Deadwood						
Symptoms/Damage	This relates to dead branches in the crown of the tree. In the					
Type:	majority of cases, this is caused by the natural ageing process of the tree or shading due to its close proximity to neighbouring trees. However, in some situations, it may be related to fungal, bacterial or viral infection.					
Consequence:	Depending upon the location and mass of dead wood removal of the affected tissue may be necessary to prevent harm to persons or property as the wood will become unstable as it decays and in some circumstances is likely to fall from the tree with little or no warning.					
Control Measures:	Detailed monitoring should be undertaken on those trees showing signs of excessive deadwood production to identify the underlying cause.					



Survey Date: 29/09/2015

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Name: Epicormic gi	Name: Epicormic growth						
Symptoms/Damage	This is the production of numerous shoots on the main stem and						
Type:	branches of the tree. They are produced by the bursting into life of						
	otherwise dormant buds. It is commonly associated with elevated						
	levels of stress on the tree.						
Consequence:	Whilst epicormic growth is usually symptomatic of an issue						
	elsewhere within the tree heavy proliferation can cause the trees						
	resources to become depleted or may mask significant structural						
	weaknesses within the framework of the tree.						
Control Measures:	Pruning off epicormic growth may be necessary to improve the						
	visual amenity of the tree or prevent the development of a hazard						
	or obstruction. No direct means of prevention are available other						
	than therapeutic measures to alleviate stresses on the tree.						

Name: Ivy (Hedera helix)						
Symptoms/Damage	Ivy may grow to varying degrees on all areas of a tree from the					
Type:	base to the upper crown. It is possible that in doing so it will out-					
	compete the host tree for available light thereby suppressing the					
	host.					
Consequence:	This is generally only harmful to the tree on already unhealthy specimens which may be constricted by large ivy stems around					
	the trunk or may have their top growth suppressed by a mass of					
	flowering shoots in the crown.					
Control Measures:	Ivy should only be removed if absolutely necessary because it provides abundant cover to wildlife and then by severing twice close to the ground and removing a length of stem thereby causing the gradual dying away of the aerial parts of the plant providing extended benefit to wildlife whist relieving the pressure on the tree.					



Appendix B

Schedule of Trees

SCHEDULE OF TREES

Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex

Surveyed By: David Carmichael Date: 08/10/2015 Managed By: Philippa Durdant-Hollamby

								-		
TreeNo	Species	DBH		ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
A001	Hawthorn, Wild Cherry, Hazel,	230	1	10	Moderate	N3.0, E3.0, S3.0, W3.0	Small area of boundary vegetation. Species including Hawthorn, Wild Cherry, Hazel, Ash and Elder. Relatively young trees of average form	C2	No work required	4
	Ash and Elder.	2.76	0-2m		SM	High	and condition.			
Yes		23.9			10 + years					
A002	English Oak Beech, Hazel	300	1	16	Moderate	N4.0, E4.0, S4.0, W4.0	Predominately Oaks with Beech, Hazel and Hawthorn. Very etiolated forms poor branch unions and significant deadwood.	C2	No work required	4
	Hawthorn.	3.6	6.1-10m		SM	High				
Yes		40.7			20+ years					
A003	Ash, Elder, Hawthorn.	250	1	14	Moderate	N3.5, E3.5, S3.5, W3.5	Area of predominantly semi-mature Ash but also including 1 x early mature ash at eastern end and Elder and Hawthorn. Unremarkable trees of average form and condition.	C2	No work required	4
		3	0-2m		SM	High				
Yes		28.3			20+ years					
A004	Oak, Elder Hawthorn,	150	1	10	Moderate	N3.5, E3.5, S3.5, W3.5	Area of boundary vegetation including a partially collapsed Oak tree. Measurements for Oak have been picked out separately. Species	C2	No work required	4
	Bullace.	1.8	0-2m		SM	High	include Elder Hawthorn, Bullace. Unremarkable trees of average			
Yes		10.2			10 + years		form and condition.			
A005	Elder.	90		5	Low	N2.0, E2.0, S2.0, W2.0	Area of scrubby Elder covered in Ivy and brambles.	C2	No work required	4
		1.08	0-2m		SM	Low				
Yes		3.7			10 + years					
A006	Lawson Cypress, Hazel	180		6	Moderate	N2.0, E2.0, S2.0, W2.0	Small offsite area of semi mature Lawsons Cypress and Hazel. Unmanaged. Poor form.	C2	No work required	4
		2.16	0-2m		SM	High				
No		14.7			10 + years					
A007	Mixed Broadleaves	140	2	2.5	Low	N1.0, E1.0, S1.0, W1.0	Understorey small area of Hawthorn and Elder.	C2	No work required	4
		1.68	0-2m		Y	High				
Yes		8.9			10 + years	Woodland floor				

TreeNo	Species	DBH	He	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
A008	Oak, Ash, Hawthorn	280	1	6	Moderate	N4.0, E4.0, S4.0, W4.0	An area of semi mature trees, predominantly Oak. Better quality trees have been identified individually. The trees within this area are	C2	No work required	4
		3.36	0-2m		SM	High	of average to poor form and condition. Many of the trees within this area feature contorted growth, included bark unions and large			
Yes		35.5			10 + years	Woodland floor	volumes of deadwood.			
G001	Common Ash x5	500	1	8	Moderate	N6.0, E6.0, S6.0, W6.0	Group of 5 x Ash, major deadwood quite etiolated forms. Fairly sparse crown. Unremarkable trees of average form and condition.	C2	No work required	4
		6	2.1-4m		EM	Moderate	contributing marginally more en masse.			
Yes		113.1			10 + years					
G002	English Oak x2	500		1	Moderate	N4.0, E4.0, S4.0, W4.0	2 x boundary Oak trees. Major deadwood and some dieback. Contorted forms due to dominance of adjacent trees. average form	C2	No work required	4
		6	2.1-4m		EM	High	and condition.		No work required	
Yes		113.1			20+ years					
G003	English Oak x7, Hawthorn x2	400		6	Moderate	N5.0, E5.0, S7.0, W5.0	Group with 7 x Oak 2 x Hawthorn. Significant amount of deadwood in Oaks and epicormic growth. Typical and rather poor woodland form.	C2		4
		4.8	2.1-4m		EM	High	Unremarkable individual trees of average form and condition which contribute slightly more en masse.			
Yes		72.4			20+ years		Sommer of the state of the stat			
G004	Blackthorn x1, Hazel x1, Oak	400	1	3	Moderate	W5.0	1 x Blackthorn 1 x Hazel and 3 x maturing Oak trees. Significant deadwood in Oaks with suppressed forms. Average form and	C2	No work required	4
	х3	4.8	2.1-4m		EM	High	condition.			
Yes		72.4			20+ years					
G005	Oak x1, Ash x1, Hawthorn x1,	400	1	1	Moderate	N5.0, E5.0, S5.0, W5.0	1 x early mature Oak 1 semi-mature Ash 1 x early mature Hawthorn and 1 x early mature off site Hornbeam. Oak is dominant feature.	C2	No work required	4
	Hornbeam x1.	4.8	0-2m		EM	High	Hawthorn significantly decayed. Hornbeams crown overhangs onto site.			
Yes		72.4			40 + years					
G006	Hawthorn x2, Ash x1.	550	1	6	Moderate	N6.0, E6.0, S6.0, W6.0	Group located around seasonal pond containing 2 x Hawthorn and 1 x multi-stemmed Ash. Ash is dominant feature but with significantly	C2	No work required	4
		6.6	0-2m		М	High	thinning crown.			
Yes		136.8			20+ years					
G007	Common Elder x5	170		5	Low	N2.5, E2.5, S2.5, W2.5	Group of five Elder. Low quality small trees. Some dieback.	C2	No work required	4
		2.04	0-2m		SM	Moderate				
Yes		13.1			10 + years	Dense undergrowth				

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
G008	Common Elder x4	140		4	Low	N2.0, E2.0, S2.0, W2.0	Group of four Elder. Average form and condition.	C2	No work required	4
		1.68	0-2m		SM	Moderate				
Yes		8.9			10 + years	Dense undergrowth				
G009	Hawthorn x1, Oak x3	310	1	17	Moderate		Group of four trees, the three Oaks are all tall with etiolated form, the stems are all heavily shrouded in ivy, preventing a full visual	C2	No work required	4
		3.72	2.1-4m		SM	High	inspection. The Hawthorn is an understorey item. All four trees feature minor deadwood.			
Yes		43.5			10 + years	Dense undergrowth	leature minor deadwood.			
G010	English Oak x4	400		19	Moderate	N7.0, E7.0, S7.0, W7.0	Group of four Oak of moderate condition. All are etiolated and feature major deadwood. No significant indicators of disease or	B2	No work required	4
		4.8	0-2m		SM	High	decay.		No work required	
Yes		72.4			20+ years	Dense undergrowth				
G011	Common Elder x3	180		4	Low	N3.0, E3.0, S3.0, W3.0	Group of three Elder. Average form and condition.	C2		4
		2.16	0-2m		SM	Moderate				
Yes		14.7			10 + years	Dense undergrowth				
G012	Elder, Cherry Plum	180	,	4	Low	N2.0, E2.0, S2.0, W2.0	Area of low quality small trees.	C2	No work required	4
		2.16	0-2m		SM	Moderate				
Yes		14.7			10 + years	Dense undergrowth				
H001	Hawthorn, Elder	120		4	Low	N2.0, E2.0, S2.0, W2.0	Unmanaged hedge row of poor quality.	C2	No work required	4
		1.44	0-2m		SM	High				
Yes		6.5			10 + years	Dense undergrowth				
T001	Silver Birch.	800	1	16	Moderate	N6.5, E7.5, S8.0, W9.0	Very large specimen for species. DBH exaggerated due to historic partial root plate failure and Reactive growth. Dense Ivy up stem and	C3	Sever Ivy	3
		9.6	0-2m		М	Low	into crown. Exposed side of stem suggests no internal decay. Tree			
Yes		289.5			10 + years		appears to be in reasonably condition. Further investigation of structural integrity will be required if tree to be retained and Ivy severed to aid further inspection.			
T002	English Oak. 750	1	14	Moderate	N8.0, E9.0, S8.0, W8.0	Slight lean to north-east. From a distance an attractive tree, however it has a very poor main union which will greatly reduce its SULE.	C1	No work required	4	
		9	0-2m		EM	High	Crown has a number of weak branch unions. No work required under current site use due to negligible target area.			
Yes		254.5			10 + years		current site use due to negligible target area.			

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority	
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat			
On site		RPA (m²)	RPA (m²)			SULE	Ground Cover				
T003	Common Ash.	690	1	17	Moderate	N7.0, E7.0, S7.0, W7.0	Multi stem (DBH 560 & 400) originally 4 x stems but two of the northern stems have failed leaving large tearout wounds and	U	No work required	4	
		8.28	2.1-4m		М	Moderate	exposed stem tissues. Very large Ganoderma bracket western remaining stem. No works required under current site use.				
Yes		215.4					Ternaming Stem. No works required under current site use.				
T004	English Oak.	830	1	17	Moderate	N8.0, E8.0, S8.0, W8.0	Some deadwood and epicormic growth. Ivy up stem and main scaffold limbs. No indicators of disease decay or structural defects.	B1	No work required	4	
		9.96	2.1-4m		М	High	Attractive tree of reasonable form and condition.				
Yes		311.7			40 + years						
T005	English Oak	950		7	Moderate	N9.0, E9.0, S10.0, W9.0	Some deadwood and epicormic growth. No indicators of disease decay or structural defects. Attractive tree of reasonable form and	B1	No work required	4	
		11.4	2.1-4m		М	High	condition.		No work required		
Yes		408.3			40 + years						
T006	Common Ash.	670		17	Moderate	W8.0	Main unions appear sound although there is a tight co-dominant stem union on west. Some deadwood but otherwise in reasonable	B2		4	
		8.04	2.1-4m		М	Moderate	form and condition.				
Yes		203.1			20+ years						
T007	English Oak	790	1	18	Moderate	N8.5, E9.0, S6.0, W6.0	Major deadwood with dense Ivy up stem along scaffold limbs and out into crown. Otherwise appears to be in reasonable form and	B1	Sever Ivy	3	
		9.48	2.1-4m		М	High	condition.				
Yes		282.3			20+ years						
T008	English Oak.	1060	1	18		W9.0	otherwise no indicators of disease decay or structural defects.	B1	No work required	4	
		12.72	4.1-6m		М	High	Reasonable form and condition.				
Yes		508.3			20+ years						
T009	English Oak	1000	1	18	Moderate	N6.0, E7.0, S8.5, W5.0	Some major deadwood otherwise no indicators of disease decay or structural defects. Good quality tree with reasonable form and	B1	No work required	4	
		12	4.1-6m		М	High	condition.				
Yes		452.4			20+ years						
T010	Common Ash.	900	1	18	Moderate	W9.0	Multi stem (DBH 2x420, 2x480). Very large broad spreading tree significant minor deadwood and thinning of crown. Nearly down	В3	No work required	4	
		10.8	2.1-4m		М	Moderate	graded due to thinning of crown but dominance within the woodland necessitated higher than C category.				
Yes		366.4			20+ years		nooconated migrar triair o eategory.				

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T011	English Oak.	820	1	17	Moderate	N7.5, E8.5, S8.5, W8.5	Some deadwood otherwise no indicators of disease decay or structural defects. Good quality tree with reasonable form and	B1	No work required	4
		9.84	0-2m		М	High	condition.			
Yes		304.2			20+ years					
T012	English Oak.	790	1	17	Moderate	N9.5, E9.0, S9.0, W9.0	Some deadwood and light epicormic growth otherwise no indicators of disease decay or structural defects. Good quality tree with	B1	No work required	4
		9.48	0-2m		М	High	reasonable form and condition.			
Yes		282.3			20+ years					
T013	Sycamore.	550	1	13	Moderate	N4.0, E4.0, S4.0, W4.0	Multi stem (DBH 390 & 380) tight main union and co-dominant stem on west. Unremarkable tree of average form and condition.	C1	No work required	4
		6.6	0-2m		EM	Moderate				
Yes		136.8			20+ years					
T014	Hawthorn	400	5		Low	N3.0, E3.0, S3.0, W3.0	DBH estimated due to dense nettle and Ivy. Early mature Hawthorn densely shrouded in Ivy to the point where the crown is heavily	C1/U	J No work required	4
		4.8	2.1-4m		EM	High	suppressed. Some canopy dieback evident. Poor quality tree not requiring felling due to low risk location.			
Yes		72.4			10 + years	Dense undergrowth	requiring tolling add to low hox location.			
T015	Silver Birch	545	1	16	Low	N7.5, E5.5, S5.5, W6.0	Mature Birch featuring bark damage to surface roots on the western aspect. Swept stem (leaning toward the east). Crown is supported by 3 main scaffold limbs which share tight unions. Crown contains minor deadwood.	C1	No work required	4
		6.54	0-2m		М	Low				
Yes		134.4			10 + years	Dense undergrowth	deadwood.			
T016	Norway Spruce	280	1	17	Moderate	N3.5, E5.0, S4.0, W2.0	Off site tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		3.36	2.1-4m		SM	Moderate	form and condition. Asymmetric crown due to competition with			
No		35.5			10 + years		neighbouring Birch.			
T017	Silver Birch	320	1	18	Moderate	N6.5, E4.0, S5.0, W5.5	Offsite tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		3.84	2.1-4m		SM	Moderate	form and condition.			
No		46.3			10 + years					
T018	Silver Birch	220	18		Moderate	N1.5, E1.0, S4.0, W4.5	Offsite tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		2.64	2.1-4m		SM	Moderate	form and condition. Growing close to neighbouring Birch.			
No		21.9			10 + years					

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T019	Silver Birch	340	1	17	Moderate	N3.5, E4.0, S4.5, W4.5	Off site tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		4.08	2.1-4m		SM	Moderate	form and condition.			
No		52.3			10 + years					
T020	Lawson Cypress	320	1	13	Moderate	N3.0, E2.5, S3.0, W3.0	Off site tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		3.84	2.1-4m		SM	High	form and condition.			
No		46.3			10 + years					
T021	Sycamore	400		17	Moderate	N5.0, E4.0, S4.5, W5.5	Off site tree with no access, therefore all dimensions are estimated and comments are based on what can be seen from site. Average	C1	No work required	4
		4.8	2.1-4m		EM	Moderate	form and condition.			
No		72.4			10 + years					
T022	Common Ash	150		5	Low	N2.0, E2.0, S2.0, W0.5	Young Ash of poor form/limited longevity, features an included bark union on scaffold limb at 1m. Leaning stem. Asymmetric crown.	C1	No work required	4
		1.8	0-2m		Y	Moderate				
Yes		10.2			10 + years	Bare earth				
T023	Sycamore	480	1	14	Moderate	N0.5, E7.0, S8.0, W6.0	Historically pollarded at 1.5m, as such the tree features tight scaffold limb unions and minor cavities on old pruning wounds. Dense ivy on	C1	No work required	4
		5.76	4.1-6m		М	Moderate	the lower stem and scaffold limbs. Asymmetric crown. Minor deadwood.			
Yes		104.2			10 + years	Bare earth	deadwood.			
T024	Sycamore	680	1	15	Moderate	N8.0, E8.0, S3.5, W6.0	Multi stem (DBH 500 & 450). Twin stemmed Sycamore located off site but abutting the boundary of the site. Dense Ivy on stem	C1	No work required	4
		8.16	2.1-4m		M	Moderate	hampers full visual inspection and DBH has been estimated. Stem union appears tight however this is difficult to assess given the dense			
No		209.2			10 + years	Bare earth	ivy. Asymmetric crown. Minor deadwood.			
T025	Common Ash	890	,	17	Low	N7.5, E10.0, S9.5, W10.0	Multi stem (DBH 650 & 600). Mature twin stemmed Ash. Both stems bifurcates at 1.5-2 metres into a total of 5 main scaffold limbs. Both	C1	No work required	4
		10.68	0-2m		М	Moderate	stems feature minor cavities in old pruning wounds. Ivy on stems. The crown is broad spreading and contains major deadwood.			
Yes		358.3			10 + years	Ivy, Dense undergrowth	The clown is broad spreading and contains major deadwood.			
T026	Silver Birch	730	1	17	Low	N6.5, E7.0, S4.5, W5.0	Multi stem (DBH 500, 400 & 350). Mature multi-stemmed Birch. One stem has completely collapsed due to substantial decay. All three	C1	No work required	4
		8.76	0-2m		М	Low	remaining stems lean (in different directions). Dense ivy on stems. Tight stem unions. Minor deadwood.			
Yes		241.1			10 + years	Dense undergrowth	right stom unions, without academoca.			

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T027	Hawthorn	360		6	Moderate	N3.5, E1.0, S3.0, W2.0	Multi stem (DBH 3x190, 1x130). Multi-stemmed Hawthorn heavily suppressed by neighbouring Hazel, as such the tree is unlikely to	C1/U	No work required	4
		4.32	2.1-4m		SM	High	survive beyond 10 years, this could be extended however if the neighbouring Hazel is re-coppiced.			
Yes		58.6				lvy	neighbouring Hazer is re-coppiced.			
T028	Hazel	490		8	Moderate	N2.0, E1.5, S3.0, W5.0	Multi stem (DBH 3x180. 3x170. 3x140). Lapsed Hazel coppice featuring elongated limbs which are suppressing neighbouring	C1	Coppice	3
		5.88	2.1-4m		SM	High	Hawthorn.			
Yes		108.6			10 + years	lvy				
T029	Hornbeam	860		8		W3.5	Multi stem (DBH 550. 300 & 580). Located on a slope at the boundary of the site, next to a public footpath. A multi-stemmed	В3	No work required	4
		10.32	0-2m		V	Moderate	veteran Hornbeam with good habitat value, though it should not be retained within a development where the target area would be high.			
Yes		334.6			20+ years	Bare earth, Ivy	All the stems lean to the east, most notably the most eastern stem			
							which sweeps almost horizontally top the east for 2 metres before changing to an upward trajectory. The stems contain bark wounds and minor cavities. The crown is broad spreading and contains minor deadwood.			
T030	English Oak	550	,	8	Moderate	N2.0, E6.0, S3.5, W0.5	Remnant of a failed, decayed mature Oak with only one live limb which makes up the entire crown. No remedial action required due to ow target area however it should be noted that this tree is unsuitable for retention within a development.	C1/U	No work required	4
		6.6	0-2m		OM	High				
Yes		136.8				Bare earth	Total Total Marian & development.			
T031	English Oak	750	1	8	Moderate	N3.0, E8.0, S9.0, W7.0	DBH estimated due to dense Ivy which is suppressing the crown. No obvious indicators of disease or decay however the ivy is impairing	B2	Remove Ivy. Remove major deadwood.	2
		9	0-2m		М	High	the inspection. Lower crown contains major deadwood.			
Yes		254.5			20+ years	Dense undergrowth				
T032	Common Ash	750	1	8	Moderate	N4.0, E6.5, S4.0, W3.0	Over mature Ash featuring an entirely hollow stem and large hole that penetrates all the way through the stem. A very tall tree with a	C3/U	No work required	4
		9	6.1-10m		OM	Moderate	high canopy. High habitat value. Not requiring intervention due to low target area. Not suitable for retention within a development.			
Yes		254.5			10 + years	Bare earth	target area. Not suitable for retention within a development.			
T033	Common Ash	820	1	9	Moderate	N6.0, E8.0, S9.0, W10.0	Multi stem (DBH 450. 440. 370. 300 & 200). Multi stemmed Ash. The two most northern stems, which cross and rub against each other, feature decay as indicated through resonance testing. Dense ivy on the stems. Minor deadwood in crown. No world's required under	C1	No work required	4
		9.84	0-2m		М	Moderate				
Yes		304.2			10 + years	lvy	current land use however within a development the two decaying stems would need to be removed.			

TreeNo	Species	DBH	He	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T034	Common Ash	780	1	8	Moderate	N6.0, E5.0, S8.0, W7.0	Multi stem (DBH 2x550). Twin stemmed Ash with large basal sucker emerging from ground level. Dense Ivy on stem extending into	C1	No work required	4
		9.36	0-2m		M	Moderate	crown. Major deadwood in crown. Average form and condition.			
Yes		275.2			10 + years	lvy				
T035	Common Ash	780	1	8	Moderate	N5.0, E5.0, S9.0, W4.0	Multi stem (DBH 2x550). Twin stemmed Ash featuring dense Ivy on the stem preventing a full visual inspection. Group tree of moderate	B2	No work required	4
		9.36	0-2m		М	Moderate	quality with no significant indicators of disease or decay. The crown contains moderate volumes of minor deadwood and also features			
Yes		275.2			20+ years	lvy	low limbs on the southern aspect.			
T036	Common Ash	890	1	8	Moderate	N2.0, E5.0, S8.0, W2.5	Multi stem (DBH 500, 440 & 580). Multi stemmed Ash featuring dense Ivy on the stem preventing a full visual inspection. Specimen	U	Fell to ground level	3
		10.68	0-2m		М	Moderate	features substantial bark necrosis on all 3 main stems and around the unions, in addition to this the crown contains major deadwood			
Yes		358.3				lvy	and is asymmetric due to competition with neighbouring specimens.			
T037	Common Ash	460	19		Moderate	N10.0, E2.0, S3.0, W4.0	Early mature Ash featuring dense Ivy on the stem extending into the crown. The tree features a swept stem which leans to the north and	C1	No work required	4
		5.52	6.1-10m		EM	Moderate	also features an asymmetric crown due to competition with neighbouring specimens.			
Yes		95.7			10 + years	lvy	noighbouring opcommend.			
T038	Common Ash	680	19 Moder	Moderate	N3.0, E7.5, S3.0, W2.0	Multi stem (DBH 520 & 440). Early mature Ash featuring dense lvy on the stem extending into the crown. The tree is of multi-stemmed	C1	No work required	4	
		8.16	6.1-10m		EM	Moderate	form with tight stem unions, the most northern stem is swept to the northeast and the crown is asymmetric due to competition with			
Yes		209.2			10 + years	lvy	neighbouring specimens. The crown contains minor deadwood.			
T039	Common Ash	500	1	9	Moderate	N6.0, E7.0, S4.0, W8.0	Mature Ash featuring dense Ivy on the stem extending into the crown. The tree features a dead basal sucker and the crown contains	B2	No work required	4
		6	6.1-10m		М	Moderate	major deadwood.			
Yes		113.1			20+ years	lvy				
T040	Hawthorn	200		5	Low	N2.0, E2.0, S2.0, W1.0	Understorey item. Average form and condition. Dense Ivy on stem.	C2	No work required	4
		2.4	0-2m		SM	High				
Yes		18.1			10 + years	Light undergrowth				
T041	English Oak	340	1	9	Moderate	N4.5, E4.0, S2.0, W1.0	Multi stem (DBH 210 & 260). Twin stemmed Oak featuring etiolated growth. Dense Ivy on the stem. Asymmetric crown and minor	C1	No work required	4
		4.08	6.1-10m		М	High	deadwood.			
Yes		52.3			10 + years	lvy				

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T042	Hawthorn	200		5	Low	N2.5, E2.5, S2.5, W2.5	Understorey item. Average form and condition. Dense Ivy on stem.	C2	No work required	4
		2.4	0-2m		SM	High				
Yes		18.1			10 + years	Light undergrowth				
T043	English Oak	490	1	9	Moderate	N8.0, E7.5, S6.0, W1.0	Early mature Oak located within a woodland setting. In good form with no significant indicators of disease or decay. The crown contains	B2	No work required	4
		5.88	6.1-10m		М	High	minor deadwood and is asymmetric due to competition with			
Yes		108.6			20+ years	lvy	neighbouring specimens.			
T044	Silver Birch	580	1	17	Moderate	N4.0, E11.0, S2.0, W0.5	Multi stem (DBH 430 & 390). Twin stemmed Birch. The most eastern stem is very contorted and leans to the east. Dense lvy on both	C2	No work required	4
		6.96	0-2m		EM	Low	stems. Major deadwood in crown.			
Yes		152.2			10 + years	Woodland floor				
T045	Common Ash	480	18	Moderate	N1.0, E6.0, S5.5, W3.0	Multi stem (DBH 380 & 290). Twin stemmed Ash featuring a tight stem union, asymmetric crown and minor deadwood. No significant	C2	No work required	4	
		5.76	0-2m		EM	Moderate	indicators of disease or decay.			
Yes		104.2			10 + years	lvy				
T046	English Oak	410	1	17	Moderate	N3.5, E4.0, S6.5, W6.5	Woodland/group edge tree of moderate form and condition. Specimen features major deadwood end an asymmetric crown. No	B2	No work required	4
		4.92	0-2m		EM	High	significant indicators of disease or decay.			
Yes		76			20+ years	lvy				
T047	Hawthorn	180	,	4	Low	N2.0, E2.0, S2.0, W2.0	Average form and condition. No significant indicators of disease or decay.	C2	No work required	4
		2.16	0-2m		SM	High				
Yes		14.7			10 + years	Dense undergrowth				
T048	Common Elder	180		4	Low	N2.0, E2.0, S2.0, W2.0	Average form and condition. No significant indicators of disease or decay.	C2	No work required	4
		2.16	0-2m		SM	High				
Yes		14.7			10 + years	Dense undergrowth				
T049	English Oak	425	1	15	Moderate	N5.5, E5.0, S5.5, W4.0	Early mature Oak of moderate form and condition. Features low limbs, minor deadwood and an asymmetric crown.	B2	No work required	4
		5.1	0-2m		EM	High	,			
Yes		81.7			20+ years	Woodland floor				

TreeNo	Species	DBH	Не	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		
On site		RPA (m²)			SULE	Ground Cover				
T050	English Oak	510	1	15	Moderate	N5.5, E5.5, S5.5, W4.5	Mature Oak of moderate form and condition. Specimen features low limbs and minor deadwood. No significant indicators of disease or	B2	No work required	4
		6.12	0-2m		М	High	decay.			
Yes		117.7			20+ years	Woodland floor				
T051	Common Ash	580	1	15	Moderate	N7.5, E6.5, S5.5, W8.0	Mature Ash of moderate form and condition. Specimen features low limbs and minor deadwood. No significant indicators of disease or	B2	No work required	4
		6.96	0-2m		М	Moderate	decay.			
Yes		152.2			20+ years	Woodland floor				
T052	English Oak	490	1	17	Moderate	N2.5, E6.5, S7.5, W7.5	Early mature Oak of moderate form and condition. No significant indicators of disease or decay. Crown contains moderate volumes of	B2	No work required	4
		5.88	0-2m		EM	High	minor deadwood. Asymmetric crown due to competition with			
Yes		108.6			20+ years	Woodland floor	neighbouring specimens.			
T053	English Oak	470	1	17	Moderate	N6.0, E5.5, S5.5, W3.0	Early mature Oak of moderate form and condition. No significant indicators of disease or decay. Dense ivy on upper stem and	B2	No work required	4
		5.64	0-2m		EM	High	branches. Crown contains moderate volumes of minor deadwood.			
Yes		99.9			20+ years	Woodland floor	Asymmetric crown due to competition with neighbouring specimens.			
W001	Oak, Ash, Hawthorn.	500	1	17	High	N5.0, E5.0, S5.0, W5.0	Predominately a fairly open Oak woodland but also containing Ash and Hawthorn. Poor stratification with ground cover predominantly	B1	No work required	4
		6	2.1-4m		EM	High	nettles and brambles.			
Yes		113.1			40 + years					

Appendix C

Schedule of Works

SCHEDULE OF WORK

Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex

Surveyed By: David Carmichael

Surveyed: 08/10/2015

Managed By: Philippa Durdant-Hollamby

Tree No.	Species	Work required	Priority
T031	English Oak	Remove Ivy. Remove major deadwood.	2
T001	Silver Birch.	Sever Ivy	3
T001	Silver Birch.	Sever Ivy	3
T007	English Oak	Sever Ivy	3
T007	English Oak	Sever Ivy	3
T028	Hazel	Coppice	3
T036	Common Ash	Fell to ground level	3

Appendix D

Explanatory Notes

Explanatory Notes

Categories



Below is an explanation of the categories used in the attached Tree Survey.

No Identifies the tree on the drawing.

Species Common names are given to aid understanding for the wider audience.

BS 5837 Main Category Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;

Category B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years;

Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;

Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837 Sub Category Table 1 of BS 5837:2012 also requires a sub category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows:

Sub Category 1 - Mainly arboricultural qualities;

Sub Category 2 - Mainly landscape qualities;

Sub Category 3 - Mainly cultural values, including conservation.

Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub Category.

DBH

Diameter of main stem in millimetres at 1.5 metres from ground level.

(mm)

Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.

Age

Recorded as one of seven categories:

Y Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.

S/M Semi-mature. An established tree, but one which has not reached its prospective ultimate height.

E/M Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.

M Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.

O/M Over-mature. A senescent or moribund 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. An over-mature specimen, usually of high value due to either its age, size and/or ecological significance



D Dead.

Height Recorded in metres, measured from the base of the tree.

Crown Base Recorded in metres, the distance from ground and aspect of the lowest

branch material.

Lowest Branch Recorded in metres, the distance from ground and aspect of the emergence

point of the lowest significant branch.

Life Expectancy Relates to the prospective life expectancy of the tree and is given as 4

categories:

1 = 40 years+;

2 = 20 years+;

3 = 10 years+;

4 = less than 10 years.

Crown Spread Indicates the radius of the crown from the base of the tree in each of the

northern, eastern, southern and western aspects.

Minimum Distance This is a distance equal to 12 times the diameter of the tree measured at 1.5

metres above ground level for single stemmed trees and 12 times the average diameter of the tree measured at 1.5 metres above ground level

tree for multi stemmed specimens. (BS 5837:2012, section 4.6).

RPA This is the Root Protection Area, measured in square metres and defined in

BS5837:2012 as "a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority". The RPA is shown on the drawing. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations. Some methods of construction can be carried out within the RPA of a retained tree but only if approved by the Local Planning

Authority's tree officer.

Water Demand This gives the water demand of the species of tree when mature, as given in

the NHBC Standards Chapter 4.2 "Building Near Trees".

Visual Amenity Concerns the planning and landscape contribution to the development site

made by the tree, hedge or tree group, in terms of its amenity value and prominence on the skyline along with functional criteria such as the screening value, shelter provision and wildlife significance. The usual

definitions are as follows:

Low An inconsequential landscape feature.

Moderate Of some note within the immediate vicinity, but not significant

in the wider context.

High Item of high visual importance.

Problems/ May include general comments about growth characteristics.

May include general comments about growth characteristic, how it is affected by other trees and any previous surgery work; also, specific

problems such as deadwood, pests, diseases, broken limbs, etc.

Work Required Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems identified in the "Problems/comments" category.



Comments

Work Required (AIA)

Identifies the tree work specifically necessary to allow a proposed development to proceed.

Priority

This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey.

- 1 Urgent works required immediately;
- 2 Works required within 6 months;
- 3 Works required within 1 year;
- 4 Re-inspect in 12 months,
- **0** Remedial works as part of implementation of planning consent.



Access Facilitation Pruning

One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.

Arboricultural Method Statement

Methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.

Arboriculturist

Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.

Competent Person

Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached. NOTE - a competent person is expected to be able to advise on the best means by which the recommendations of this British Standard may be implemented.

Construction

Site-based operations with the potential to affect existing trees.

Construction Exclusion Zone

Area based on the root protection area from which access is prohibited for the duration of a project.

Root Protection Area (RPA)

Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.

Service

Any above or below ground structure or apparatus required for utility provision. **NOTE** - examples include drainage, gas supplies, ground

source heat pumps, CCTV and satellite communications.

Stem

Principal above ground structural component(s) of a tree that supports its branches.

Structure

Manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork.

Tree Protection Plan

Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures.

Veteran Tree

Tree that, by recognized criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

NOTE - these characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem.



Appendix E

Tree Preservation Order Enquiry/Response

Melanie McKenzie

From: Tracy Reader [tracy.reader@brentwood.gov.uk]

Sent: 12 October 2015 15:02
To: Melanie McKenzie

Cc: Alan Marsh

Subject: RE: TPO Enquiry - 4991 Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex,

CM15 9QB

Attachments: 4991 - Land rear of Hatch Road Pilgrims Hatch - Site Map (2).jpg

Dear Melanie

I have searched on the plan that you supplied and as far as i can see we have no tree preservation orders on this site

Regards

Tracy

Tracy Reader | Land Charges Assistant | Brentwood Borough Council T 01277 312625 | F 01277 312743 | www.brentwood.gov.uk | tracy.reader@brentwood.gov.uk

From: Melanie McKenzie [mailto:MelanieMcKenzie@TreeSurveys.co.uk]

Sent: 12 October 2015 09:00

To: Tracy Reader

Subject: RE: TPO Enquiry - 4991 Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB

Morning Ms Reader

Apologies I was supposed to add the attachment with the original email.

Thank you

Kind Regards

Melanie McKenzie

Administrator

(Please note my working hours are 9am - 1pm)

P Please consider your environmental responsibility - think before you print!



5 Moseley's Farm Business Centre Fornham All Saints, Bury St. Edmunds, Suffolk, IP28 6JY

Tel: 01284 765391 DD: 01284 715013

info@treesurveys.co.uk www.treesurveys.co.uk









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From: Tracy Reader [mailto:tracy.reader@brentwood.gov.uk]

Sent: 09 October 2015 12:47

To: Melanie McKenzie

Cc: Alan Marsh

Subject: RE: TPO Enquiry - 4991 Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB

Dear Sir/Madam

Could you please supply a site plan of the area in question.

Regards

Tracy Reader

Tracy Reader | Land Charges Assistant | Brentwood Borough Council T 01277 312625 | F 01277 312743 | www.brentwood.gov.uk | tracy.reader@brentwood.gov.uk | tracy.reader | <a href="tracy.r

From: Melanie McKenzie [mailto:MelanieMcKenzie@TreeSurveys.co.uk]

Sent: 09 October 2015 11:34

Subject: TPO Enquiry - 4991 Land to rear of Hatch Road, Pilgrims Hatch, Brentwood, Essex, CM15 9QB

Dear Sir/Madam,

Could you please advise if the above mentioned site is covered by TPO or is located within a Conservation Area?,

I look forward to hearing from you.

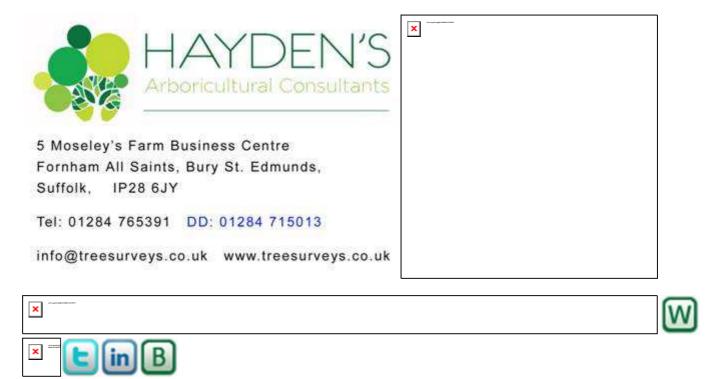
Kind Regards

Melanie McKenzie

Administrator

(Please note my working hours are 9am - 1pm)

P Please consider your environmental responsibility - think before you print!



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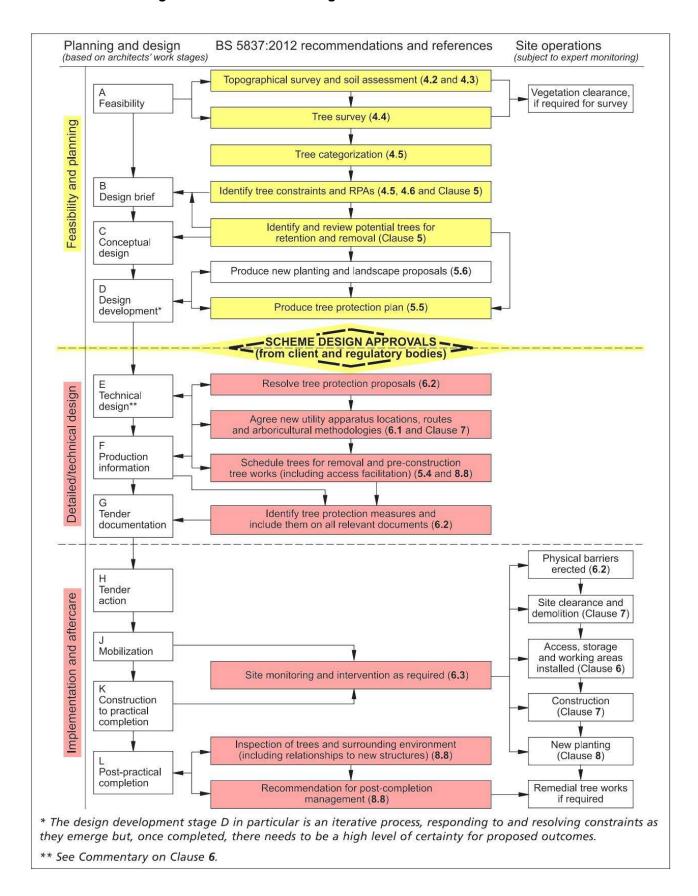
Click here to report this email as spam.

Brentwood Borough Council, Town Hall, Ingrave Road, Brentwood, Essex. CM15 8AY. This email (including any attachments) is intended only for the recipient(s) named above. It may contain restricted or privileged information and should not be read, copied or otherwise used by any other person unless express permission is given. If you are not a named recipient, please contact the sender and delete the email from the system. It is the recipient's responsibility to ensure that appropriate measures are in place to check for software viruses.

Appendix F

Advisory Information & Sample Specifications

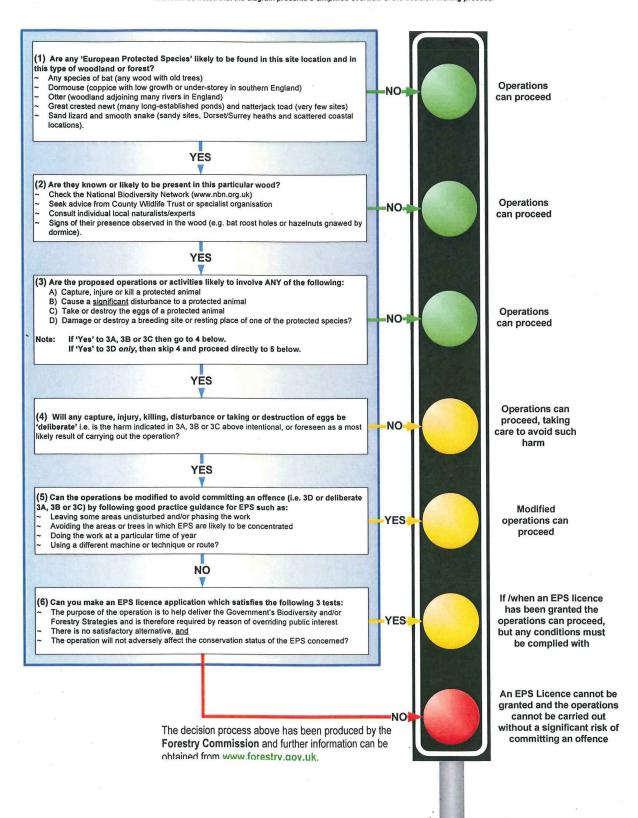
1. BS 5837:2012 Figure 1 - Flow Chart - Design and Construction & Tree Care



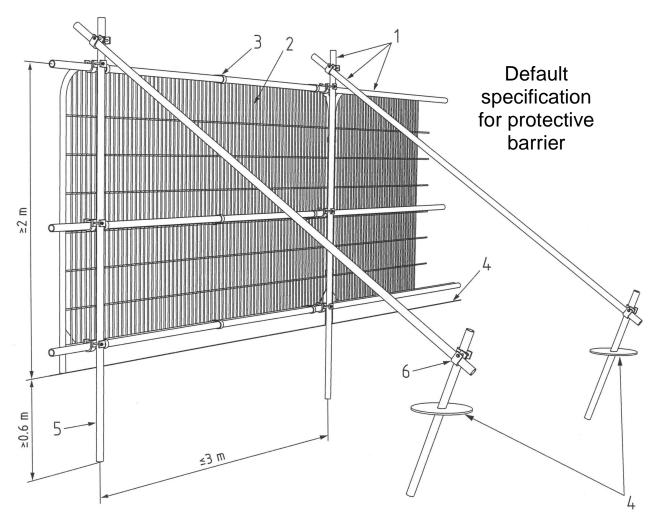
European Protected Species and woodland operations Decision tree to aid planning of woodland operations and protecting EPS (v.1)

The diagram below illustrates the questions that woodland managers and operators should consider when deciding whether they need to apply for an EPS licence.

It should be noted that the diagram presents a simplified overview of the decision-making process.



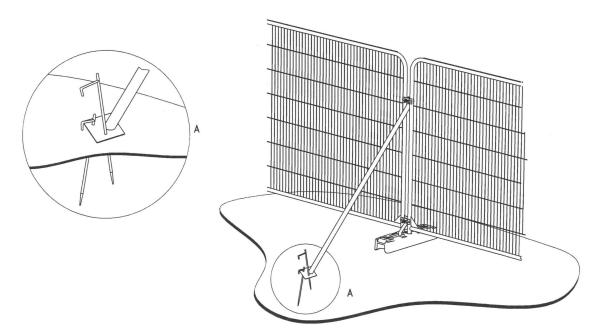
3. BS 5837:2012 Figure 2: Default specification for protective barrier



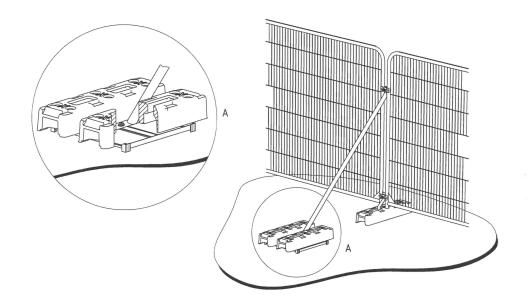
Key

- 1 Standard scaffold pole
- 2 Heavy gauge 2m tall galvanised tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6m
- 6 Standard scaffold clamps

4. BS 5837:2012 Figure 3: Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Appendix G

Hayden's Drawing

- **Arboricultural Impact Assessments**
 - **Arboricultural Method Statements**
 - **Tree Constraints Plans** •
 - **Arboricultural Feasibility Studies**
 - **Shade Analysis**
 - Picus Tomography •
- **Arboricultural Consultancy for Local Planning Authority**
 - **Quantified Tree Risk Assessment**
 - **Health & Safety Audits for Tree Stocks**
 - Tree Stock Survey and Management
 - Mortgage and Insurance Reports
 - **Subsidence Reports** •
 - **Woodland Management Plans**
 - **Project Management**
 - **Ecological Surveys** •

