ARBORICULTURAL IMPACT ASSESSMENT

In relation to development at:

Plummerden House

Park Lane, Lindfield RH16 2QS

DSEPLUM/WLA-V3-XX-DR-Y-AIA
29/04/2025

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Validation statement

This report contains supporting information to describe trees on and adjacent to the area proposed for development and the impact on those trees resulting from development. For validation purposes, this report includes:

- Annexed tree constraints plan giving graphical representation of retained trees relative to proposed structures and their calculated canopy spreads and root protection areas.

1 Copyright

1.1 The copyright of this document and any appendices remain with Wright Landscape and Arboriculture Ltd. The content and format of this report and any appendices are for the exclusive use of the client and their agents for the purposes of their planning application. It may not be sold, lent, hired or divulged to a third party without the written consent of Wright Landscape and Arboriculture Ltd. Wright Landscape and Arboriculture Ltd terms and conditions apply to this report and all their associated works in conjunction with this project.

2 Qualifications and experience

2.1 Margaret Wright is director of Wright Landscape and Arboriculture Ltd with 20 years industry experience both as an arboricultural consultant and Local Authority Tree Officer. Margaret has presented research at a national conference and has an arboricultural MSc (first) with the University of Central Lancashire. Margaret is Bond Solon trained, a former executive committee member of the London Tree Officer's Association and professional member of the Arboricultural Association. Published works, qualifications and details of forthcoming publications provided on request.

CONTENTS

Annexed plans

PRELIMINARIES

3 Introduction

3.1 This report supports a planning submission in providing a description of trees on and adjacent to the application site. Advice is given with the aim of providing sufficient arboricultural information for the local planning authority to assist their assessment of the proposal.

4 Documents supplied

4.1 In order to assist with the formation of this report, Wright Landscape and Arboriculture have been provided with the following plans: Plummerden House – Office Building Site Plan, Plummerden House – Ancillary Building Block Plan, Plummerden House – Ancillary Building Elevations, Plummerden House – Ancillary Building Roof Plan, Plummerden House – Ancillary Building Floor Plan.

5 Statutory designations

5.1 The site is not located within a conservation area and no trees on or adjacent to the site are protected by tree preservation order under the Town and Country (Tree Preservation)(England) Regulations. Ancient woodland is listed to the north of the site (>70m), and is considered remote from the area of development. There is no evidence that this woodland will be directly or indirectly affected by the proposal.

6 Caveats

6.1 With regards to the General Data Protection Regulations [GDPR] (EU) 2016/679 in force as of May 2018, Wright Landscape and Arboriculture's records of the site and the management advice contained within this report will be kept for 12 months. Within this 12-month period, data gathered on behalf of the client will not be shared unless the express consent of the client has been given in writing. After that 12-month period, all records will be deleted.

6.2 Birds and bats (including nests and roosts of a temporary nature) are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside Rights of Way act 2000) and under European legislation by the Conservation of Habitats Regulations 2010. It is therefore essential that any future works to tree are timed considerately to avoid disturbance of any protected species.

6.3 Predictions on the future growth of trees and significant bodies of vegetation are made on the assumption of average environmental conditions over the next decade in the absence of extreme weather events and unforeseen changes in the availability of soil water. Predictions should be considered with the view that trees may grow considerably more or less dependent on environment.

7 Use of this document

7.1 British Standards are guidelines produced by the British Standards Institute Group, the National Standards body for the UK. British Standards are best practice documents, following formal consensus of opinion from arboricultural industry peer review. British Standard BS 5837:2012 Trees in relation to design, demolition and construction – recommendations [BS5837] provides guidance on the assessment of trees in the context of development and sets minimum standards for protection of retained trees on development sites.

7.2 Recommendations within British Standard documents are not law. However, for planning applications that have the potential to impact trees, the majority of Local Planning Authorities [LPAs] require submission of an arboricultural report compliant with the recommendations of this standard. This report satisfies that requirement.

8 Technical references

8.1 This report is based on the following technical references (where applicable):

- British Standards Institution (2010) BS 3998: Tree works – recommendations.
- British Standards Institution (2012) BS 5837: Trees in relation to design, demolition and construction- recommendations.

9 Site description

9.1 The property is a detached rural dwelling within the parish of Lindfield. The area proposed for development concerns the existing stable block and areas of hard standing to the front. Trees and hedges edging the garden and driveway over 15m away are, owing to their position, considered remote from development risk and have been excluded from the survey. These have been shown shaded on the associated plans.

10 Development appraisal

10.1 The application proposes the demolition of the existing stable with construction of a new ancillary building on the same footprint. The existing hard landscaping will remain. All structures are expected to be timber frame.

11 Tree constraints

11.1 The data collected on trees forms the basis for calculating above and below ground constraints to development. Above ground constraints would include canopy spread and shading whereas below ground constraints are indicated by the root protection area [RPA] calculated in accordance with BS5837 (fig. 1).

11.2 The RPA as defined by BS5837 is a design tool or (theoretical) model which represents the minimum soil volume to sustain healthy life of a tree. This is detailed as a magenta dashed line on the annexed plan.

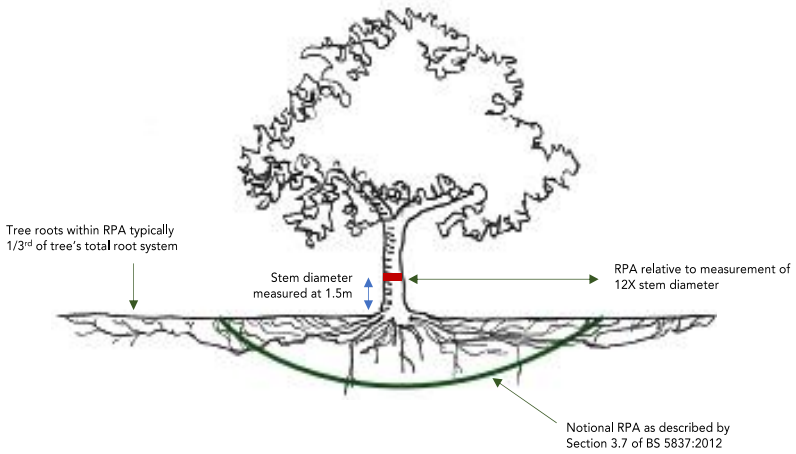

Fig 1; Notional root protection area as described by the British Standard BS 5837:2012

11.3 Below ground structures such as foundations of buildings and hard landscaping sub-base materials can affect the distribution of tree roots causing them to deflect and grow asymmetrically. Given the position of the low retaining wall and stable block, an offset model has been offered for TG5. A modified RPA is shown as a red-dashed line on the accompanying plans.

11.4 No offset model has been offered for oaks T32 and T38, as these trees predate the structure. However, it is likely that root from these trees proliferate to the west

into open ground as the woodland soil here is likely to be more favourable in terms of flora and mycorrhizal associations.

12 Above ground constraints

12.1 The proposed building will broadly follow the line of the existing roof. The lowest branch overhanging the stable belongs to Tree T32 (see Fig. 2). This branch is currently 3.7 metres above ground level at the left-hand corner of the building. The proposed structure is anticipated to be approximately 2.7 metres high at this point, resulting in no foreseeable need to prune the branch either for construction purposes or to alleviate future pressures.

12.2 Should the branch height reduce temporarily — for instance, under the weight of a saturated canopy during a wet summer — it would be feasible to temporarily support the branch using a ratchet strap during construction works. This would not cause any lasting harm to the health or structural integrity of the tree.

12.3 The applicant has coexisted with the stable beneath the canopy of T32 for a considerable period without leaf fall or shading becoming a nuisance. Provided that gutter guards are installed along the rear elevation of the new building, the proximity of retained trees should present no new issues for the applicant and their family.

Fig.2: T32 rear of existing building. Branch over stable block measured at 3.7m from ground level at its lowest point. Some deviation is expected in summer, with the weight of a wet canopy. Tree photographed after a period of dry weather.

13 Below ground constraints

13.1 The proposed development footprint will extend marginally beyond the existing stable block. A limited area of this extension will intrude into the RPAs of Trees T32 and T38. As the affected ground is currently sealed with hard surfacing, it is considered unlikely that significant rooting activity exists within this zone.

13.2 It is proposed that the existing block paving be carefully lifted and that the underlying sub-base be retained and incorporated as the working platform for the proposed raft foundations. This method would obviate the need for excavation within the RPAs, thereby avoiding direct harm to retained trees. This approach can be secured through an appropriately worded planning condition requiring a pre-commencement site meeting and the submission and approval of a detailed Tree Protection Plan (TPP).

13.3 Any installation of new or connecting services, including drainage channels located to the front of the proposed building, should be undertaken by hand excavation under arboricultural supervision, as specified within the TPP (Annex C).

14 Summary

- No trees will need to be pruned or removed to facilitate development.
- Development offers a slight expansion of the existing footprint, within areas where root growth is unlikely to be present.
- The development can be undertaken without harm to retained trees, subject to adherence to the tree protection plan in annex C.

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Appendix i TREE REPORT – TREE SCHEDULE EXPLANATORY NOTES

- **Tree number**: Individual trees referred to by a 'T' prefix, i.e., T1, T2 etc. Collections or groups of trees referred to as 'TG' to denote presence of a group rather than as an individual tree. 'H' prefix denotes a hedge. W'' denotes woodland block, 'A' denotes area. Trees numbered for reference. Trees with pre-existing survey tags have tagged numbers listed italicised in [*brackets*].
- **Species**: Species listed by common name. Where name is followed by the abbreviation *ssp*. or *cv*. the sub-species or cultivar is undetermined.
- **Trunk diameter**: Measured in millimetres, at 1.5m from ground level. Measurements are taken with a calibrated stem diameter tape or laser sight where access is restricted. Where access to measure the trunk is impossible, for example the tree is on adjacent property, a laser sight measure is used, or trunk diameter measurements are estimated.
- **Height**: Measurement of tree height given to the nearest meter. May be derived by compensating lines of sight or approximated, based on best available evidence to hand.
- **Crown spread**: Crown/canopy spread typically given to the nearest meter or half meter, measured from the face of the trunk to the tips of live branches. Measures towards cardinal points unless otherwise stated and typically measured with a laser range finder. May be paced or estimated, if access is restricted.
- **Crown clearance**: Measured or estimated in metres, gives height of clear stem before first branch break.
- **Life stage**: Young/trees up to 10 years of age = Y, early-mature/trees exceeding 1/3rd life expectancy = EM, mature/maturing trees between exceeding 2/3rds life expectancy = M, over mature/beyond life expectancy, declining and aged trees of low vigour = OM, veteran/trees possessing certain attributes relating to veteran trees = V, ancient/notable specimens of national importance given their age and history = VA. Age is estimated from visual indicators of growth and experience of tree growth rates and should only be taken as an estimated or provisional guide as tree growth is largely dependent on the availability and historic availability of soil and water resource.
- **SULE**: **Safe useful life expectancy.** No. remaining years life (estimated) based on condition and species.

- **Vigour:** An assessment of the tree's growth compared with a healthy, open grown tree of the same species (ideal conditions). [N] Normal (as expected), [L] Low; les growth than expected.
- **Structural condition**: An assessment of the general condition of the tree as a biomechanical structure, considering (but not limited to) the presence and significance of decay pathogens, fibre buckling, broken branches, splits and cracks within the main stem or scaffold limbs etc. Trees are graded Dead [D], Poor [P], Fair [F], Moderate [M], Good [G], or Excellent [E]. Trees in poor condition are described as trees with major structural and/or physiological defects such that it is unlikely the tree will recover in the long term. Trees in fair condition are considered as having minor defects or in the early stages of decline. Moderate condition relates to trees with few remedial defects or likely to recover from structural weakness. Trees in good condition are considered to be trees with few minor defects and good overall health. Trees listed as excellent are considered to be outstanding specimens or prime examples of their species.
- **Physiological condition**: An assessment of the general condition of the tree considering (but not limited to) vigour, extension growth, crown density, and presence of pathogens. Trees are graded Dead [D], Poor [P], Fair [F], Moderate [M], Good [G], or Excellent [E]. Trees in poor condition are described as trees with major structural and/or physiological defects such that it is unlikely the tree will recover in the long term. Trees in fair condition are considered as having minor defects or in the early stages of decline. Moderate condition relates to trees with few remedial defects or likely to recover from structural weakness. Trees in good condition are considered to be trees with few minor defects and good overall health. Trees listed as excellent are considered to be outstanding specimens or prime examples of their species.
- **Preliminary management recommendations**: Recommendations for urgent tree works based on the tree's condition and an assessment of its risk to current surroundings. Preliminary recommendations for work do not exceed the client's duty should the tree/s listed be protected by TPO, Conservation area, felling licence, grant program, or legal covenant.
- **RPA**: Measurement of root protection area (radius) to nearest 10mm, as defined by BS 5837:2012 Trees in relation to design, demolition and construction – recommendations.

Appendix ii TREE REPORT – CASCADE CHART FOR TREE QUALITY ASSESSMENT

(Extracted from British Standard BS 5837:2012 Table 1)

Table 1 **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality *NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*			See Table 2
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2