

Tree Survey, Arboricultural Impact Assessment Arboricultural Method Statement & Tree Protection Plan In Accordance with BS 5837:2012

Proj. No 10758	1 Gre	1 Green Farm Barns, Buggs Road, Burgate, Diss, Suffolk, IP22 1QG								
	Clie	nt:	Hucklesby Architects							
Date of F	Report:	16/02/2024	Revision:	Original						

Tree Survey, Arboricultural Impact Assessment, Arboricultural Method Statement & Tree Protection Plan – In Accordance with BS 5837:2012

Summary

The purpose of this report is to provide a consideration of the arboricultural implications created by the proposed development. In accordance with the feasibility and planning sections of BS5837:2012 *"Trees in relation to design, demolition and construction – Recommendations"*, trees deemed to be within the influencing distance of the projected construction have been evaluated for quality, longevity, and initial maintenance requirements. Where trees do not have to be removed for health and safety reasons, a detailed and objective assessment has been made of the consequences of the intended layout.

In this circumstance it is intended to construct a new outbuilding in the rear garden. This will be accessed via the existing infrastructure on site. As a result six individual trees were inspected. The arboricultural related implications of the proposal are as follows:

- 1 It is not necessary to fell any trees or landscape features in order to achieve the proposed layout.
- 2 The alignment of the new outbuilding does not encroach within the Root Protection Areas of any trees that are to be retained. In view of this, and as assessed in accordance with BS5837:2012, no specialist foundation designs or construction techniques will be required to prevent damage to tree roots. Specialist foundations may still be required for other reasons, including mitigating the influencing distance of tree roots, subject to expert advice from a structural engineer.
- 3 All trees and landscape features that are to remain as part of the development should suffer no structural damage provided that the findings with this report are complied with in full. This includes ensuring that protective fencing is erected as detailed at items 4.6 and 5.1 of this report.

Given the above, there are no overt or overwhelming arboricultural constraints that can be reasonably cited to preclude the proposed construction.



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1.0 Introduction

1.1 Terms of Reference

- 1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Hucklesby Architects to prepare a Tree Survey, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan for the existing trees at 1 Green Farm Barns, Buggs Road, Burgate, Diss, Suffolk, IP22 1QG.
- The site survey was carried out on the 2nd February 2024. The relevant 1.1.2 gualitative tree data was recorded in order to assess the condition of the existing trees, their constraints upon the prospective development and the necessary protection and construction specifications required to allow their retention as a sustainable and integral part of the completed 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.

1.3 Documentation

- 1.3.1 The following documentation was provided prior to the commencement of the production of this report;
 - Email of instruction by Sarah Hucklesby on behalf of Mr Jones •
 - Definition of site boundary •
 - Description of requirements/deadlines
 - Topographical survey/map •
 - Proposed site layout



2.0 The Site

2.1 **Overview**

2.1.1 The site is 1 Green Farm Barns, Buggs Road, Burgate, Diss, Suffolk, IP22 1QG.

2.2 **Soils**

- 2.2.1 The soils type commonly associated with this site are slowly permeable and seasonally wet, slightly acid but base-rich loams and clays. They are of moderate fertility and mainly support seasonally wet pastures and woodlands type habitats. This soil type constitutes approximately 19.9% 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 Mid Suffolk District Council prior to commencing works to trees. It should be noted however, that Mid Suffolk District 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.

This information was sourced using the Local Planning Authority's Online Mapping System (as instructed by them) and to our best knowledge was current and accurate at the time the information was accessed. We would advise it prudent that before any tree work commences, this is checked directly with the Local Planning Authority to confirm that their online mapping system is definitive.



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 Enclosure 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 Enclosure Acts. These Acts may require that hedges are retained and managed in perpetuity.

It is recommended professional legal advice be sought before removing hedgerows to determine whether the hedgerow might be protected by the Enclosure Act. Details of the Enclosures Act are held by the Local Records Office.

3.0 Tree Survey

3.1 As part of this survey a total of six individual trees, two hedges have been identified. These have been numbered T001 – T006, and H001 – H002 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.10758-D-AIA.
- 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 Arboricultural Impact Assessment

4.1 **The Proposal**

4.1.1 The proposal is to construct a new outbuilding in the rear garden. This will be accessed via the existing infrastructure on site.

4.2 Access

4.2.1 Site access is encumbered by the theoretical Root Protection Area (RPA) of the following retained trees – T001, T002 and T003. In this case the RPA is safeguarded by existing compacted surfacing which is regularly used and therefore, and from a purely arboricultural perspective, it will not be necessary to install a proprietary temporary load bearing road to protect tree roots.

4.3 **Demolition**

4.3.1 There is no demolition associated with this proposal.

4.4 **Construction**

4.4.1 Construction of foundations or structural supports do not encroach within the Root Protection Area (RPA) of any trees to be retained. Therefore from an arboricultural perspective, no specialised construction or foundation techniques will be required to protect tree roots. However, dependent on the soil type, species and topography, trees may have an influence on the soil beyond their calculated RPA.



- 4.4.2 It is understood that there are no new hard surfaces associated with this proposal.
- 4.4.3 Excavation and soil re-modeling is not shown to encroach within the RPA of any retained trees. Therefore, no adverse arboricultural implications are expected.

4.5 **Implications of Sloping Ground**

4.5.1 The arboricultural implications of the proposed structures are based on an assumption that because there are no significant existing slopes on site, level changes will not occur within the RPA of trees that are shown to be retained.

4.6 **Requirement for Tree Barrier Fencing**

4.6.1 Prior to the commencement of construction and immediately after the completion of the necessary tree surgery and felling work, protective fencing will be erected on site. This must be fit for purpose (including any ground protection if necessary) in full accordance with the requirements of BS 5837:2012 and positioned as shown on the attached Arboricultural Impact Assessment & Tree Protection drawing.

4.7 Compound

4.7.1 The site provides adequate internal space to locate a construction compound outside the RPA of any trees and landscape features that are to be retained.

4.8 Phasing

4.8.1 From an arboricultural perspective there are no phasing issues. Once the protective fencing has been installed ensuring the neighbouring trees are protected during the development there is no other phasing requirements.

4.9 Monitoring

- In accordance with item 6.3 of BS 5837:2012, the site and associated 4.9.1 development should be monitored regularly by a competent Arboriculturalist to ensure that the arboricultural aspects of the planning permission are complied with. Shown on drawing 10758-D-AIA is an auditable monitoring schedule to assess the progress of key site events/activities.
- 4.9.2 In addition to the method statement flowchart/checklist, it is necessary to identify the key arboricultural responsibilities associated with the progression of the development. Accordingly, a draft "Statement of Supervision (Arboriculture)" has been included at Appendix F. The purpose of this document is to identify a definite decision making and data recording structure in the monitoring process, together with providing a list of specific inspection trigger points. Prior to works commencing on site, this document should be re-issued with contact names and document reference numbers included.
- 4.9.3 It is the responsibility of the Site Manager, with authorisation from their Client, to commission and plan Arboricultural Monitoring site visits as listed in the Statement of Supervision (Appendix F) and on drawing no. 10758-D-AIA. Upon request. Havden's Arboricultural Consultants will produce a detailed quotation to match the critical Arboricultural Monitoring points outlined.



4.10 **Tree Surgery to Facilitate Proposed Development**

4.10.1 It is not necessary to undertake tree surgery works to retained trees in order to facilitate the proposed development.

4.11 Landscape Implications

4.11.1 No trees or landscape features have been identified for felling for the sole purpose of achieving the proposed layout.

* Please see definitions in the Explanatory Notes attached to this report.

4.12 **Post Development Implications**

- 4.12.1 No adverse arboricultural implications are considered reasonably foreseeable for the trees that remain provided that the recommendations of this report are complied with in full.
- 4.12.2 Due to the dynamic nature of trees and their interaction with the environment, their health and structural integrity is liable to change over time. Because of this it is recommended that all trees on or adjacent to the site be inspected on an annual basis.
- 4.12.3 As stated in BS 5837:2012, regular maintenance of newly planted trees is of particular importance for at least three years during the critical post-planting period and might, where required by site conditions, planning requirements or legal agreement, be necessary for five years or more. Therefore, the designer of the new landscaping should, in conjunction with the landscape design proposals, prepare a detailed maintenance schedule covering this period, and appropriate arrangements made for its implementation.

5.0 Design Advice, Arboricultural Method Statement & **Tree Protection Plan**

5.1 Securing of Tree Structure and Root Protection Areas (RPA)

- 5.1.1 The trees to be retained will be protected by the use of stout barrier fencing erected in the positions indicated on the attached Arboricultural Impact Assessment & Tree Protection drawing no. 10758-D-AIA. This fencing will be in accordance with the requirements of BS 5837:2012 including any necessary ground protection.
- 5.1.2 All fencing provided for the safeguarding of trees will be erected prior to any demolition or development commencing on the site, therefore ensuring the maximum protection. This fencing, which must have all weather notices attached stating "Construction Exclusion Zone - No Access" will be regarded as sacrosanct and, once erected, will not be removed or altered without the prior consent of the Local Planning Authority.
- 5.1.3 Where fencing is impractical, consideration must be given to other forms of effective above ground tree structure protection. An example of this would be a combination of Barksavers to secure the stems and a temporary load bearing surface to shield the ground.



5.2 Location of Site Office, Compound and Parking

5.2.1 The position of the office, compound and parking will be agreed in writing with the Local Planning Authority prior to commencement of any permitted development works. Any proposed re-location of these items through the various phases of development will be agreed prior to re-siting with the Local Planning Authority.

5.3 **On Site Storage of Spoil and Building Materials**

- 5.3.1 Prior to and during all construction works on site, no spoil or construction materials will be stored within the RPA of any tree on, or adjacent to the site, even if the proposed development is to be within the RPA. This is to reduce to a minimum the compaction of the roots of the trees. Details of the RPA for each tree where no spoil or building materials will be stored are indicated on the attached Arboricultural Impact Assessment & Tree Protection drawing no. 10758-D-AIA. Any encroachment within this protected area will only be with the prior agreement of the Local Planning Authority.
- 5.3.2 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there is a multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipework shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.
- 5.3.3 All material storage facilities and work areas must consider the effects of sloping ground on the movement of potentially harmful liquid spillages towards or into protected areas.

5.4 **Programme of Works**

5.4.1 All tree surgery works, once approved by the Local Planning Authority, will be carried out prior to any other site works. Once completed, the proposed protective fencing will be erected along the lines indicated above. All of this will be carried out prior to commencement of any development works on the site. Outline details of the proposed programme are given in the Design and Construction and Tree Care flow chart attached (Appendix E-1).

5.5 Levels

- 5.5.1 Other than for any specific exception which may be referred to at item 4.0, no alterations to soil levels within the RPA of retained trees are envisaged. However, if it is necessary for these to occur, appropriate measures must be taken to prevent or minimise any detrimental effects on the affected root systems as detailed in 5.6.2 and 5.6.3 below.
- 5.5.2 If it is necessary to excavate so close to trees that roots greater than 50mm diameter are likely to be encountered, particular care will be taken to avoid damage. Excavation in these areas will be undertaken by hand or using an air spade, avoiding any damage to the bark. The roots will be surrounded with sharp sand prior to the replacing of any soil or other material in the vicinity.



5.5.3 If it is necessary to raise levels, it is essential that adequate supplies of water and oxygen pass through the soil to the trees' roots. Therefore, where necessary, a granular material will be used which will not inhibit gaseous diffusion. Possible options are no-fines gravel, cobbles or, Type 2 road-stone. All hard surfaces will be of suitable specification to allow such gaseous diffusion, e.g. brick pavers.

5.6 Services

- 5.6.1 It is our understanding that any service that may be require for the outbuilding will be routed from the existing residential building on site. However, the following items below are refenced as guidance.
- It is proposed that all underground service runs will be placed outside the RPA 5.6.2 of the trees on or adjacent to the site. Where it is not possible to do this, the proposed length infringing the RPA will be hand dug 'broken trenches' (NJUG 4 paragraph 4) to ensure the maximum protection of the trees' roots. The trenches may also be excavated using an air spade, or trenchless technology can be employed if this methodology is considered appropriate by the relevant service company (thus allowing services to pass below and through the roots without the need for traditional excavation). If it is necessary to cut any small roots as part of any of these processes, they should be severed in such a way as to ensure that the final wound is as small as possible and free from ragged, torn ends.
- 5.6.3 All routes for overhead services will aim to avoid the trees. Where this is not possible, any tree work will be agreed prior to commencement with the Local Planning Authority.
- 5.6.4 All service providers (Statutory Authorities) will be consulted prior to commencement of works with the aim of minimising the number of service runs on the site.
- 5.6.5 All service runs/trenches where they encroach within the RPA of retained trees will be agreed with the Local Planning Authority prior to commencement of works.

5.7 **Reporting and Monitoring Procedures**

In accordance with item 6.3 of BS 5837:2012, the site and associated 5.7.1 development should be monitored regularly by a competent arboriculturalist to ensure that the arboricultural aspects of the planning permission (e.g. the installation and maintenance of protective measures and the supervision of specialist working techniques) are implemented. Furthermore, regular contact between the Site Manager and the Arboriculturalist allows them to effectively deal with and advise on any tree related problems that may occur during the development process. This system should be auditable. Should any issues arise during the arboricultural monitoring of the development the Arboriculturalist will contact the Local Planning Authority and appropriate action taken only with the prior permission of Huckelsby Architects and the Local Planning Authority.



6.0 Recommendations

6.1 It is recommended that the measures detailed in this report are implemented in full to provide retained trees with the highest level of protection during the process of construction.



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 subject to the recommendations specified within being adhered to. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events.

However, if any additional alterations to the property or soil levels are carried out and/or further tree works undertaken other than specified within the report, it will become invalid and a new tree inspection strongly recommended.

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 2024 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.

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NHBC Standards (2023) Chapter 4.2 'Building Near Trees'. National House-Building Council.

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Building Research Establishment. Littlefair P.J. (2011) Site Layout planning for Good daylight and Sunshine - A guide to good practice (Second Edition). BRE 209.

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British Standards Institute. (1999). Code of Practice for Site Investigations BS 5930:1999 HMSO, London.



9.0 Appendices

Appendix	Α	Species List & Tree Problems
Appendix	В	Schedule of Trees
Appendix	С	Explanatory Notes
Appendix	D	Tree Preservation Order Enquiry/Response
Appendix	Е	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
	5	Figure 4 Detail of protective barrier where construction encroaches within
		BS5837:2012 Root Protection Area
Appendix	F	Statement of Supervision
Appendix	G	Drawing No 10758-D-AIA



Appendix A - Species List & Tree Problems

Species List:

Ash	Fraxinus excelsior
Cherry	Prunus sp
Cherry Plum	Prunus cerasifera
Goat Willow	Salix caprea
Hawthorn	Crataegus monogyna
Hornbeam	Carpinus betulus
Silver Birch	Betula pendula

Tree Problems:

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

Name: Deadwood								
Symptoms/damage type and cause:	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 remova of the affected tissue may be necessary to prevent harm to persons or property as the wood will become unstable as decays and in some circumstances is likely to fall from the tree with little or no warning							
Control:	Detailed monitoring should be undertaken on those trees showing signs of excessive deadwood production to identify the underlying cause.							
Species affected:	Most tree species.							
Images:								



Appendix B

Schedule of Trees

SCHEDULE OF TREES (AIA) 1 Green Farm Barns, Buggs Road, Burgate, Diss, Suffolk

Surveyed By: Matthew Plane-Da'Silva Date: 02/02/2024 Managed By: Matthew Plane-Da'Silva

TreeNo	Species	DBH	Hei	ight	Visual	Crown Spread	Problems / Comments BS		Work Required (TS)	Priority	Work Required (AIA)	Priority
		Min Dist	Crown	Lowest	Age	Water Demand		Cat		(TS)		(AIA)
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover						
H001	Ash, Hawthorn, Cherry Plum	170		6	Moderate	N3.5, E3.5, S3.5, W3.5	Well established hedgerow with the main stems located behind an	B2	No work required.	4		
		2.04	1.8		SM	High	existing timber fence line. Minor					
Yes		13.1			20+ years	Light undergrowth	good screening for the site.					
H002	Hawthorn	80	2	.5	Low	N1, E1, S1, W1	Small section of hedgerow running around site boundary.	C2	No work required.	4		
		0.96	2		SM	High						
Yes		2.9			20+ years	Light undergrowth, Gravel						
T001	Betula Pendula	320	1	2	Moderate	N5, E3, S1.5, W2	The tree is located on the edge of the driveway next to a existing pond	B1	No work required.	4		
		3.84	3		SM	Low	with the land delving to the north to					
Yes		46.3			20+ years	Water, Light undergrowth	managed over the driveway. No					
					L		inspection					
T002	Carpinus Betulus	300	1	0	Moderate	N4.5, E1, S1.5, W5	The tree is located on the edge of the driveway next to a existing pond	B1	No work required.	4		
		3.6	1		SM	Moderate	with the land delving to the north to					
Yes		40.7			20+ years	Light undergrowth, Water	managed over the driveway. No					
					L		inspection.					
T003	Goat Willow	420	9	9	Moderate	N4, E3.5, S5, W5	The tree is located off-site behind an existing timber fence. Well managed	B1	No work required.	4		
		5.04	3		SM	High	over driveway. Main stem originates					
Yes		79.8			20+ years	Light undergrowth						
T004	Prunus Spp	250		4	Moderate	N3, E3, S3, W3	Multi-stemmed form. No significant defects at time of inspection. Not	C1	No work required.	4		
		3	1.8		SM	Moderate	deem to be of significant value.					
Yes		28.3			20+ years	Gravel						
T005	Carpinus Betulus	160		5	Moderate	N2, E2, S2, W2	The tree appears to be in a good physiological condition. No	B1	No work required.	4		
		1.92	2		SM	Moderate	significant defects at time of					
Yes		11.6			20+ years	Light undergrowth	inspection.					

TreeNo	eeNo Species	DBH	DBH	He	ight	Visual	Crown Spread	Problems / Comments	BS	Work Required (TS)	Priority	Work Required (AIA)	Priority
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand		Cat		(TS)		(AIA)	
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover							
T006	Cherry	320		7	Low	N4, E4, S4, W4	The tree appears to be in a good physiological condition with a large amount of healthy budding material throughout the group	B1	No work required.	4			
		3.84	1.8		SM	Moderate							
Yes		46.3			20+ years	Dense undergrowth							

Appendix C

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 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 40 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 5837Table 1 of BS 5837:2012 also requires a sub category to be applied toSubthe A, B, C, and U assessments. This allows for a further understanding ofCategorythe 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.

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 characteristic, how it isCommentsaffected 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.
- ConstructionSite-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.
- StemPrincipal above ground structural component(s) of a tree that
supports its branches.
- StructureManufactured object, such as a building, carriageway, path,
wall, service run, and built or excavated earthwork.
- Tree Protection PlanScale 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 TreeTree 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 D

Tree Preservation Order Enquiry/Response



Tree Preservation Order / Conservation Area Online Mapping Extract



Appendix E

Advisory Information & Sample Specifications

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



** See Commentary on Clause 6.

	European Protected Species and woodlan Complete all sections of the Ch	i d operat ecklist	ions. (V4)
		✓	
	Checklist		Details
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 -	YES NO	Name of Wood:
	Otters Great crested newts Sand lizards Smooth snakes		Grid Reference:
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	Area: (ha) Date of Assessment:
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	Name of Assessor:
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.		Notes
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 S	A licence is not required but continue to sections 6 and 7 below /ou will need to obtain a licence BEFORE arrying out the work (see EPS Licence Application Forms and Notes)
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 t	/ou may commit an offence if you do not ell your operators about the protected species in your wood.
7	Have arrangements for supervision been made to ensure Good Practice guidance is complied with during the operations? Details:	YES NO	You may commit an offence if you do not ake steps to ensure that your operators comply with the Good Practice guidance.



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

5. Figure 4 Detail of protective barrier where construction encroaches within BS5837:2012 Root Protection Area



Appendix F

Statement of Supervision

NB. Items designated **??** cannot be entered until after approval is granted, but are to remain in the document to show where updates are required. This document to be reissued prior to any works commencing onsite with this text to be deleted from final document.

1 Green Farm Barns, Buggs Road, Burgate, Diss, Suffolk, IP22 1QG

Statement of Supervision (Arboriculture)

Introduction

In accordance with Planning Permission ?? (dated ??/??/????), Hucklesby Architects are undertaking the development of the above site.

The purpose of this document is to ensure that all works that have an impact on retained trees are undertaken in accordance with the approved Method Statement and Tree Protection Plan. As such, the purpose of the Statement is to identify the following arboricultural issues:

- Approved documents;
- Key staff and contacts;
- Critical phases of pre-commencement, induction and construction.

Approved Documents

The following documents must be available to all those with responsibility for arboricultural matters during construction:

- BS 5837:2012 Trees in relation to design, demolition and construction Recommendations.
- Notice of Planning Decision ??, dated ??/??/????.
- Arboricultural Method Statement & Tree Protection Plan for this project produced by Hayden's Arboricultural Consultants dated 16/02/2024.

Key Staff

The following have or are to be appointed responsible for arboricultural matters at the site:

- Developer: Hucklesby Architects (or their representative).
- Arboricultural Consultant: Hayden's Arboricultural Consultants Ltd. Contact Mr Matthew Plane-Da'Silva (Arboricultural Consultant) – 01284 765391, info@treesurveys.co.uk, (or his representative).
- Site Manager/Agent TBC, (or their representative).

Critical phases of pre-commencement, induction, construction & completion

REF	ACTIVITY	ONE OFF /REPEAT	ATTENDEES	ACTION
1	Pre- commencement meeting (to discuss working methods, timescales and tree protection schemes)	One off	Developer, Arboricultural Consultant, Site Manager/Agent, Ground Works Contractor, Council Arboricultural Officer	Arboricultural Consultant to record minutes – copies to be submitted to attendees
2	Inspection of completed tree surgery & erection of fencing	One off	Arboricultural Consultant, Site Manager/Agent	Arboricultural Consultant to record minutes – copies to be submitted to Developer and Council Arboricultural Officer
3	Completion of construction – prior to removal of fencing	One off	Arboricultural Consultant, Site Manager/Agent	Arboricultural Consultant to record minutes – copies to be submitted to Developer and Council Arboricultural Officer
4	Final tree assessment – after fencing removal	One off	Developer, Arboricultural Consultant, Site Manager/Agent, Ground Works Contractor, Council Arboricultural Officer	Arboricultural Consultant to record minutes – copies to be submitted to Developer and Council Arboricultural Officer
-	Additional inspections (if necessary) to ensure periods not greater than three months elapse between any of above listed monitoring events	Dependent on progress of the project	Arboricultural Consultant, Site Manager/Agent	Arboricultural Consultant to record minutes – copies to be submitted to Developer and Council Arboricultural Officer

Variations and Incidents

Any proposed variations to the proposed working method (relating to arboricultural matters) will be referred by the on-Site Manger/Agent to the Developer who will seek advice from the Arboricultural Consultant. The Arboricultural Consultant shall advise on minor amendments (e.g. realignment of fencing etc) and will subsequently report these to the Arboricultural Officer by e mail or minutes. Issues directly relating to tree surgery or tree retention will be forwarded by the Arboricultural Consultant (with recommendations) to the Arboricultural Officer for approval. Except in an emergency situation **and** when the Arboricultural Officer is unavailable, no such actions will occur without the written approval of the Arboricultural Officer.

Implacest-

Matthew Plane-Da'Silva Arboricultural Consultant Hayden's Arboricultural Consultants Ltd

16/02/2024

Appendix G

Haydens 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 •

