HAYDEN'S
Arboricultural Consultants

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

Proj. No **8860**	**25 Ham Farm Road, Richmond, London, TW10 5NA**		
Client:		Proctor and Shaw	
Date of Report:	17/03/2021	Revision:	A

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

Summary

The purpose of this report is to provide a preliminary 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 demolish the existing dwelling and construct a replacement dwelling with associated landscaping. As a result, ten individual trees, one group of trees and one hedge were inspected. The arboricultural related implications of the proposal are as follows:

1 It is necessary to fell five category 'C' trees (T002, T003, T004, T007 and T010) and a small section of one category 'C' hedge (H001) to achieve the proposed layout. Additionally, three trees (T005, T008 and T009) require minor surgery to permit construction.

2 The alignment of the replacement dwelling nominally intrudes within the Root Protection Area of one tree (T005) to be retained. This has only a minor influence on the tree's Root Protection Area. As such it is considered appropriate to undertake linear root pruning thus obviating the need for specialist construction techniques, as discussed at item 4.4.1.

3 The alignment of the rear decked patio and footpath encroach within the Root Protection Area of two trees (T005 and T009) and one group of trees (G001) that are to be retained. Given the use of modern "no dig" construction techniques this is not considered to be a substantial issue, as discussed at items 4.4.3 and 4.4.4.

4 This report recommends that specialist advice is obtained by expert practitioners in other disciplines. Such input should always be sought prior to construction in order to demonstrate that the techniques and methods hereby proposed are achievable. In this particular circumstance it is necessary to contact the following:

- Structural Engineer (foundation design, item 4.4.1 and 4.4.2)
- Civil Engineer ("no dig" surfacing, items 4.4.3 and 4.4.4)

5 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 and ground protection are installed as detailed at items 4.6 and 5.1 of this report.

6 Post Planning Permission – Subject to achieving Planning Permission, a detailed Arboricultural Method Statement and Tree Protection Plan will be required. This will include the following: fencing type, ground protection measures, “no dig” surfacing, access facilitation pruning specification, service drawings, drainage proposals, project phasing and an auditable monitoring schedule.

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

Contact Details

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Contents

1.0 Introduction

1.1 Terms of Reference

1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Mr and Mrs B Tkacz to prepare a Tree Survey, Arboricultural Impact Assessment, Preliminary Arboricultural Method Statement and Preliminary Tree Protection Plan for the existing trees at 25 Ham Farm Road, Richmond, London, TW10 5NA.

1.1.2 The site survey was carried out on 25/05/2021. The relevant qualitative and quantitative 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 from Bartosz Tkacz on the 18th May 2021
- Topographical survey – drawing no. 2103_EX.01_EX SITE PLAN
- Existing site plan - drawing no. 2103_EX.01_EX SITE PLAN
- Proposed site layout – drawing no. 2103_P.01.PROP SITE PLAN

2.0 The Site

2.1 Site Overview

2.1.1 The site is 25 Ham Farm Road, Richmond. It is a detached dwelling set within reasonable grounds. Residential dwellings border the site's north western and south eastern aspects and garages its south western aspect. Ham Farm Road borders its north eastern aspect, from which the site is accessed and beyond this is woodland. The trees surveyed were found to be of mixed age and similar condition and to provide a variety of amenity benefits.

2.2 Soils

2.2.1 The soil type commonly associated with this site are generally freely draining slightly acid loams. They are of low fertility and typically support neutral and acid pastures and deciduous woodland type habitats. This soil type constitutes approximately 15.5% of 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 Conservation Area

The site is located within a locality specifically identified by London Borough of Richmond upon Thames Council as a "Conservation Area". This is a planning designation that seeks to provide control over the built environment but which also has provision for tree protection. The effect of this on anyone wishing to undertake work on trees sited within a Conservation Area is to require them to submit 6 weeks written notice detailing the surgery or felling they plan to undertake. No work may be carried during the 6-week period unless written permission has been received from London Borough of Richmond upon Thames Council. The Local Planning Authority (LPA) can only prevent works notified to them within the 6-week period by serving a Tree Preservation Order. If this happens, the owner of the tree has a right to object to the serving of the Order.

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

- Making a tree safe if it is an imminent threat to people or property.
- Removing deadwood or a dead tree.
- Trees with stem diameters of less than 75mm (measured at 1.5m from ground level). If the works being carried out are to help promote the growth of other trees then trees with stem diameters of less than 100mm (at 1.5m) may be removed or pruned.

Anyone wishing to undertake work as an exemption to the written notification process are **required** to provide the LPA 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 LPA prior to carrying out such operations. Furthermore, even in the event of an emergency situation there is still a duty to notify the LPA that work has been completed including supplying an explanation of the necessity. Failure to comply with the requirements of Conservation Area 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.

2.3.2 If **detailed planning permission** is granted and as part of the relevant approval, works (felling or surgery) to trees located within a Conservation Area are agreed as acceptable by the LPA, no **additional** written permission to proceed will be required provided that:

(i) the planning permission remains live
(ii) the works are in strict accordance with the specification of the extant planning permission
(iii) the works are being completed solely to implement the detailed planning permission.

3.0 Tree Survey

3.1 As part of this survey a total of ten individual trees, one group of trees and one hedge have been identified. These have been numbered T001 – T010, G001 and H001 respectively.

3.2 A topographical survey was provided which showed the position of the trees on site. However, it should be noted 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. 8860-D-AIA rev. A.

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:

T005	Repollard at historic reduction points. Undertake secondary investigations with a Resistograph Microdrill.

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:

T009	Monitor annually (included union).

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 Arboricultural Impact Assessment

4.1 The Proposal

4.1.1 The proposal is to demolish the existing dwelling and construct a replacement dwelling with associated landscaping within the curtilage of the site.

4.2 Access

4.2.1 Site access is unencumbered by the Root Protection Areas (RPA) of any trees to be retained. From a purely arboricultural perspective, it will therefore not be necessary to install ground protection to protect tree roots.

4.3. Demolition

4.3.1 Demolition of existing structures and removal of existing hard surfacing affects the theoretical RPA of T001 and T005, as shown on the attached drawing no. 8860-D-AIA rev. A. To prevent damage to these trees works must only be completed with appropriate machinery, or by hand, within the calculated RPA and may only commence once protective fencing has been installed. In the proximity of the retained trees, all walls and material must be demolished inwards into the footprint of the building and away from the stems (often referred to as “top down, pull back”). Additionally, all plant and vehicles engaged in demolition should either operate outside the theoretical RPA, or should run on a temporary load bearing surface to protect the underlying soil structure. All foundations and hard surfaces within the theoretical RPA are to be broken out with extreme care, either manually or with a breaker and small mini digger operating outside the RPA, or on the temporary load bearing surface.

4.4 Construction

4.4.1 Construction of the replacement dwelling’s foundations marginally encroach within the calculated RPA of T005. Given the negligible extent of the additional intrusion into the RPA of T005 when compared to the exiting building’s footprint, as shown on the attached drawing no. 8860-D-AIA rev. A, no significant root disturbance is thought likely.

However, to ensure any roots which have permeated to the footprint of the new dwelling are not damaged, it is advised that precautionary excavation and root pruning is undertaken as part of the access facilitation pruning (AFP) works. However, given the proximity of the proposed construction to the trees to be retained, it is recommended that a Structural Engineer is consulted to assess the implications of the tree retention on the required foundation design.

4.4.2 Where the alignment of the replacement dwelling does not encroach within the RPAs of any trees that are to be retained, 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, and as such expert advice should always be sought from a Structural Engineer.

4.4.3 Installation of a new hard surfaces (i.e. garden footpath) encroach within the RPA T005, T009 and G001, as shown on the attached drawing no. 8860-D-AIA rev. A. Provided that these work with finished levels and required load bearings without cutting into the ground, the surfaces should be attended to using “no dig” construction methods. In the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden’s Arboricultural Consultants will supply a sample design of “no dig” surfacing. However, the exact specification (adhering to the principles of the sample design) must be designed by a Civil Engineer who can confirm that the finished levels and load bearings are achievable with this type of design without cutting into the ground. To protect the RPA of the affected tree, this area should be constructed as a final phase of development with the RPA initially protected by a combination of protective fencing and ground protection.

4.4.4 Installation of a raised decked patio encroaches within the RPA of T005, as shown on the attached drawing no. 8860-D-AIA rev. A. Provided this works with finished levels and required load bearings without cutting into the ground, which must be confirmed by a Civil Engineer, no adverse arboricultural implications are expected.

4.4.5 Excavation is proposed in the RPA of T005 to facilitate installation of a pond, as shown on the attached drawing no. 8860-D-AIA rev. A. Given the negligible incursion into the periphery of the tree’s RPA, 1.1%, it is considered appropriate to undertake linear root pruning as part of the access facilitation pruning (AFP) works. If roots are unearthed, they will be cleanly severed with secateurs ensuring all wounds are free from ragged, torn ends.

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 demolition and immediately after the completion of the necessary tree work, protective fencing will be installed on site. This must be fit for purpose, in full accordance with the requirements of BS 5837:2012 and positioned as shown on the attached drawing no. 8860-D-AIA rev. A.

4.6.2 After the completion of demolition and prior to the commencement of construction, the protective fencing will be re-aligned and ground protection installed as shown on the attached drawing no. 8860-D-AIA rev. A. Full details of fencing will be supplied by Hayden's Arboricultural Consultants in the detailed Arboricultural Method Statement & Tree Protection Plan

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 The proposal involves the integration of a number of aspects that affect tree protection (e.g. – but not exclusively – demolition, movement of materials and the installation of services). For this reason the project must be carefully phased to ensure the highest level of protection for retained trees at all times. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden's Arboricultural Consultants will produce an in-depth phasing recommendation to cover the major operations on site as they affect retained trees.

4.9 Monitoring

4.9.1 In accordance with item 6.3 of BS 5837:2012, the site and associated development should be monitored regularly by a competent Arboriculturalist to ensure that the arboricultural aspects of the planning permission are complied with. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden's Arboricultural Consultants will produce an extensive auditable monitoring schedule to assess the progress of key site events/activities.

4.10 Access Facilitation Pruning

4.10.1 It is necessary to undertake access facilitation pruning (AFP) which includes below ground works to T005 and above ground works to T005, T008 and T009, as outlined in the *Schedule of Works to Allow Development.* These works are necessary to permit construction and facilitate installation of the pond. Given the amount of pruning necessary and the location of the work, as discussed at items 4.4.1 and 4.4.5, the AFP is not considered likely to have an adverse effect on the trees concerned. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, an in-depth AFP specification will be provided.

4.11 Landscape Implications

4.11.1 The items listed in the table below require felling to permit the proposed development to proceed: -

Feature No	Reason for Removal	BS Category*	Visual Amenity Assessment*
H001 (section)	To facilitate construction of the replacement dwelling.	C	Moderate
T002	To facilitate construction of the replacement dwelling.	C	Low
T003	To facilitate construction of the replacement dwelling and decked patio.	C	Low
T004	To facilitate construction of the replacement dwelling and decked patio.	C	Low
T007	To facilitate construction of the footpath.	C	Low
T010	To facilitate the proposed tree planting.	C	Low

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

4.12 Post Development Implications

4.12.1 Given the proposed tree: dwelling juxtaposition is almost identical to the existing juxtaposition, 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. It is therefore 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. The designer of the new landscaping should therefore, 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, Preliminary 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 using stout barrier fencing and ground protection installed in the positions indicated on the attached Preliminary Arboricultural Impact Assessment & Tree Protection drawing no. 8860-D-AIA rev. A. This fencing and ground protection 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 LPA.

5.1.3 Where footpaths, access drives, or parking bays are constructed within the RPA of retained trees, careful attention will be paid to the type of surface treatment used in these areas, details of which are given in item 5.8, below. If possible, these should be installed as a final phase of the project, thereby protecting the RPA throughout the major construction phase of the proposed development.

5.1.4 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 LPA 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 LPA.

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 Preliminary Arboricultural Impact Assessment & Tree Protection drawing no. 8860-D-AIA rev. A. Any encroachment within this protected area will only be with the prior agreement of the LPA.

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 pipe-work 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 LPA, 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 G-1).

5.5 Tree Surgery

5.5.1 All tree work will be agreed with the LPA and will be carried out in line with BS 3998:2010 (Recommendations for Tree Works). An appropriately qualified, experienced and insured arboricultural contractor will carry out the work. Any alterations to the proposed schedule of works will be agreed with the LPA prior to commencement of works.

5.6 Levels

5.6.1 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.

5.6.2 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.

5.6.3 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 granite. All hard surfaces will be of suitable specification to allow such gaseous diffusion, e.g. brick pavers.

5.7 Services

5.7.1 At the time of writing this report, no details on proposed services were available. However, the following principles should be adhered to when planning for their installation.

5.7.2 It is proposed that all underground service runs will be placed outside the RPA 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.

5.7.3 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 LPA.

5.7.4 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.

5.7.5 All service runs/trenches where they encroach within the RPA of retained trees will be agreed with the LPA prior to commencement of works.

5.8 **Hard Surface Types & Construction within the Root Protection Area**

5.8.1 Where it is necessary to construct footpaths, driveways, non-adoptable roads, and other hard surfaces within the RPA as calculated in accordance with BS 5837:2012 (item 4.6.1), it is proposed that the design will comply with the 'no-dig' 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 it is necessary to remove any existing hard surface, or lower the ground level within the RPA, this may expose roots. This operation must be undertaken using hand tools or an air spade. Any roots found should be treated with the greatest care and surrounded by sharp sand to provide a level base. Please note that 'no-dig' surfaces are not always considered acceptable for adoption.

5.9 **Reporting and Monitoring Procedures**

5.9.1 In accordance with item 6.3 of BS 5837:2012, the site and associated 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 LPA and appropriate action taken only with the prior permission of Mr and Mrs B Tkacz and the LPA.

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 demolition and construction.

6.2 Subject to achieving Planning Permission, it is recommended that a detailed Arboricultural Method Statement & Tree Protection Plan should be provided. This will include the following: fencing type, ground protection measures, "no dig" surfacing, access facilitation pruning specification, service drawings, drainage proposals, project phasing and an extensive auditable monitoring schedule.

6.3 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.

6.4 The tree surgery works proposed as part of this survey are recommended to mitigate any identified problems that may be caused by trees in close proximity to the proposed development. 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 LPA, 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 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:

March 2022
For and on Behalf of Hayden's Arboricultural Consultants Limited

8.0 References

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9.0 Appendices

Appendix	**A**	Species List & Tree Problems
Appendix	**B**	Schedule of Trees
Appendix	**C**	Schedule of Works - Irrespective of Development
Appendix	**D**	Preliminary Schedule of Works to Allow Development
Appendix	**E**	Explanatory Notes
Appendix	**F**	Tree Preservation Order Enquiry/Response
Appendix	**G**	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	**H**	Drawing no. 8860-D-AIA rev. A

Appendix A - Species List & Tree Problems

Species List:

Apple	*Malus sp*
Bay Laurel	*Laurus sp*
Cherry	*Prunus sp*
Cypress	*Cupressus sp*
Holly	*Ilex sp*
Olive	*Olea sp*
Pine	*Pinus sp*
Willow	*Salix sp*

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 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:	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:	 

Name: *Hedera helix* (Ivy)	
Symptoms/damage type and cause:	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. Ivy can also mask potentially dangerous faults on a tree.
Control:	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.
Species affected:	Most trees can be affected.
Images:	 

Appendix B

Schedule of Trees

SCHEDULE OF TREES (AIA) 25 Ham Farm Road, Richmond, London

Surveyed By: Nick Hayden Date: 25/05/2021
Managed By: Nick Hayden

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
On site		RPA (m²)	Aspect	Aspect	SULE	Ground Cover						
G001	3x Cypress and 1x Holly	50	6.5		Moderate	N3, E3, S3, W3	All stems heavily clad in Ivy. Multi-stemmed specimens topped at circa. 5.5m above ground level. Tight unions. Provides screening but otherwise of little arboricultural merit. DBH of individual specimens provided.	C2	No work required.	4		
		0.6	0-2m		EM	High						
Yes		1.1			10+ years	Ivy, Bare earth, Grass						
H001	Cypress	200	3		Moderate	N1.5, E1.5, S1.5, W1.5	Well maintained boundary hedge.	C2	No work required.	4	Fell small section shown on drawing no. 8860-D-AIA rev. A to permit development.	0
		2.4	0-2m		SM	High						
Yes		18.1			10+ years	Shrub bed						
T001	Olive	280	2		Low	N1.5, E1.5, S1.5, W1.5	Pollarded at circa. 1m above ground level. Vigorous regrowth on decaying stem.	C2	No work required.	4		
		3.36	0-2m		EM	Low						
Yes		35.5			10+ years	Grass						
T002	Cypress	80	1.5		Low	N0.8, E0.8, S0.8, W0.8	Young specimen located within 1.5m of dwelling.	C2	No work required.	4	Fell to permit development.	0
		0.96	0-2m		Y	High						
Yes		2.9			10+ years	Ivy, Shrub bed, Block paving						
T003	Bay Laurel	60	2		Low	N0.5, E0.5, S0.5, W0.5	Clipped Bay.	C2	No work required.	4	Fell to permit development.	0
		0.72	0-2m		Y	Moderate						
Yes		1.6			10+ years	Block paving						
T004	Bay Laurel	60	2		Low	N0.5, E0.5, S0.5, W0.5	Clipped Bay.	C2	No work required.	4	Fell to permit development.	0
		0.72	0-2m		Y	Moderate						
Yes		1.6			10+ years	Block paving						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover						
T005	Willow	990	11		Moderate	N6, E6.5, S6.5, W5.5	Twin stemmed from circa. 1.6m above ground level, union appears stable. DBH recorded at circa. 1.2m above ground level beneath union. Tapping lower stem with a sounding mallet did suggest localised decay present. Northern codominant stem bifurcates at circa. 2m above ground level and the sub-dominant stem is dead with notable decay. Fungal fruiting bodies present but unable to identify conclusively from ground level. Bark necrosis on western aspect that extends to union with minor occlusion at edges of exposed, dysfunctional wood. Dead bark extends circa. 0.5m below union on stem's western aspect. Dominant stem extending north over adjacent structure has decaying branch stubs. First primary branch extending over pergola contorted and has a possible hazard beam forming. Dieback in upper canopy of stem. Southern extending codominant stem has cavities and decay in first primary branch, possible nesting holes. Dieback and reduced vigour at crown extremity. Crown has been reduced historically at circa. 9m. Dense regrowth at reduction points, many of which display evidence of decay. Deadwood throughout. Secondary investigations recommended and re-pollarding advised if retained. BS categorisation may be amended following further investigations.	C2	Repollard at historic reduction points. Undertake secondary investigations with a Resi Microdrill.	2	Undertake precautionary root pruning at the location shown on drawing no. 8860-D-AIA rev. A and crown lift to 3m to permit development.	0
		11.88	0-2m		M	High						
Yes		443.4			10+ years	Block paving, Shrub bed						
T006	Cherry	190	5.5		Low	N3, E1.5, S3, W2	Dense Ivy impeded a detailed inspection. Bifurcates at circa. 1m above ground level, western stem removed at circa. 0.75m above union. Suppressed specimen. Dieback. An unremarkable feature.	C2	No work required.	4		
		2.28	0-2m		EM	Moderate						
Yes		16.3			10+ years	Bare earth, Shrub bed						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
On site		RPA (m^2)	Aspect	Aspect	SULE	Ground Cover						
T007	Cypress	100	3		Low	N1.5, E3.5, S2.5, W1	Partially failed, suppressed specimen densely clad in Ivy. Leaning into and resting on adjacent shrub bed. An unremarkable specimen.	C2	No work required.	4	Fell to facilitate implementation of landscaping scheme.	0
		1.2	0-2m		SM	High						
Yes		4.5			10+ years	Ivy, Light undergrowth						
T008	Cherry	90	6		Low	N1, E3, S2.5, W2	Suppressed specimen with asymmetric crown.	C2	No work required.	4	Crown lift to 3m to permit development.	0
		1.08	0-2m		Y	Moderate						
Yes		3.7			10+ years	Ivy, Shrub bed						
T009	Pine	320	7		Low	N3, E4.5, S3.5, W2.5	Swept stem to south east, however static imbalance is correcting itself. Bifurcates at circa. 1.8m above ground level. Bark inclusion at union but currently appears stable. Minor dieback of lower crown on western aspect.	C2	Monitor annually (included union).	3	Crown lift to 3m to permit development.	0
		3.84	2.1-4m		SM	Moderate						
Yes		46.3			10+ years	Grass						
T010	Apple	90	2		Low	N1.5, E2, S1.5, W2	Reasonable vigour.	C2	No work required.	4	Fell to facilitate implementation of landscaping scheme.	0
		1.08	0-2m		SM	Moderate						
Yes		3.7			10+ years	Grass						

Appendix C

Schedule of Works - Irrespective of Development

SCHEDULE OF WORK IRRESPECTIVE OF DEVELOPMENT

25 Ham Farm Road, Richmond, London

Surveyed By: Nick Hayden
Surveyed: 25/05/2021
Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
T005	Willow	Repollard at historic reduction points. Undertake secondary investigations with a Resi Microdrill.	**2**

Schedule of Enhanced Monitoring

25 Ham Farm Road, Richmond, London

Surveyed By: Nick Hayden
Surveyed: 25/05/2021
Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
T009	Pine	Monitor annually (included union).	**3**

Appendix D

Preliminary Schedule of Works to Allow Development

SCHEDULE OF WORKS (AIA)

25 Ham Farm Road, Richmond, London

Surveyed By: Nick Hayden
Surveyed: 25/05/2021
Managed By: Nick Hayden

Tree No.	Species	Work required	Priority
H001	Cypress	Fell small section shown on drawing no. 8860-D-AIA rev. A to permit development.	**0**
T002	Cypress	Fell to permit development.	**0**
T003	Bay Laurel	Fell to permit development.	**0**
T004	Bay Laurel	Fell to permit development.	**0**
T005	Willow	Undertake precautionary root pruning at the location shown on drawing no. 8860-D-AIA rev. A and crown lift to 3m to permit development.	**0**
T007	Cypress	Fell to facilitate implementation of landscaping scheme.	**0**
T008	Cherry	Crown lift to 3m to permit development.	**0**
T009	Pine	Crown lift to 3m to permit development.	**0**
T010	Apple	Fell to facilitate implementation of landscaping scheme.	**0**

Appendix E

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 F

Tree Preservation Order Enquiry/Response

Gabrielle Justesen

From: trees&parks@richmond.gov.uk
Sent: 18 May 2021 13:47
To: Gabrielle Justesen
Subject: RE: TPO Enquiry - 8860 - 25 Ham Farm Road, Richmond, London, TW10 5NA

Dear Gabby Justesen

Thank you for your email.

I can confirm there are no TPO's on your property.

Your address is however within a conservation area, please complete a tree works application for any tree works.

http://www.richmond.gov.uk/protected_trees

You will receive a decision on your application within 6 weeks.

We are conducting a Customer Experience Survey to gather customer feedback to help improve our services. The survey only takes 5 minutes and can be completed by using the link below.
www.richmond.gov.uk/customer_feedback

Kind regards

Michelle Davies

Corporate Customer Services
Serving Richmond and Wandsworth Councils
Tel: 0208 891 1411
www.richmond.gov.uk / *www.wandsworth.gov.uk*
You can also follow us on Twitter for up to date information and news: Twitter @LBRUT_help

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From: Gabby@treesurveys.co.uk
Sent: 18/May/2021 13:11 (BST)
To: trees&parks@richmond.gov.uk
Subject: TPO Enquiry - 8860 - 25 Ham Farm Road, Richmond, London, TW10 5NA

Dear Sir or Madam,

Could you please advise if the above mentioned site and adjacent areas (and the neighbouring properties) are covered by TPO or located within a Conservation Area?

I have attached a map for your use.

I look forward to hearing from you.

Kind regards

Gabby Justesen
Office Manager – Southern Office

(Please note my working hours are 9am – 3pm)

CORONAVIRUS PROCEDURES:
Due to the nature of our work, a large percentage of the site work is lone working and consequently low risk. Therefore, we are still operating as normal providing we can lone work on site and avoid meetings, albeit with

Parkleys Estate Conservation Area 67

Designation

Conservation area designated:
02.12.2003

Location
OS Sheets: 1771, 1871
Parkleys Estate conservation area lies to the south of Ham Common. The common to the north, Upper Ham Road to the west and suburban Kingston to the south contains it. It adjoins Ham Common conservation area (no.7) to the northwest and Richmond Park conservation area (no.62) to the northeast.

History and Development

This area was formerly agricultural land. No.5 Ham Farm Road now stands on the site of the original farmhouse. Ham Farm Nursery was established here in the 19th century with a new farmhouse. The nursery continued until it was taken over by Span Developments Ltd in the early 1950s. The Parkleys Estate was developed on this site between 1954 and 1955. Further detached houses were subsequently developed along Ham Farm Road also as part of the Span development between 1955 and 1956.

Character

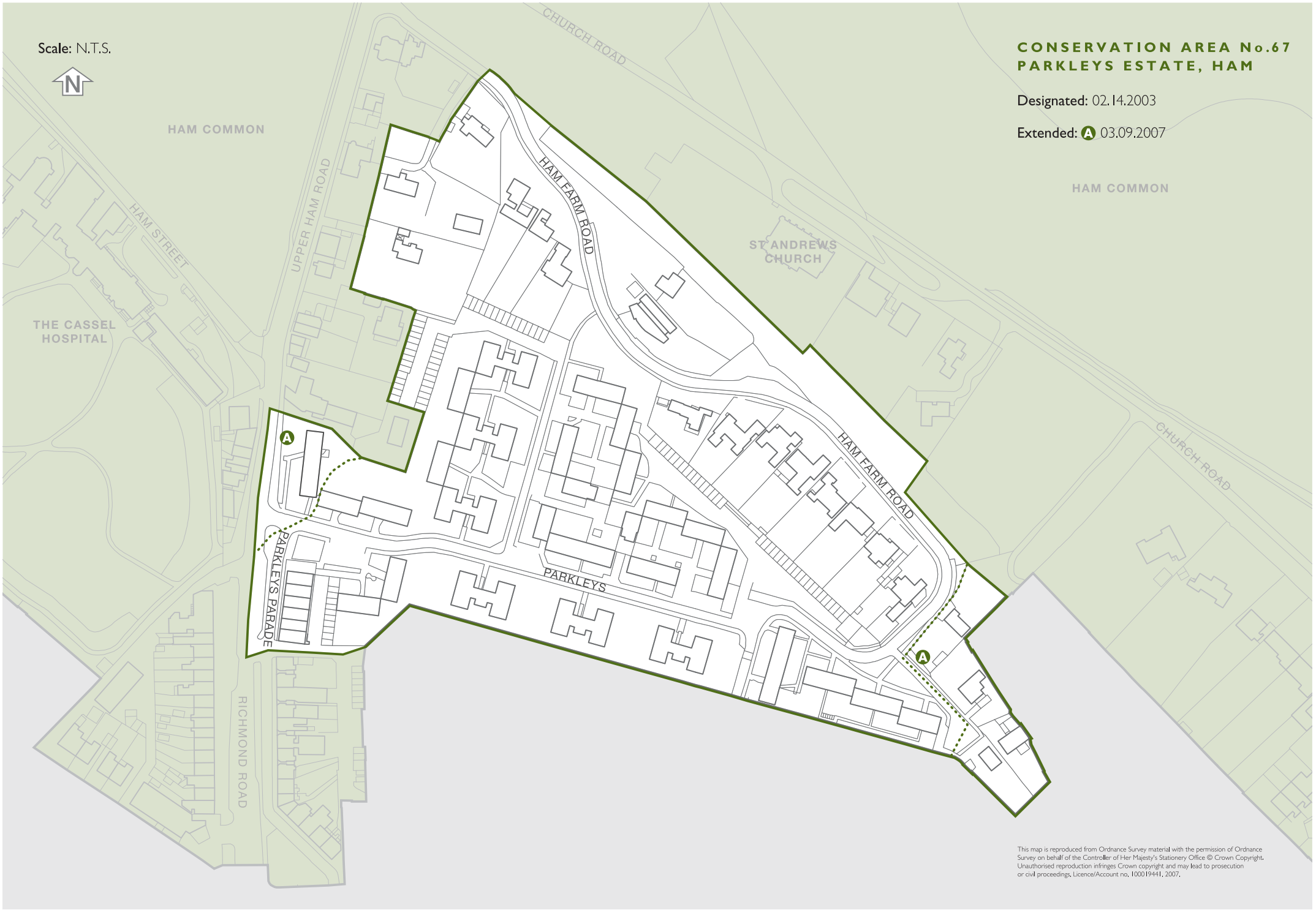
Parkleys Estate conservation area is a highly influential 1950s planned development of both flats on Parkleys and associated detached houses along Ham Farm Road, by the pioneering Span Developments Ltd. The estate was the first of the large residential developments by the celebrated Span Developments Ltd. of Eric Lyons and Geoffrey Townsend. This unique private housing development was designed for first time buyers, offering an innovative endowment mortgage, and is the first example of the successful residents' management companies set up by Span. Parkleys has been listed grade II in recognition of its special historic and architectural interest. Parkleys consists of modern flat blocks of either a three-storey H-plan with central entrance stairwell or two-storey terraces enclosing shared courtyards. These flats are of brick construction with concrete slab floors and flat roofs. They have large timber windows and distinctive concrete tile-hanging. Span was revolutionary in using such modern architectural design and mixing this with traditional materials. Uniquely the estate also includes a parade of six shops with maisonettes above. This parade on Ham Farm Road has an even more modern design than the neighbouring flats and includes a fine sculpture by Keith Goodwin. The stock and gardener of the former nursery on this site were taken over as part of this development. The buildings of the estate were then carefully laid out to retain existing trees. The high standard of hard and soft landscape and the well-conceived series of spaces and views is an important integral part of the overall design of the estate. Ham Farm Road is a number of large detached houses in garden plots. Noted modern architects individually designed the original thirteen houses in the 1950s, such as Leslie Gooday, Bernard Kreeger and Eric Lyons. Span maintained control over the general layout and approved designs of these houses.

Problems and Pressures

- Loss of traditional architectural features and materials due to unsympathetic alterations
- Lack of coordination and poor quality of street furniture and flooring
- Maintenance of the balance between the mature landscape and the amenity of residents

Opportunity for Enhancement

- Preservation, enhancement and reinstatement of architectural quality and unity
- Coordination of colour and design and improvement in quality of street furniture and flooring
- Improvement and protection of landscape setting


Scale: N.T.S.
N
CONSERVATION AREA No.67
PARKLEYS ESTATE, HAM
Designated: 02.14.2003
Extended: A 03.09.2007
HAM COMMON
HAM STREET
UPPER HAM ROAD
CHURCH ROAD
ST ANDREWS CHURCH
THE CASSEL HOSPITAL
HAM FARM ROAD
PARKLEYS PARADE
PARKLEYS
RICHMOND ROAD
A
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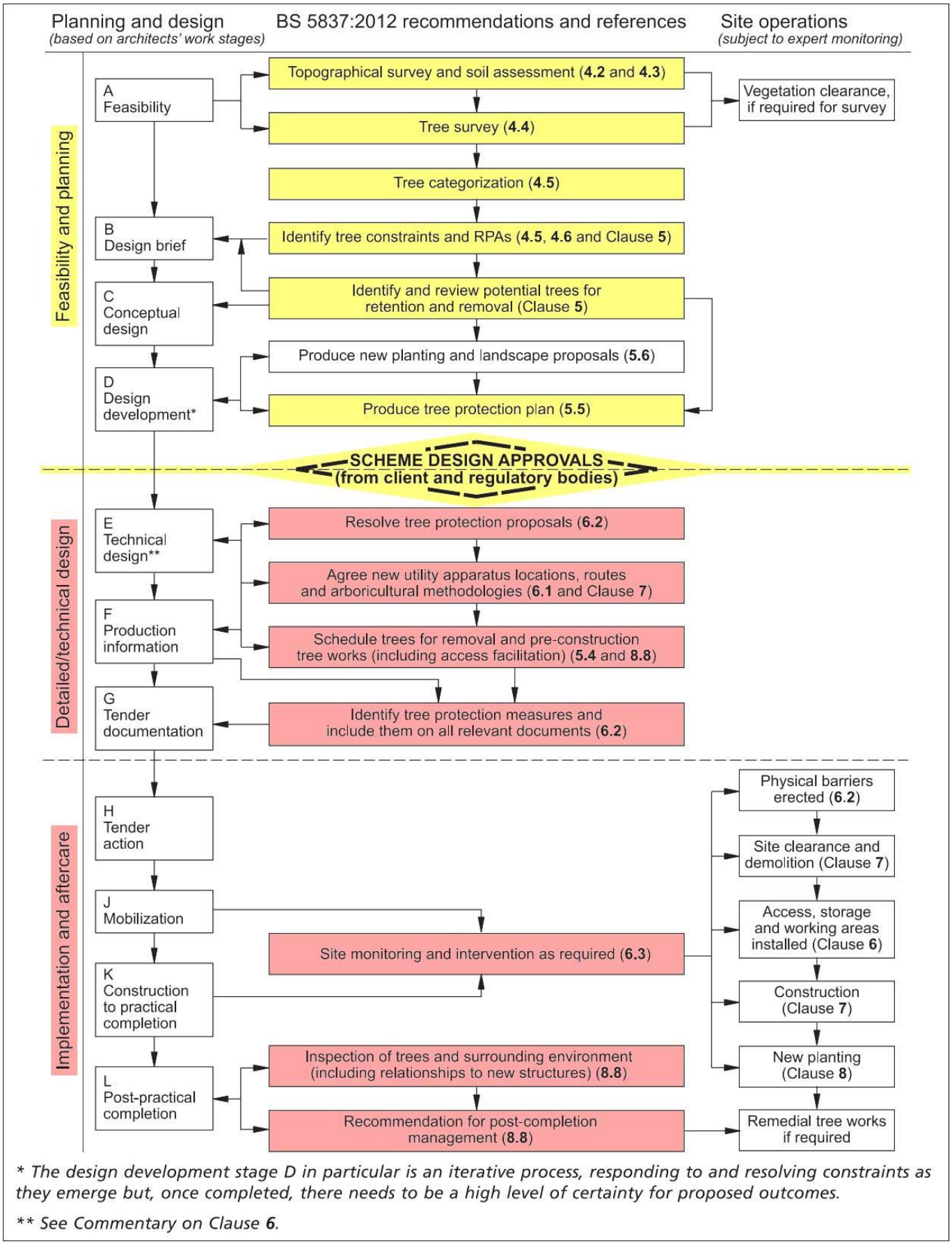
Appendix G

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

Details

Name of Wood:

Grid Reference:

Area: (ha) .

Date of Assessment:

Name of Assessor:

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

NO — You will need to obtain a licence BEFORE carrying 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

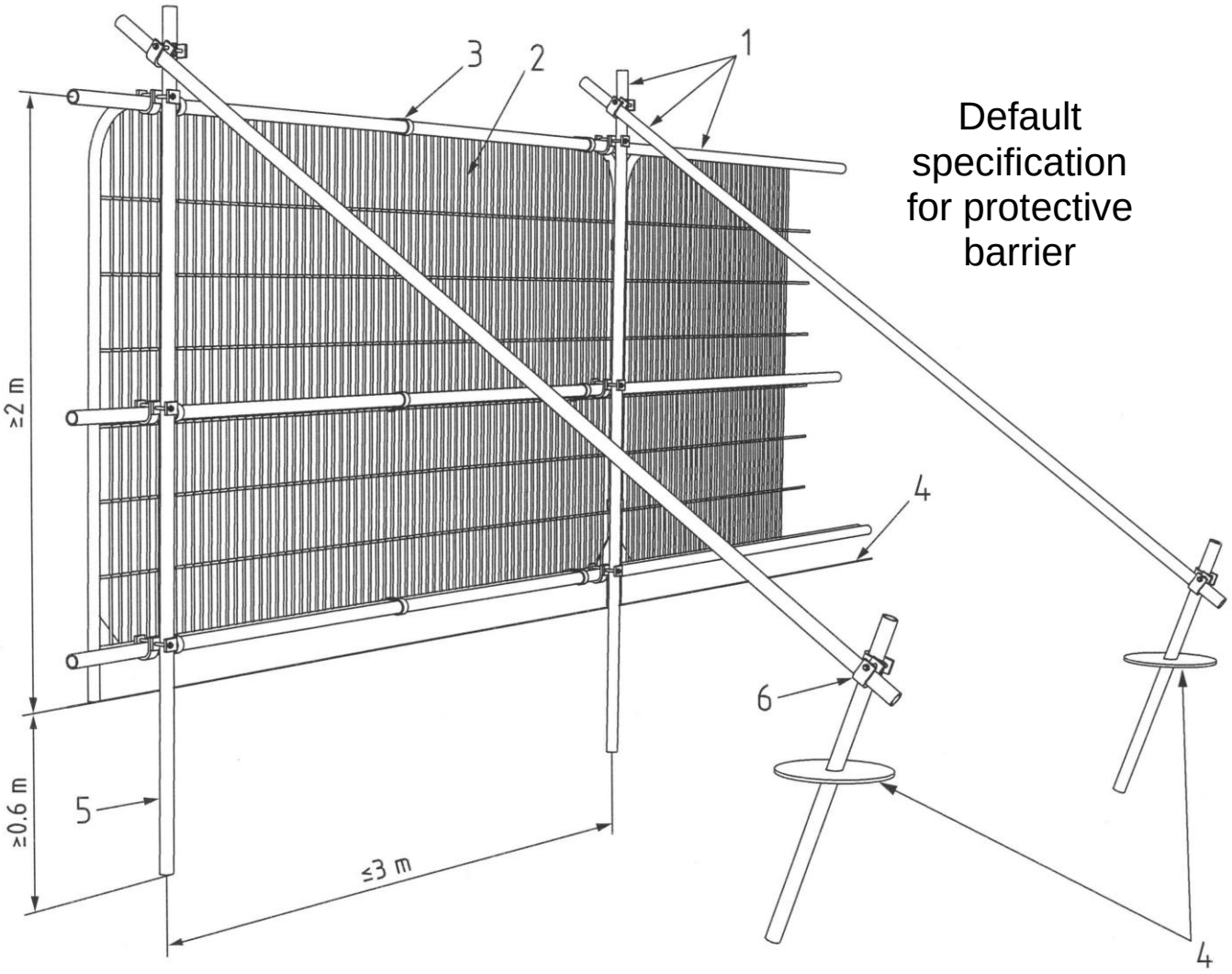
NO — You may commit an offence if you do not tell your operators about the protected species in your wood.

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 take steps to ensure that your operators comply with the Good Practice guidance.

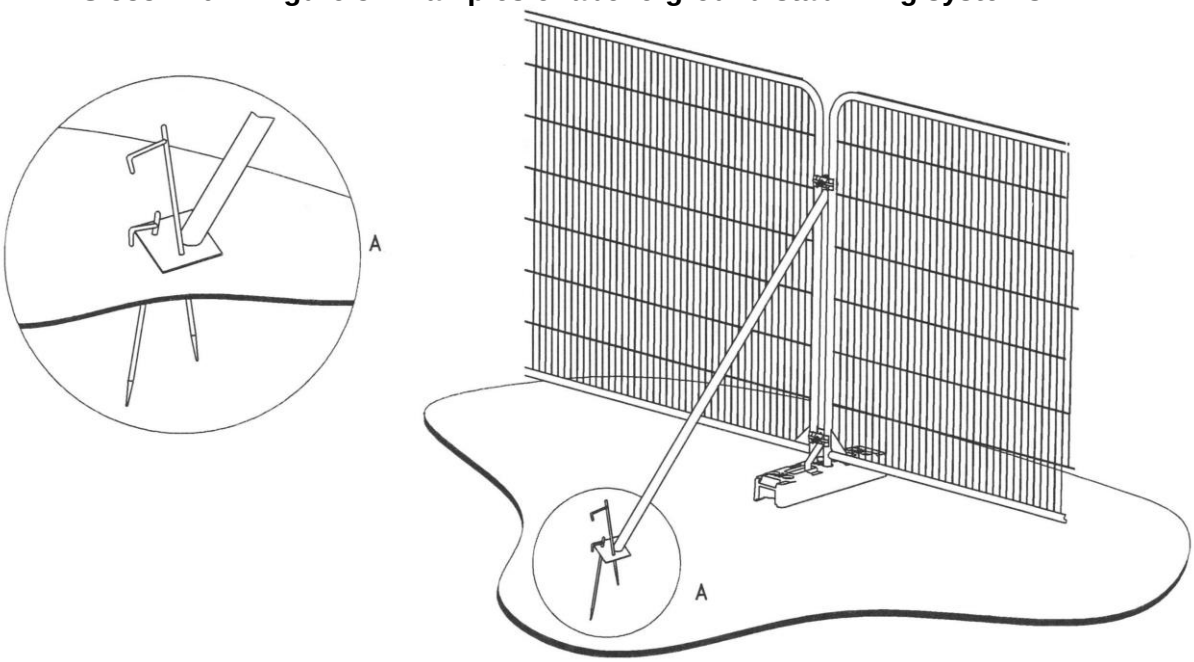
3. BS 5837:2012 Figure 2: Default specification for protective barrier



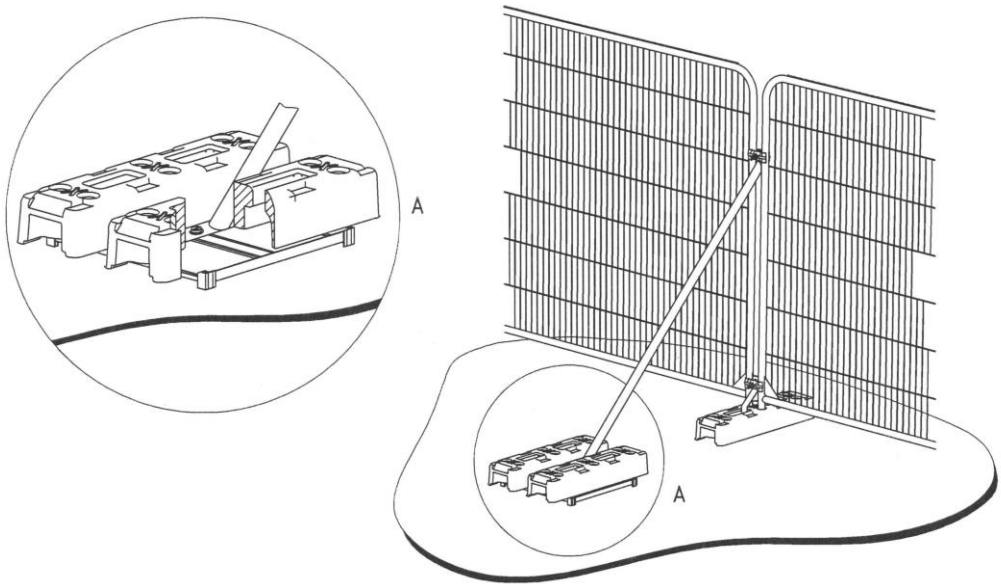
Key

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 H

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