HAYDEN'S
Arboricultural Consultants

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

Proj. No **7474**	**Reepham Road & Holt Road, Norwich, Norfolk, NR6 6UD**
Client:	Code Development Planners
Date of Report:	21/02/2020

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1.0 Introduction

1.1 Terms of Reference

1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Code Development Planners to prepare a Tree Survey and Constraints Plan for the existing trees at Land between Reepham Road and Holt Road, Norwich, Norfolk, NR6 6UD.

1.1.2 The site survey was carried out on the 25th June 2019. 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 Code Development Planners dated 25th April 2019
- Definition of site boundary
- Topographical survey

2.0 The Site

2.1 **Site Overview**

2.1.1. The site is Land between Reepham Road and Holt Road, Norwich, Norfolk, NR6 6UD.

2.2 **Soils**

2.2.1 The soils type commonly associated with this site are generally freely draining, slightly acid, and sandy in texture. They are of low fertility and typically support acid dry pastures; and acid deciduous and coniferous woodland heath type habitats. This soil type constitutes approximately 2.8% 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 **Tree Preservation Order(s)**

The local planning authority Broadland District Council have deemed it appropriate to provide statutory protection to trees on and/or neighbouring this site through the serving of a Tree Preservation Order (TPO), Ref no (TPO 2012 No 54 (1127)) The effect of this on the owners, managers or any persons wishing to undertake work on preserved trees is to require them to obtain written permission from Broadland District Council prior to actioning any surgery or felling etc. The purpose of this process is to try to ensure that the works are appropriate, proportionate, and in keeping with the long-term aims of the TPO (as expressed in the original TPO statement) but, given that trees are living organisms, and the locality within which they are set is liable to change, it is often the case that local planning authority decisions relating to TPO applications require regular review to reflect the current situation rather than the historical perspective of the original date of protection.

There are certain circumstances where written permission from the local planning authority may not be necessary before undertaking works. These include;

- Making a tree safe if it is an imminent threat to people or property.
- Removing dead wood, or a dead tree.

Owners, managers or any persons wishing to undertake work as an exemption to the written permission process **are required** to provide the local planning authority with 5 days' notice prior to attending to a tree which they deem as being dead or dangerous; unless such works are required in an emergency. It is the tree owner's responsibility to provide proof that the tree was indeed dead or dangerous should this exception be challenged; hence, it is advisable always to request an inspection by the Local Planning Authority prior to carrying out such operations. Furthermore, and even in the event of an emergency situation, there is still a duty to notify the local planning authority that work has been completed including supplying an explanation of the necessity. Failure to comply with the requirements of TPO legislation can lead to a maximum fine of up to £20,000 per tree in the Magistrates Court. Fines in the Crown Court are unlimited.

Following our enquiry, a copy of the TPO schedule and/or plan was provided by the Local Planning Authority which depicts the trees protected under the order, a copy of which is included in Appendix E.

2.3.2 Felling Licence

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 Licence from the Forestry Commission. There are exemptions however and these are as follows:-

A Felling Licence 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 Licence.

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 SSSIs), 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 thirty-six individual trees, ten groups of trees, three areas of trees, twenty-one hedges and six woodlands have been identified. These have been numbered T001 – T036, G001 – G010, A001 – A003, H001 – H021 and W001 – W006 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. 7474-D-CP.

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 Several items would benefit from tree surgery or additional investigation, be it for health and safety, cultural, aesthetic, or structural reasons as detailed in the attached Schedule of Trees. Including the trees recommended for felling, the items requiring the **most urgent** intervention are as follows:

Within six months:

H001	Remove dead trees.
H012	Fell to ground level dead Elm.
W001	Remove dead trees.

3.6 Over and above the general and prudent recommendation that all trees are inspected on an annual basis, the following items have been identified as requiring enhanced monitoring to assess any changes in faults and weaknesses etc as detailed in the Schedule of Trees:

G003	Monitor annually for Ash dieback.
T009	Monitor annually for Ash dieback.
T010	Monitor annually for Ash dieback.
T011	Monitor annually for Ash dieback.
T012	Monitor annually for Ash dieback. Remove Ivy and part of hedge to view base.
T014	Monitor annually for further pest damage.

3.7 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.7474-D-CP. 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.7474-D-CP. 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 effect 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, dependent on the individual circumstances of the site.

5.0 Conclusions

5.1 The site is Land between Reepham Road and Holt Road, Norwich, Norfolk, NR6 6UD. 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 thirty-six individual trees, three areas of trees, ten groups of trees, twenty-one hedges and six 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.

5.5 Irrespective of any development proposals, a number of trees require attention as detailed items in the *Schedule of Trees*. As recorded at item 3.5 above, three items need attention within six months.

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 reasonably 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.

Signed:

February 2020…….
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.

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

NHBC Standards (2007) *Chapter 4.2 'Building Near Trees'.* National House-Building Council.

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

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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.

Schwaze F.W.M.R. Engels J. & Mattheck C. (2000) *Fungal Strategies of Wood Decay in Trees*. Springer

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

Weber K., Mattheck C. (2003). *Manual of Wood Decays*. The Arboricultural Association

9.0 Appendices

Appendix	**A**	Species List & Tree Problems
Appendix	**B**	Schedule of Trees
Appendix	**C**	Schedule of Works - Irrespective of Development
Appendix	**D**	Explanatory Notes
Appendix	**E**	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 Checklist (v.4)
3. BS 5837:2012 Figure 2 - Default specification for protective barrier
4. BS 5837:2012 Figure 3 - Examples of above-ground stabilising systems

Appendix	**G**	Drawing No 7474-D-CP

Appendix A - Species List & Tree Problems

Species List:

Ash	*Fraxinus excelsior*
Austrian (or Black) Pine	*Pinus nigra*
Blackthorn	*Prunus spinosa*
Cherry	*Prunus sp*
Elder	*Sambucus nigra*
Elm	*Ulmus sp*
English Oak	*Quercus robur*
European Lime	*Tilia x europaea*
Field Maple	*Acer campestre*
Goat Willow	*Salix caprea*
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Holly	*Ilex aquifolium*
Hornbeam	*Carpinus betulus*
Horse Chestnut	*Aesculus hippocastanum*
Leyland Cypress	*X Cuprocyparis leylandii*
Norway Spruce	*Picea abies*
Oak	*Quercus robur*
Red Oak	*Quercus rubra*
Rowan	*Sorbus aucuparia*
Scots Pine	*Pinus sylvestris*
Sitka Spruce	*Picea sitchensis*
Sweet Chestnut	*Castanea sativa*
Sycamore	*Acer pseudoplatanus*
Whitebeam	*Sorbus Aria*

Tree Problems:

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

Name: **Ash Dieback** (*Hymenoscyphus fraxineus*):	
Symptoms/Damage Type:	Symptoms of the disease can be visible on leaves, shoots, stems and branches of affected trees. In severe cases, the entire crown shows leaf loss and dieback, which is often associated with the formation of Epicormic shoots on branches and the trunk. Ash tree showing symptoms of Chalara fraxinea are now widespread across Europe and Britain.
Consequence:	The disease caused leaf loss and crown dieback in affected trees and often leads to tree death.
Control Measures:	You can report suspect trees via the Forestry Commission Tree Alert page: www.forestry.gov.uk/treealert You do not need to take any particular action if you own infected Ash trees, unless serves with a Plant Health Notice. You can slow the spread of the Ash dieback disease by locally burning, burying or composting fallen Ash leaves.

Name: **Deadwood**	
Symptoms/Damage Type:	This relates to dead branches in the crown of the tree. In the 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.

Name: **Dutch Elm Disease** (*Ophiostoma ulmi)*	
Symptoms/Damage Type:	The first symptom is the yellowing of the leaves from July onwards. It spreads rapidly often causing death in the same season - it is very rare for a tree to survive once the fungus has occurred. Dark brown streaks are evident when the bark and outer wood are peeled from the infected branches. Brown blotches may also be seen on infected branches if they are cut cleanly in a transverse section. The tree is infected by the Elm Bark Beetle which carries the disease. Once active in the tree, the fungus produces yeast like cells in the wood which are transported within the trees water conducting tissues. These cause blockages of the tissue and hence both the wilting of the leaves and the brown staining of the infected wood mentioned above.
Consequence:	This is the most serious disease in Elm trees and is still common in Britain. Infected trees decline and die rapidly.
Control Measures:	Control by fungicidal injections has been successful in specimen trees of high value however the cost of this recurrent procedure usually outweighs the value of the affected tree.

Name: **Ivy (Hedera helix)**	
Symptoms/Damage Type:	Ivy may grow to varying degrees on all areas of a tree from the 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

Reepham Road & Holt Road, Norwich, Norfolk

Surveyed By: Steve Holyland Date: 25/06/2019
Managed By: Steve Holyland

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
A001	Elder, Ash	250	10		Low	N4, E4, S4, W4	Off-site. Unable to assess a large proportion of the area is made up of scrubby growth and Elder. There is an isolated Ash tree, but due to the presence of overgrown vegetation and the heavy presence of brambles and nettles a full inspection was not undertaken and the dimensions are therefore estimated. The area is of low value and is currently unmanaged.	C2	No work required.	4
		3	0		SM	Moderate				
Yes		28.3			20+ years	Dense undergrowth				
A002	English Oak, Elder, Holly, Sycamore, Scots Pine, Hawthorn	500	17.9		Moderate	N6, E6, S6, W6	Area is located off-site. Unable to carry out a full detailed inspection. Trees appear to be in good overall condition displaying good vigour throughout the canopies.	B2	No work required.	4
		6	1		M	High				
No		113.1			20+ years	Dense undergrowth				
A003	Sycamore, English Oak, Hawthorn, Elder, Holly	250	6		Moderate	N2, E2, S2, W2	Area is a linear feature between the agricultural field and residential gardens. Appears to be unmanaged and let to grow naturally. The low storey is heavily populated by brambles and nettles which restricts a full inspection. Appears healthy and displaying good vigour throughout the crown.	B2	No work required.	4
		3	0		SM	High				
Yes		28.3			20+ years	Dense undergrowth				
G001	Field Maple, Elm	300	11		Low	N4.5, E4.5, S4.5, W4.5	A group of more mature specimens within the boundary hedgerow. All stems are densely clad in Ivy. Stems are located in close proximity to each other, typical of a lapsed hedge. Some of the Elm have succumbed to Dutch Elm disease.	C2	No work required.	4
		3.6	3		EM	High				
Yes		40.7			10+ years	Light undergrowth				
G002	Horse Chestnut	400	15		Low	N6, E6, S6, W6	Two Horse Chestnut situated close together forming one homogenous feature. Ivy is cladding in places and hedge prevents full inspection of base and lower stem. Crowns are in good condition and in good vigour.	B2	No work required.	4
		4.8	4		M	Moderate				
Yes		72.4			20+ years	Hedge				
G003	Ash	200	9		Moderate	N4, E4, S4, W4	A cluster of likely self set Ash. Some Ivy encroachment on main stems. Crowns appears to have succumbed to the onset of Ash dieback. Trees are not currently considered a significant hazard.	C2	Monitor annually for Ash dieback.	3
		2.4	0.5		EM	Moderate				
Yes		18.1			10+ years	Hedge, Light undergrowth				
G004	English Oak	480	12		Moderate	N6, E6, S6, W6	A group of Oak which are closely situated together. Ivy encroachment on main stems which has recently been severed. Ivy still prevents a full inspection. The crowns form one homogenous feature. Crowns appear in fair condition with typical deadwood.	B2	No work required.	4
		5.76	0.5		M	High				
Yes		104.2			20+ years	Ivy, Light undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
G005	English Oak	450	12		Moderate	N6.5, E6.5, S6.5, W6.5	A group of Oak which are closely situated together. Some are multi-stemmed from base. Ivy encroachment on main stems which has recently been severed. Ivy still prevents a full inspection. The crowns form one homogenous feature. Crowns appear in fair condition with typical deadwood.	B2	No work required.	4
		5.4	0.5		M	High				
Yes		91.6			20+ years	Ivy, Light undergrowth				
G006	English Oak	480	14		Moderate	N6.5, E6.5, S6.5, W6.5	A group of Oak which are closely situated together. Some are multi-stemmed from base. Ivy encroachment on main stems which has recently been severed. Ivy still prevents a full inspection. The crowns form one homogenous feature. Crowns appear in fair condition with typical deadwood.	B2	No work required.	4
		5.76	0.5		M	High				
Yes		104.2			20+ years	Ivy, Light undergrowth				
G007	English Oak, Ash	750	14		Moderate	N7.5, E7.5, S7.5, W7.5	A line of Oak which form more of a homogenous linear feature. Some main stems are clad in Ivy preventing full assessment. Some trees are multi-stemmed from base. The crowns appear in a fair overall condition with some typical deadwood.	B2	No work required.	4
		9	0.5		M	High				
Yes		254.5			20+ years	Ivy, Light undergrowth				
G008	English Oak, Ash	700	14		Moderate	N7.5, E7.5, S7.5, W7.5	A line of Oak which form more of a homogenous linear feature. Some main stems are clad in Ivy preventing full assessment. Some trees are multi-stemmed from base. The crowns appear in a fair overall condition with some typical deadwood.	B2	No work required.	4
		8.4	1		M	High				
Yes		221.7			20+ years	Ivy, Light undergrowth				
G009	Scots Pine	300	13.3		Moderate	N3, E3, S3, W3	Group of early mature trees. Tree have become heavily covered with Ivy which extends from ground level on to the main stems. Ivy could possibly be masking defects. Minor deadwood.	B2	No work required.	4
		3.6	2		EM	Moderate				
Yes		40.7			20+ years	Light undergrowth				
G010	Leyland Cypress	350	13		Moderate	N5.5, E5.5, S5.5, W5.5	Group of early mature trees which have established together resulting in a uniform feature.	B2	No work required.	4
		4.2	0		M	High				
Yes		55.4			20+ years	Bare earth				
H001	Sycamore, Elm, Hawthorn	150	6		High	N2.5, E2.5, S2.5, W2.5	Boundary hedge along Holt Road, typical boundary feature which is managed by flail. Some of the Elm specimens have succumbed to Dutch Elm disease and now threaten road.	C2	Remove dead trees.	2
		1.8	0		SM	High				
Yes		10.2			10+ years	Light undergrowth				
H002	Blackthorn, Hawthorn, Leyland Cypress	100	4.5		Moderate	N1, E1, S1, W1	Formally kept boundary hedge with adjacent gardens. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
H003	Holly, Hawthorn	150	5		Low	N2, E2, S2, W2	Farm yard hedge of average form. Overgrown understorey. Some dieback in places.	C2	No work required.	4
		1.8	0		EM	High				
Yes		10.2			10+ years	Light undergrowth				
H004	Holly, Hawthorn, Blackthorn	150	5		Low	N2, E2, S2, W2	Farm yard boundary hedge which is managed by flail. No signs of significant defects or disease.	C2	No work required.	4
		1.8	0		EM	High				
Yes		10.2			10+ years	Light undergrowth				
H005	Leyland Cypress	200	4		Low	N1.5, E1.5, S1.5, W1.5	Maintained hedge with dieback in places due to topping.	C2	No work required.	4
		2.4	0		EM	High				
Yes		18.1			10+ years	Grass				
H006	Leyland Cypress, Elder	200	3		Low	N1.5, E1.5, S1.5, W1.5	Topped Leylandii hedge with suckering Elder in between. No signs of significant defects or disease.	C2	No work required.	4
		2.4	0		EM	High				
Yes		18.1			10+ years	Grass				
H007	Hawthorn, Blackthorn, Field Maple, Elder	100	2		Low	N1, E1, S1, W1	Field boundary hedge. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				
H008	Hawthorn, Field Maple, Elder, Blackthorn	100	2.5		Low	N1, E1, S1, W1	Field boundary hedge. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				
H009	Blackthorn, Hawthorn, Elm	100	2		Low	N1, E1, S1, W1	Boundary hedge with some Ivy cladding in places. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				
H010	Elm, Field Maple, Blackthorn	100	2		Low	N1, E1, S1, W1	Field boundary hedge. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
H011	Ash, Elm, Hawthorn, Blackthorn	100	2.5		Low	N1, E1, S1, W1	Field boundary hedge. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				
H012	Hawthorn, Elm, Blackthorn	100	6		Moderate	N2, E2, S2, W2	Field boundary hedge. No signs of significant defects or disease but some Elm specimens are dead.	C2	Fell to ground level dead Elm.	2
		1.2	0		EM	High				
Yes		4.5			10+ years	Light undergrowth				
H013	Blackthorn, Hawthorn	100	4.5		Moderate	N2, E2, S2, W2	A dense and wide boundary hedge. No signs of significant defects or disease.	C2	No work required.	4
		1.2	0		EM	High				
Yes		4.5			10+ years	Dense undergrowth				
H014	Hawthorn, Blackthorn, English Oak, Ash	150	6.5		Moderate	N2.5, E2.5, S2.5, W2.5	A remnant boundary hedge which is also understorey to the mature trees. Ivy clads in places. Overall no signs of significant defects or disease.	C2	No work required.	4
		1.8	0		EM	High				
Yes		10.2			10+ years	Light undergrowth, Ivy				
H015	Hawthorn	75	2		Low	N0.5, E0.5, S0.5, W0.5	Linear feature acting as a boundary between the site and neighbouring land.	C2	No work required.	4
		0.9	0		SM	High				
Yes		2.5			20+ years	Dense undergrowth				
H016	Hazel, Elder, Black Hawthorn, Elm Species, Field Maple	75	4		Low	N1, E1, S1, W1	Linear feature acting as a boundary between the site and neighbouring land.	C2	No work required.	4
		0.9	0		SM	Low				
Yes		2.5			20+ years	Dense undergrowth				
H017	Hawthorn	50	1		Low	N0.5, E0.5, S0.5, W0.5	Young newly planted hedgerow acting as a boundary between fields.	C2	No work required.	4
		0.6	0		Y	High				
Yes		1.1			20+ years	Grass				
H018	Hawthorn, Sycamore, Field Maple	350	7		Moderate	N3, E3, S3, W3	Densely populated lapsed hedgerow consisting of a variety of different species. The feature contains small dead trees which are predominantly Elm. Trees are heavily colonised by Ivy through out the landscape feature which has restricted a full detailed inspection being undertaken	C2	No work required.	4
		4.2	2.5		M	High				
Yes		55.4			20+ years	Dense undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
H019	Leyland Cypress	300	5.5		Low	N1.5, E1.5, S1.5, W1.5	Managed hedgerow acting as a boundary between sites.	C2	No work required.	4
		3.6	0		EM	High				
Yes		40.7			20+ years	Light undergrowth				
H020	Hawthorn, Elder Species, Hazel	75	2		Low	N0.5, E0.5, S0.5, W0.5	Linear feature on site acting as a boundary between sites.	C2	No work required.	4
		0.9	0		SM	High				
Yes		2.5			20+ years	Dense undergrowth				
H021	Hawthorn, Black Hawthorn, Elm Species	50	1.8		Low	N0.5, E0.5, S0.5, W0.5	Linear feature on site acting as a boundary between sites.	C2	No work required.	4
		0.6	0		SM	High				
Yes		1.1			20+ years	Grass				
T001	English Oak	1200	12		Low	N5.5, E5.5, S6, W6	Large old pollard which is possibly a veteran. Main stem and inner crown is clad densely in Ivy preventing a full inspection. Crown is asymmetric due to track and competition for light. Crown appears in good vigour.	B3	Remove all Ivy and reinspect.	3
		14.4	0.5		M	High				
Yes		651.4			20+ years	Light undergrowth				
T002	Ash-leaf Maple	280	6		Low	N3, E4, S3, W3	Open grown specimen with dense form. No signs of significant defects or disease.	C1	No work required.	4
		3.36	1.5		EM	Moderate				
Yes		35.5			10+ years	Grass				
T003	Rowan	150	5.5		Low	N2, E2, S2, W2	Open grown specimen with dense form. No signs of significant defects or disease.	C2	No work required.	4
		1.8	1		SM	Moderate				
Yes		10.2			10+ years	Grass				
T004	Whitebeam	200	6.5		Low	N3, E3, S3, W3	Open grown specimen with dense form. No signs of significant defects or disease.	C1	No work required.	4
		2.4	1		EM	Moderate				
Yes		18.1			10+ years	Grass				
T005	English Oak	800	15		Low	N4, E6, S7, W6	Tree situated higher up on grass verge to road. Tree appears to be an old pollard with a hollowing from the bole. Previous failures have occurred on road side. Reformed crown is fair and in good condition.	B3	Carry out climbing inspection to check hollowing.	3
		9.6	1		M	High				
Yes		289.5			20+ years	Grass, Tarmac				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T006	Hawthorn	200	5		Low	N2, E2, S2, W2	Likely a lapsed hedgerow specimen which is clad in Ivy. Overall no signs of significant defects or disease.	C2	No work required.	4
		2.4	0		EM	High				
Yes		18.1			10+ years	Hedge				
T007	Hornbeam	400	10		Low	N5, E7, S5, W7	Multi-stemmed specimen from base. DBH estimated due to hedge. Low open growing specimen which appears in good health and condition.	B2	No work required.	4
		4.8	0		EM	Moderate				
Yes		72.4			20+ years	Hedge				
T008	English Oak	500	10		Low	N5, E6.5, S5, W6.5	Open growing specimen in hedgerow. Ivy clads main stem and inner crown preventing a full inspection. Crown appears in good condition.	B1	Remove all Ivy and reinspect.	3
		6	1		EM	High				
Yes		113.1			20+ years	Hedge				
T009	Ash	280	7		Low	N3, E4.5, S4, W4	Open grown specimen in hedgerow. Possible on set of Ash Dieback due to some dieback occurring at tips.	C2	Monitor annually for Ash dieback.	3
		3.36	2.5		EM	Moderate				
Yes		35.5			10+ years	Hedge				
T010	Ash	400	10		Low	N4, E4.5, S4, W4.5	Open grown specimen in hedgerow. Possible on set of Ash Dieback due to some dieback occurring at tips. DBH estimated due to hedge.	C2	Monitor annually for Ash dieback.	3
		4.8	3		EM	Moderate				
Yes		72.4			10+ years	Hedge				
T011	Ash	400	8.5		Low	N6, E5, S4, W4	Tree appears to be old pollard specimen with a very decayed and hollowing stem. Onset of Ash Dieback looks to be present with dieback from the tips. DBH estimated due to hedge.	C2	Monitor annually for Ash dieback.	3
		4.8	3		OM	Moderate				
Yes		72.4			10+ years	Hedge				
T012	Ash	600	12		Moderate	N5, E5, S5.5, W5.5	Tree located in dense Blackthorn hedge preventing taking of measurements and full inspection. Tree is multi-stemmed from base. Main stems clad in Ivy. Crown appears to have succumbed to Ash dieback due to dieback of the tips.	C1	Remove Ivy and part of hedge to view base. Monitor annually for Ash dieback.	3
		7.2	3.5		M	Moderate				
Yes		162.9			10+ years	Hedge				
T013	English Oak	770	13		Moderate	N8, E8, S9, W8	A multi-stemmed specimen from base with tightly situated stems. Dense Ivy clads the base and main stem into the internal crown preventing a full inspection. Ivy has recently been severed. Crown appears in a fair overall condition with only typical deadwood.	B2	Remove all Ivy and reinspect.	3
		9.24	0.5		M	High				
Yes		268.2			20+ years	Ivy, Light undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T014	English Oak	530	12		Moderate	N5, E5, S6.5, W6	Twin stem specimen from base. Crown is low and domed. Foliage has been badly damaged by a pest but no sign as to what.	C1	Monitor annually for further pest damage.	3
		6.36	1		EM	High				
Yes		127.1			10+ years	Dense undergrowth				
T015	Ash	650	16		Moderate	N8, E8, S7, W8	A mature open growing specimen. Base and main stem are clad in Ivy preventing full assessment. Crown is well formed and does not appear to be affected by Ash Dieback. Foliage has good vigour. Some deadwood is present but does not appear to threaten road.	B1	Remove all Ivy and reinspect.	3
		7.8	2		M	Moderate				
Yes		191.1			20+ years	Hedge				
T016	Ash	690	14		Moderate	N7, E7, S7, W7.5	A multi-stemmed specimen from base. All stems are densely clad in Ivy preventing full assessment. Crown does not appear to have been affected by Ash Dieback and is in good vigour.	B2	Remove all Ivy and reinspect.	3
		8.28	0.5		M	Moderate				
Yes		215.4			20+ years	Ivy, Light undergrowth				
T017	English Oak	480	10		Low	N5, E6.2, S5, W5	Tree appears to be in a good overall condition displaying good vigour throughout the crown however a full detailed inspection was not able to be undertaken due to the location of the tree within a hedgerow.	C1	No work required.	4
		5.76	1		SM	High				
Yes		104.2			20+ years	Dense undergrowth				
T018	English Oak	600	12		Low	N7, E7, S7, W7	Tree appears to be in a good overall condition displaying good vigour throughout the crown however a full detailed inspection was not able to be undertaken due to the location of the tree within a hedgerow and the presence of Ivy which extends from ground level into the main canopy.	C1	No work required.	4
		7.2	4		EM	High				
Yes		162.9			20+ years	Dense undergrowth				
T019	Ash	250	9		Low	N4, E4, S4, W4	Tree appears to be in a good overall condition displaying good vigour throughout the crown however a full detailed inspection was not able to be undertaken due to the location of the tree within a hedgerow and the presence of Ivy which extends from ground level into the main canopy.	C1	No work required.	4
		3	2		SM	Moderate				
Yes		28.3			10+ years	Dense undergrowth, Ivy				
T020	Red Oak	900	12		Low	N6, E7, S6, W6	Old pollard. Tree appears to be in a good overall condition displaying good vigour throughout the crown however a full detailed inspection was not able to be undertaken due to the location of the tree within a hedgerow and the presence of Ivy which extends from ground level into the main canopy.	B3	No work required.	4
		10.8	4		M	High				
Yes		366.4			20+ years	Dense undergrowth				
T021	Sweet Chestnut	700	13		Low	N4, E4, S4, W4	Tree appears to be in a good overall condition displaying good vigour throughout the crown however a full detailed inspection was not able to be undertaken due to the location of the tree within a hedgerow and the presence of Ivy which extends from ground level into the main canopy.	B1	No work required.	4
		8.4	3		EM	Moderate				
Yes		221.7			20+ years	Dense undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
T022	Ash	750	14		Low	N7, E7, S7, W7	Mature Ash tree which is in a poor overall condition. There is major deadwood located in the upper canopy with extensive dieback. Limited useful life expectancy.	C1	No work required.	4
		9	2		M	Moderate				
Yes		254.5			10+ years	Light undergrowth				
T023	English Oak	600	13		Moderate	N7, E7, S7.5, W7	Tree is in a good overall condition displaying good vigour throughout the crown, minor deadwood located in canopy, typical to species. No significant defects at time of inspection however a full inspection of the base of the tree was hindered due to the presence of Ivy.	B1	No work required.	4
		7.2	1.5		EM	High				
Yes		162.9			20+ years	Dense undergrowth				
T024	Ash	220	9.5		Low	N6, E5, S5.5, W6	Tree is in a fair overall condition. There is major deadwood located in the upper canopy with signs of dieback. Limited useful life expectancy.	C1	No work required.	4
		2.64	3		SM	Moderate				
Yes		21.9			10+ years	Dense undergrowth				
T025	Ash	400	14.1		Low	N6, E6, S6.6, W6	Mature Ash tree which is in a poor overall condition. There is major deadwood located in the upper canopy with signs of dieback. Ivy is present from ground level and extends into the main canopy masking possible defects.	C1	No work required.	4
		4.8	3		M	Moderate				
Yes		72.4			10+ years	Dense undergrowth				
T026	Ash	450	14		Low	N6.5, E6, S6, W6	Mature Ash tree which is in a good overall condition. There is minor deadwood located in the upper canopy. Tree bifurcates at approximately 1 metre. Poor attachment point.	B1	No work required.	4
		5.4	3		M	Moderate				
Yes		91.6			20+ years	Light undergrowth				
T027	English Oak	200	5		Low	N3, E3, S3.3, W3.5	No significant defects at time of inspection.	C1	No work required.	4
		2.4	1.5		Y	High				
Yes		18.1			20+ years	Dense undergrowth				
T028	Ash	730	14		Low	N6.5, E7, S7.5, W6.5	Mature Ash tree which is in fair overall condition. There is major deadwood located in the upper canopy with signs of dieback. Tree is growing within a section of hedgerow therefore a full inspection of the base has been restricted. Tree has limited life expectancy.	C1	No work required.	4
		8.76	2		M	Moderate				
Yes		241.1			10+ years	Dense undergrowth				
T029	Elder	200	7		Low	N1.5, E0.5, S1.5, W1.5	Tree heavily covered with Ivy which may obscure defects. Low value tree with limited life expectancy.	C1	No work required.	4
		2.4	2		SM	Moderate				
Yes		18.1			10+ years	Dense undergrowth				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover				
T030	Sycamore	450	15		Moderate	N5, E5, S5, W5	Tree is located off-site therefore dimensions have been estimated, unable to undertake a detailed inspection.	B1	No work required.	4
		5.4	3		EM	Moderate				
No		91.6			20+ years	Off-site/ no access				
T031	English Oak	500	15.4		Moderate	N8.4, E8.5, S6, W9	Tree is located off-site therefore dimensions have been estimated, unable to undertake a detailed inspection. Tree appears to be in good overall condition displaying good vigour throughout the crown	B1	No work required.	4
		6	2.5		M	High				
No		113.1			20+ years	Dense undergrowth				
T032	English Oak	450	15		Moderate	N8, E7, S6, W8	Tree is located in a dense amount of undergrowth therefore dimensions have been estimated, unable to undertake a detailed inspection. Tree appears to be in good overall condition displaying good vigour throughout the crown	B1	No work required.	4
		5.4	2		M	High				
Yes		91.6			20+ years	Dense undergrowth				
T033	Sycamore	400	1		Low	N5, E4.5, S5, W5	Tree is situated on the opposite side of the boundary marker, unable to access main stem due to heavy presence of brambles, Holly and nettles. Tree displays good vigour throughout the crown.	B1	No work required.	4
		4.8	0		EM	Moderate				
Yes		72.4			10+ years	Dense undergrowth				
T034	Hawthorn	140	4		Low	N1.5, E2, S1, W1	Unremarkable trees of little merit.	C1	No work required.	4
		1.68	0.5	0.5	SM	High				
Yes		8.9			10+ years	Dense undergrowth				
T035	Scots Pine	660	17		Low	N2, E4, S3, W2.5	Tree appears to be in a good overall condition displaying good vigour throughout canopy. Deadwood is present however typical to species. Unremarkable tree of little merit, contained with a larger woodland.	C1	No work required.	4
		7.92	1		M	Moderate				
Yes		197.1			20+ years	Woodland floor				
T036	English Oak	640	22		Moderate	N6, E6, S6, W6	Tree is located in a dense amount of undergrowth therefore dimensions have been estimated, unable to undertake a detailed inspection. Tree bifurcates at approximately 1.5 metres. Unable to access main stem to inspect main union point. Tree appears to be in good overall condition displaying good vigour throughout the crown.	B1	No work required.	4
		7.68	4		M	High				
Yes		185.3			20+ years	Woodland floor, Dense undergrowth, Ivy				
W001	Elm, Lime, Sweet Chestnut, Austrian Pine, Oak, Sycamore	500	20		Moderate	N7, E7, S7, W7	Linear woodland feature which borders the site and neighbouring cricket ground. Woodland is very dense and overgrown, with Ivy being a dominant feature. Some mature dead Elm still stand at the northern end of the woodland and Dutch Elm disease is present.	B2	Remove dead trees.	2
		6	0		M	High				
		113.1			20+ years	Dense undergrowth, Woodland floor				

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand				
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover				
W002	Sycamore, Field Maple, Cherry, Holly, Oak, Elder	300	14		Moderate	N4.5, E4.5, S4.5, W4.5	A linear woodland feature running along the boundary with the neighbouring cricket ground. Feature is very dense and populated but overall appears in good condition. No signs of significant defects or disease.	B2	No work required.	4
		3.6	0		EM	High				
		40.7			20+ years	Light undergrowth				
W003	Scots Pine, English Oak, Goat Willow, Field Maple, Elm, Sitka Spruce	400	16		Low	N6, E6, S6, W6	A woodland belt which runs down the side of the farm yard. Ivy and undergrowth encroach in places. Some trees have been cut to clear the overhead cables. Some dead specimens within belt but of low risk. Overall no signs of significant defects or disease.	B2	No work required.	4
		4.8	0		EM	High				
Yes		72.4			20+ years	Light undergrowth				
W004	English Oak, Sycamore, Ash, Hawthorn	550	18		High	N6, E6, S6, W6	A linear woodland which runs along Reepham Road. The understorey is very dense which prevented full access. The road side has not been inspected due to undergrowth and speed of traffic. Ivy clads many stems throughout the woodland. Heavily populated feature.	B2	Clear some of the understorey and reinspect.	3
		6.6	0		M	High				
Yes		136.8			20+ years	Dense undergrowth				
W005	English Oak, Hawthorn, Ash, Cherry Species	700	18		High	N8, E8, S8, W8	Woodland feature which runs alongside Reepham Road. Mixed species. however predominately made up of Oak. The woodland seemingly has been left to develop a natural habitat and understory. Ivy has colonised many of the trees which has restricted a full detailed inspection.	B2	Remove Ivy to facilitate future inspection to ensure of their safe retention next to the road.	3
		8.4	1.5		M	High				
Yes		221.7			20+ years	Dense undergrowth				
W006	Scots Pine, Sycamore, Holly, Lime Species, Hawthorn, Elder, Norway Spruce	450	22		Moderate	N5, E5, S5, W5	Woodland feature which runs alongside field. Mixed species. The woodland seemingly has been left to develop a natural habitat and understory. Ivy has colonised many of the trees which has restricted a full detailed inspection. Tree appear to be in good condition displaying good vigour throughout the crowns. Area of the woodland have become heavily populated with bramble and shrubs making access restricted.	B2	No work required.	4
		5.4	0		M	High				
Yes		91.6			20+ years	Woodland floor, Dense undergrowth				

Appendix C

Schedule of Works

SCHEDULE OF WORK

Reepham Road & Holt Road, Norwich, Norfolk

Surveyed By: Steve Holyland
Surveyed: 25/06/2019
Managed By: Steve Holyland

Tree No.	Species	Work required	Priority
H001	Sycamore, Elm, Hawthorn	Remove dead trees.	**2**
H012	Hawthorn, Elm, Blackthorn	Fell to ground level dead Elm.	**2**
W001	Elm, Lime, Sweet Chestnut, Austrian Pine, Oak, Sycamore	Remove dead trees.	**2**
T001	English Oak	Remove all Ivy and reinspect.	**3**
T005	English Oak	Carry out climbing inspection to check hollowing.	**3**
T008	English Oak	Remove all Ivy and reinspect.	**3**
T012	Ash	Remove Ivy and part of hedge to view base.	**3**
T013	English Oak	Remove all Ivy and reinspect.	**3**
T015	Ash	Remove all Ivy and reinspect.	**3**
T016	Ash	Remove all Ivy and reinspect.	**3**
W004	English Oak, Sycamore, Ash, Hawthorn	Clear some of the understorey and reinspect.	**3**
W005	English Oak, Hawthorn, Ash, Cherry Species	Remove Ivy to facilitate future inspection to ensure of their safe retention next to the road.	**3**

Schedule of Enhanced Monitoring

Reepham Road & Holt Road, Norwich, Norfolk

Surveyed By: Steve Holyland
Surveyed: 25/06/2019
Managed By: Steve Holyland

Tree No.	Species	Work required	Priority
G003	Ash	Monitor annually for Ash dieback.	**3**
T009	Ash	Monitor annually for Ash dieback.	**3**
T010	Ash	Monitor annually for Ash dieback.	**3**
T011	Ash	Monitor annually for Ash dieback.	**3**
T012	Ash	Monitor annually for Ash dieback.	**3**
T014	English Oak	Monitor annually for further pest damage.	**3**

Appendix D

Explanatory Notes

Explanatory Notes

HAYDEN'S Arboricultural Consultants

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

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/ Comments	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 (TS)	Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems identified in the “Problems/comments” category.

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.

BS 5837:2012 Terms and Definitions

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

Beth Jennings

From: planning <planning@broadland.gov.uk>
Sent: 28 June 2019 15:32
To: Beth Jennings
Subject: RE: TPO Enquiry | 7474 | Reepham Road and Holt Road, Norwich, Norfolk, NR6 6UD
Attachments: 2012 No.54 (1127) - Current_First Schedule and Map Only.pdf

Hi Beth,

Thanks for your email.

I have looked very closely because this is a big site area! The only part that is covered by a TPO (TPO 2012 No 54 (1127)) is on the map attached. I can't see any other TPO's on that site and none of it is within a conservation area.

Hope that helps.

Steph

Mrs Stephanie Keeler
Planning Administrator
t 01603 430509 e stephanie.keeler@broadland.gov.uk

Two Councils One Team

Broadland District Council
Community at heart

South Norfolk COUNCIL

From: Beth Jennings [mailto:BethJennings@TreeSurveys.co.uk]
Sent: 28 June 2019 15:04
To: Conservation
Subject: TPO Enquiry | 7474 | Reepham Road and Holt Road, Norwich, Norfolk, NR6 6UD

Good afternoon,

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

I have attached a site map for your use.

I look forward to hearing from you.

Kind Regards

Beth Jennings

Administrator

HAYDEN'S
Arboricultural Consultants

Tel: 01284 765391 info@treesurveys.co.uk **www.treesurveys.co.uk**

Head Office: 5 Moseley's Farm Business Centre, Fornham All Saints, Bury St. Edmunds, Suffolk, IP28 6JY
South West Office: Unit 7, Enterprise House, Cherry Orchard Lane, Salisbury, Wiltshire, SP2 7LD

SCHEDULE 1

SPECIFICATION OF TREES

Trees specified individually
(encircled in black on the map)

Reference on map	Description	Situation
NONE	NONE	NONE

Trees specified by reference to an area
(within a dotted black line on the map)

Reference on map	Description	Situation
NONE	NONE	NONE

Groups of trees
(within a broken black line on the map)

Reference on map	Description (including number of trees in group)	Situation
NONE	NONE	NONE

Woodlands
(within a continuous black line on the map)

Reference on map	Description	Situation
W1	All trees of whatever species marked within the black outline on the map.	TG 19584 12889

BROADLAND DISTRICT

Tree Preservation Order

2012 No.54

Key

Woodland W1:
All trees of whatever species

Scale as shown

NORTH

Broadland District Council

Thorpe Lodge, 1 Yarmouth Road

Thorpe St Andrew, Norwich, NR7 0DU.

Tel (01603) 431133

E-mail conservation@broadland.gov.uk

Tree Preservation Order

CONFIRMATION OF ORDER

This order was confirmed by the Broadland District Council without modification on the 5th day of March 2013

Head of Democratic Services and Monitoring Officer

Drayton

Tree Preservation Order 2012 No. 54

Drayton Wood, Drayton High Road, Drayton

Scale 1:4000

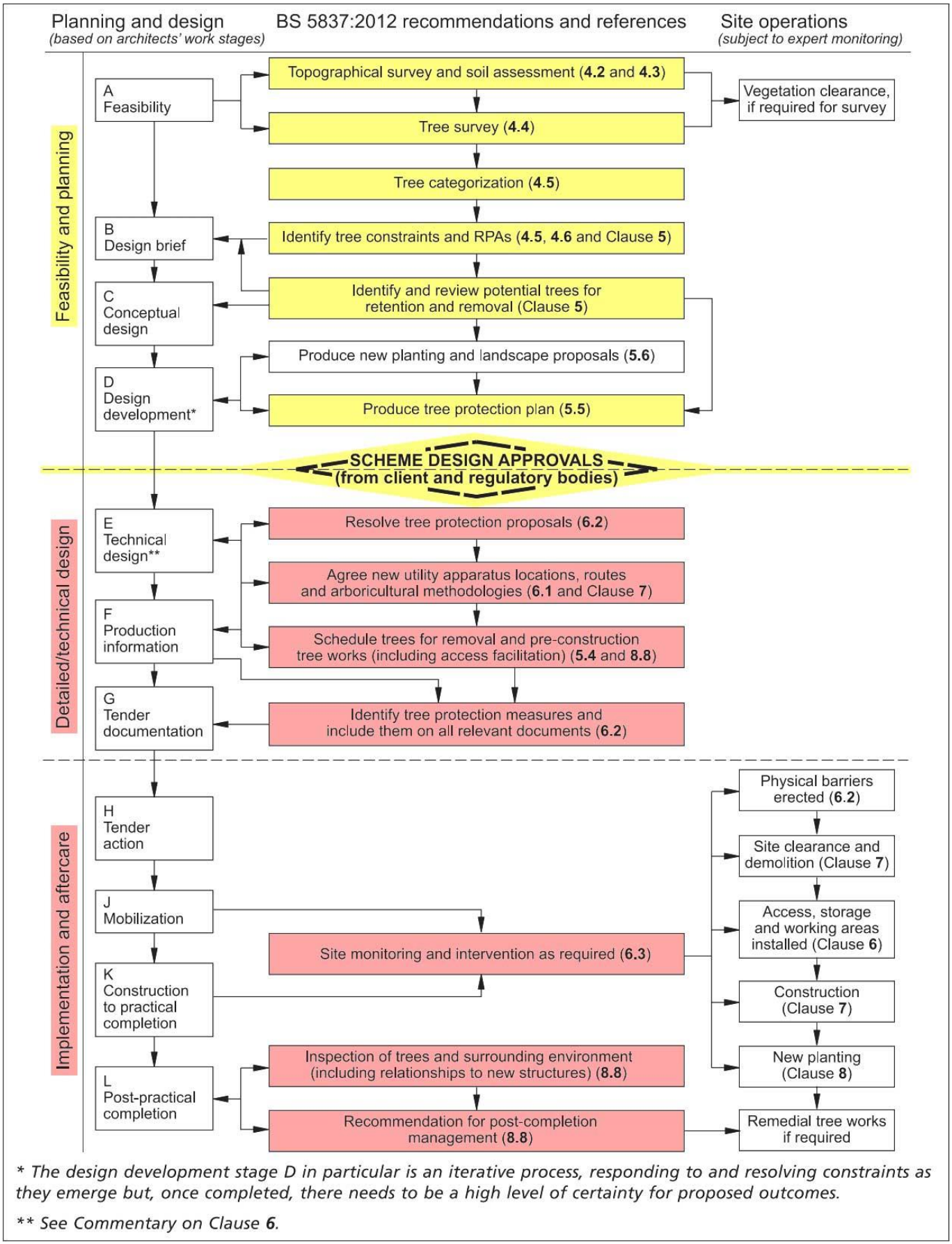
Head of Democratic Services and Monitoring Officer

7003

Appendix F

Advisory Information & Sample Specifications

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



** The design development stage D in particular is an iterative process, responding to and resolving constraints as they emerge but, once completed, there needs to be a high level of certainty for proposed outcomes.*

*** See Commentary on Clause **6**.*

2.

European Protected Species and woodland operations. (V4)

Complete all sections of the Checklist

✔

Checklist

1 **Are you within, or close to, the known mapped range of any of the protected species OTHER THAN BATS which are potentially everywhere? Tick any that apply.**
See distribution maps in the Good Practice Guidance for each species -

- ☐ Dormice
- ☐ Otters
- ☐ Great crested newts
- ☐ Sand lizards
- ☐ Smooth snakes

YES ☐ NO ☐

2 **Does your wood contain any of the following habitats? Tick any that apply.**

- ☐ Old trees with holes and crevices which might be used bats
- ☐ Species rich scrub/coppice, early growth stage plantations and forest interfaces
- ☐ Rivers on which otters might be found
- ☐ Ponds which might be occupied by great crested newts
- ☐ Open areas on heathy soils

YES ☐ NO ☐

3 **Have any of the protected species been recorded in this wood or on adjoining sites? Tick any that apply.**
Indicate which sources of information you have checked:

- ☐ National Biodiversity Network (www.nbn.org.uk)
- ☐ Local Biological Records Centre
- ☐ Local Wildlife Trust
- ☐ Other

Specify Other:

YES ☐ NO ☐

4 **Have your inspections or any expert surveys found any of the following signs or evidence? Tick any that apply.**

- ☐ Signs (e.g. otter spraint, nuts gnawed by dormice, leaves folded by newts)
- ☐ Sightings (or echo-location)
- ☐ Potential breeding or roosting sites (e.g. veteran trees, old trees with crevices, riverside hollow trees, ponds, timber stacks, large fallen deadwood)
- ☐ Confirmed breeding or roosting sites (i.e. evidence of sites actually being used)

Details:

YES ☐ NO ☐

CHECK POINT

If you have answered NO to ALL of the above then only bats need to be considered in your operations.

If you have answered YES to any of the above then the species concerned must be considered as well as bats.

5 **Do the operations comply with Good Practice for bats and any other species found (or likely to be found in your wood) or can the operations be modified to do so?**
Details: Use reverse of form to expand as required:

YES ☐ NO ☐

6 **Whether or not a licence is required...**
Has the information been communicated to operators (including the location of breeding sites and sensitive areas)? Tick any that apply.

- ☐ Included in documentation (e.g. contract, letter of instruction, site assessment or other management plan)
- ☐ Shown to operators and/or their supervisor
- ☐ Marked with paint or hazard tape
- ☐ Shown on the site plan

Other means:

YES ☐ NO ☐

7 **Have arrangements for supervision been made to ensure Good Practice guidance is complied with during the operations?**
Details:

YES ☐ NO ☐

Details

Name of Wood:

Grid Reference:

Area: (ha) .

Date of Assessment:

Name of Assessor:

Notes

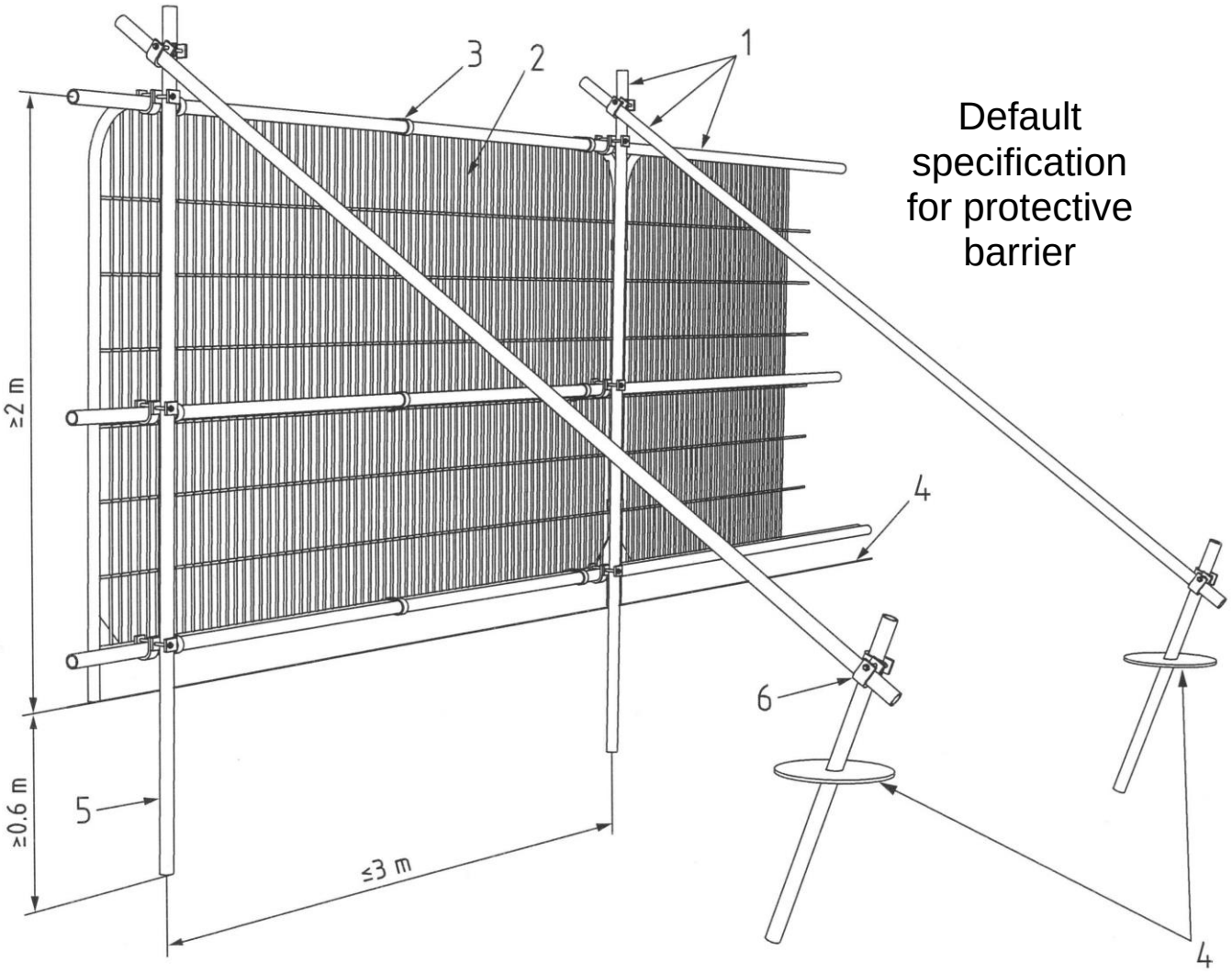
A licence is not required but continue to sections 6 and 7 below

You will need to obtain a licence BEFORE carrying out the work (see EPS Licence Application Forms and Notes)

You may commit an offence if you do not tell your operators about the protected species in your wood.

You may commit an offence if you do not take steps to ensure that your operators comply with the Good Practice guidance.

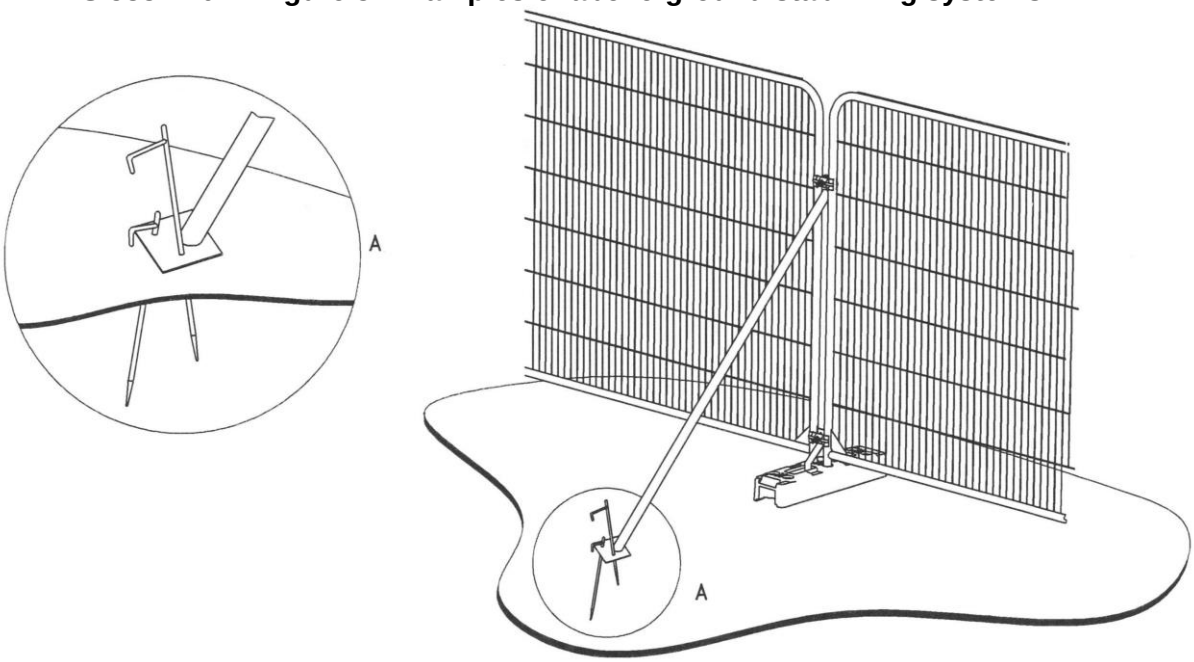
3. BS 5837:2012 Figure 2: Default specification for protective barrier



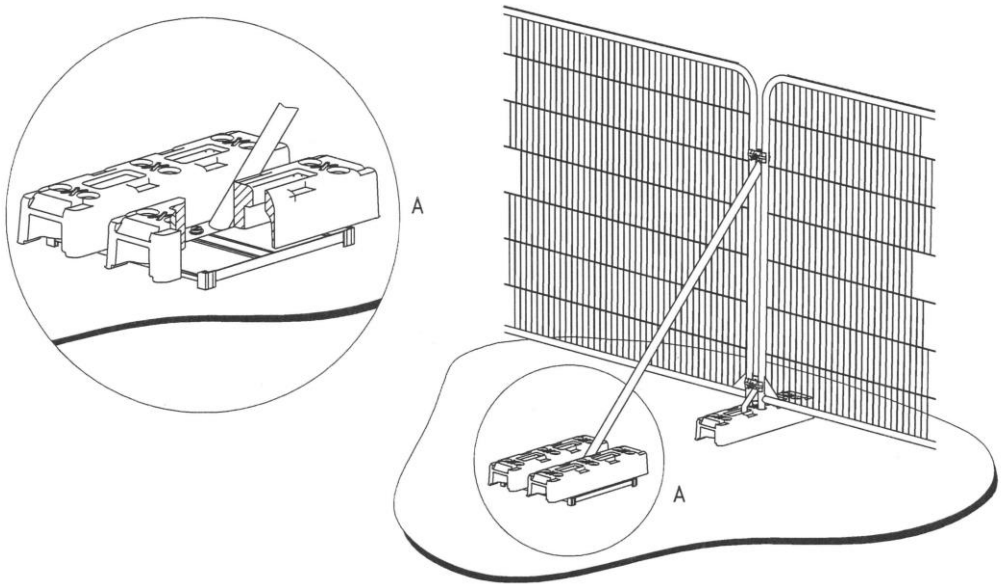
Key

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