

Arboricultural Impact Assessment

41, Kingsway, Chandlers Ford, Hampshire, SO53 1EL

Client: Mr Hoenig



9 Rosebay Close, Horton Heath, Southampton, Hampshire, SO50 7PN

Info@arborlogica.co.uk

www.arborlogica.co.uk

01489 890989

07843 283541

Compiled by: **Oliver Johns** *Dip.Arb. (L4 ABC) TechArborA*

Table of Contents

	<i>Page</i>
1 Introduction	3
2 Site Description & Information	3
3 Description of Proposed Development	3
4 Survey Limitations	4
5 The Tree Survey	4
6 The Tree Survey Data	5
7 Arboricultural Assessment Plan	6
8 Tree Work Required For Proposal	6
9 Other Tree Work	6
10 RPA Encroachment	6
11 Shading	6
12 Hard surfacing within RPA	5
13 Future Pressure for Tree Pruning/Removal	6
14 Removal of Existing Structures	7
15 Mitigating Tree Loss	7
16 Conclusion	7

Appendices

Appendix 1 - Tree Survey Data Table	8
Appendix 2 - Arboricultural Impact Assessment Plan	9

1 Introduction

- 1.1 Arborlogica has been commissioned by Mr Hoenig to undertake an Arboricultural Impact Assessment (AIA) at 41, Kingsway, Chandlers Ford, Hampshire, SO53 1EL
- 1.2 Under s197 of the Town & Country Planning Act 1990, LPAs have a legal duty to consider the protection of trees and the planting of new trees on development sites when granting planning permission. LPAs must also consider the potential effects, whether detrimental or positive, that proposed developments will have on retained trees, and the effect that these trees will have on the users of the development.
- 1.3 This purpose of the Arboricultural Impact Assessment is to detail the results of the field survey highlighting any arboricultural constraints in order to evaluate the direct and indirect effects of the proposed development on the trees surveyed. Recommendation will be made to eliminate or mitigate any impact identified to retained trees that maybe affected by the proposed development.
- 1.4 The tree initial survey was carried out on 11th December 2023 by Oliver Johns. All inspections were made from ground level. If the need for further investigations, for decay detection for example were identified, these are recommend in the Tree Works Schedule where required.
- 1.5 This report has been produced in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction Recommendations. Preliminary recommendations have been given based on the quality of individual or groups of trees, from the tree survey data. The Root Protection Area (RPA), for trees and groups have been calculated and presented within the Arboricultural Assessment Plan. The survey data has been supported by a Photographic Record where appropriate.

2 Site Description & Information

- 2.1 41, Kingsway is a single story residential dwelling situated approximately 300m north of Chandlers Ford village centre. The site consists of a vehicular entrance in the north-west corner, leading into the site across an elevated section crossing over a stream on to a parking area with garage beyond.
- 2.2 The site is heavily treed with multiple mature trees especially to the rear (south-east) of the property.
- 2.3 Eastleigh Boroughs Councils online interactive mapping indicates there are three Tree Preservation Orders (TPO's) in force onsite. These consist Oak (T1) TPO No: 290-E, Silver Birch (T5) TPO No: 290-E and a woodland TPO that includes the entirety of the rear of the site and runs along the rear of multiple neighbouring properties. The woodland TPO consisting of Alder, Oak and Birch, Ash and Cherry with an understorey of Hazel and Yew, TPO No: 290-E.
- 2.4 The assessment was carried out within the boundaries of 41, Kingsway; however trees on adjacent land have also been included where they are within influencing distance to the proposed development.
- 2.5 Topographical drawings have been supplied by the project architect therefore; trees have been plotted using the tree centres marked on the supplied drawing.

3 Description of Proposed Development

- 3.1 The design proposal consists of renovation of the existing dwelling and construction of a new office, garage and utility area to adjoin the existing dwelling to the north-east and removal of the existing garage and associated foundation.

4 Survey Limitations

- 4.1 This report has been produced for our client in accordance with the terms of contract and is to be used for planning purposes only. Information provided by third parties in this report is assumed to be correct however, we cannot be held responsible for errors or omissions in information supplied by third parties. We hold the copyright to these documents and they may not be duplicated or used by third parties without our written consent.
- 4.2 Only trees that could have an influence on the proposed development have been included in this survey and only trees with a Diameter Breast Height (DBH) of 75mm and over have been included or 150mm DBH where trees are within woodland groups.
- 4.3 Root Protection Area (RPA) has been calculated as per BS5837:2012 recommendations. Due to limitation in predicting precise morphology of rooting areas it is recommended that trial pits are hand dug where certainty as to exact location of roots maybe required.
- 4.4 Where it was not possible to access neighbouring properties, or where access to the base of trees was restricted, tree data may have been estimated.
- 4.5 Before the Arboricultural Method Statement (AMS) can be produced, the final design must be agreed. Any changes to the design that has an impact to trees must be agreed by the tree consultant. Any changes required to the AMS can then be made and implemented as required.
- 4.6 This AIA is based on the condition of the trees at the time of the assessment. Trees are dynamic structures and their condition will change. Inspections should be undertaken regularly monitoring tree health to determine appropriate management actions where necessary.
- 4.7 No soil assessments have been carried out; such analysis should be carried out by a specialist to ensure building foundations are adequate and in accordance with current Guidelines. According to the British Geological Survey, the site is "Clayey Loam to Silty Loam", therefore due to the proximity of the proposed dwellings to tree rooting zones; it is recommended that advice is sought from a structural engineer for suitable foundation depths/design to reduce the risk of vegetation related subsidence.

5 The Tree Survey

- 5.1 The initial tree survey was carried out on 11th December 2023 using methodology set out in BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.
- 5.2 Weather conditions on the day of the assessment were fine and clear.
- 5.3 Each individual surveyed tree (T), tree group (G) and woodland (W) was given a sequential reference number.
- 5.4 Tree height, crown spread (North, South, East & West) and height of first significant branch were measured using a Truepulse 360R laser, enabling an accurate representation of the crown spreads and RPA's to be plotted on the Tree Protection Plan (TPP). If the use of the laser was not possible or reasonable practicable, due to undergrowth around the base of the tree for example, measurement were taken using tape measures or estimates may have been used.
- 5.5 A description of the life stage of each tree surveyed is identified as follows:
 - Young (Y) – Newly planted trees and self-seeded trees.
 - Semi-mature (SM) – Large nursery stock still in the early stages of establishment.
 - Early mature (EM) – Trees in the first third of their life cycle.
 - Mature (M) – Trees in the second third of their life cycle.

Over mature (LM) – Trees in the final third of their life cycle.

Veteran (V) – Trees that show ancient tree characteristics irrespective of their age.

- 5.6 An assessment of each tree's physiological and structural condition is identified as G (good), F (fair), P (poor) or D (dead).
- 5.7 An estimated remaining contribution in years within the context of the current site usage was identified as <10, 10+, 20+ or 40+.
- 5.8 The trees were classified in accordance with the BS5837:2012 tree quality assessment categories 'A', 'B', 'C' and 'U' (see table below) category 'A' and 'B' trees are considered as 'high' and 'moderate' quality, respectively, and are considered a constraint to development. These trees should be retained and given appropriate protection during the development works. 'C' category trees are considered 'lower' quality due condition or 'lower' amenity value, therefore usually less of a constraint to the development. 'U' category trees are those in such poor condition that they cannot usually be retained within the current site context for longer than ten years and should not be considered a constraint to design.
- 5.9 Root Protection Areas (RPAs) are calculated for individual trees utilising the methodology set out in BS 5837:2012, calculated by multiplying the stem diameter (measured at 1.5 m from ground level) by twelve for single-stemmed trees and a variant on this for multi-stemmed trees.
- 5.10 For Groups of trees and woodlands, RPA's are calculated based on the stem diameter of the largest trees at the edge of the groups and woodland.
- 5.11 Recommendations may be made if safety concerns with a particular tree are identified; however this is not a Tree Risk Survey and should not be used as one. Any safety issues identified will be brought to the client's attention and a Tree Risk Survey will be recommended.
- 5.12 Any works recommend are made in accordance with BS3998:2010 - Tree Work Recommendation or relevant industry best practices and shall ensure bio-security measures are carried out to prevent spread of pest and diseases.
- 5.13 The survey does not account for any ecological or habitat constraints however, any such constraint that come to light will be noted and an ecological survey will be recommended.
- 5.14 A detailed description of all trees and groups of trees surveyed including recommended works can be found in the Tree Survey Schedule below, this summarises the BS 5837 quality grading of the trees found on and adjacent to the site, when they are within influencing distance to the proposed development.

6 The Tree Survey Data

- 6.1 The trees assessed and surveyed on and immediately adjacent to the site included twelve individual trees, no tree group and no woodlands.

Tree Quality ►	A	B	C	U	Stump	Group Totals
Individual (T)	0	7	4	1		12
Groups (G)	0	0	0	0		0
Woodland (W)	0	0	0	0		0
Category Totals	0	7	4	1	0	12

7 Arboricultural Assessment Plan

- 7.1 The Arboricultural Impact Assessment Plan showing the location of all trees and groups of trees surveyed can be found below in Appendix 2.
- 7.2 Tree centres are plotted in their respective colours as per BS5837:2021 recommendations Category A (Green) Category B (Blue) category C (Grey) category U (Red)
- 7.3 Crown spreads have been plotted in the trees respective retention category colour and RPA's have been plotted in magenta.
- 7.4 A detailed description of all trees and groups of trees surveyed and recommended works can be found below in Appendix 1 - Tree Survey Data table.

8 Tree Work Required For Proposal

- 8.1 No tree work shall be directly required to enable this proposal.

9 Other Tree Work

- 9.1 The removal of T6 (Category U) has been recommended for good arboricultural management. T6 has sparse foliage and is approximately 80% dead.
- 9.2 Minor pruning back of T7 (category C) has been recommended to clear driveway for vehicle clearance.

10 RPA Encroachment

- 10.1 Very minor encroachment in the RPA of T5 shall be required to enable the installation of the proposed office foundations. The encroachment is approximately one tenth of 1%, therefore I consider the encroachment negligible.
- 10.2 Due to the location of the existing driveway and garage foundations rooting in this area is unlikely and not expected, however due care shall still be taken and methods of how this foundation can be installed mitigating impact to this tree will be set out within a Arboricultural Method Statement.

11 Shading

- 11.1 Proposed dwellings will be subject to an element of shading during the day due to mature trees present to the south and east. The proposed layout positions the extensions towards the northern boundary of the site where shading is not expected to be excessive and should not adversely affect reasonable enjoyment of the proposal.

12 Hard surfacing within RPA

No hard surfacing shall be required within any RPA

13 Future Pressure for Tree Pruning/Removal

- 13.1 Proposed layouts should ensure sufficient space for future tree growth and should aim to minimise the need for significant regular pruning.
- 13.2 I consider the current layout will not lead to on-going pressure for significant tree pruning.

14 Removal of Existing Structures

- 14.1 Removal of the existing garage and associated foundations shall be required.
- 14.2 Methods of working within or adjacent to retained tree RPA's shall be set out in an Arboricultural Method Statement.

15 Mitigating Tree Loss

- 15.1 Eastleigh Borough Councils Trees and Development Supplementary Planning Document (SPD) requires applicant to provide suitable replacement tree planting for removed trees.
- 15.2 Quantities required will depend on the stem diameter of the tree proposed for removal. The requirement will apply to A and B category trees, category C trees will be replaced on a 1:1 basis. Please refer to Table 1 below for requirements:

Table 1

Stem Diameter of Tree Proposed for Removal*	Number of Replacement Trees Required
150 – 199 mm	1
200 – 299 mm	2
300 – 399 mm	3
400 – 499 mm	4
500 – 599 mm	5
600 – 699 mm	6
700 – 799 mm	7
800 mm +	8

- 15.3 Due to the removal of one category U tree (T6), mitigation planting it is not required, however where possible, new tree planting should be incorporated into the proposals landscaping scheme.

16 Conclusion

- 16.1 The arboricultural impact of the proposed development is negligible. There is one small category U tree/shrub to be removed, this tree removal is not required to enable the proposal and is recommended for removal for good arboricultural management reasons.
- 16.2 Any impact from demolition or construction activities shall be mitigated with adequate tree protection and appropriate working methods during these phases.
- 16.3 Tree protection methods and methods of working within or adjacent to RPA's shall be set out in an Arboricultural Method Statement. Protection methods and locations shall be displayed within a Tree Protection Plan.
- 16.4 I do not perceive any significant Arboricultural reason for this proposal not to proceed subject to adequate mitigation and appropriate planning conditions.

Appendix 1 - Tree Survey Data Table

Tree No.:	Common Name	Species	Ht (m)	Stem Diameter (mm)	N	E	S	W	1 st Branch	Canopy Height (m)	Age Class	Retention Category	RLC	Physiological Condition	Structural Condition	Recommendation	Works Required for Proposal	Notes
T1	Oak		18	650	6.5	6	7	6	3S	2N	EM	B1	40	Good	Fair			Previously crown reduced, ditch to east
T2	Silver Birch		20	540	6	5	4	5.5	12 S	13 S	M	B2	20	Good	Fair			Lower deadwood phototropic lean to NE
T3	Alder		20	530	4.5	4	5	5	5W	3W	M	B2	20	Good	Fair			Suppressed to east, east of ditch.
T4	Alder		18	350;300	7	5	4	6	8N	7N	M	B2	20	Good	Fair			Suppressed to south, ivy clad, phototropic lean to n. Estimated values as in neighbouring property
T5	Silver Birch		16	430	6	6	8	8	4N	3W	M	B1	40	Good	Good			Suppressed to south, ivy clad, phototropic lean to n. Estimated values as in neighbouring property
T6	Shrub		3	95	.5	2	1	.5	.5E	1	M	U	<10	Poor	Fair	Fell		Sparse foliage, >80 dead
T7	Hazel		6	100;120	2	3	3	2	2W	2W	EM	C1	40	Good	Fair	Cut back to edge of driveway for vehicle clearance.		Estimated values as off site.
T8	Beech		20	500	5.5	5	7	7	2S	2S	EM	B1	40	Fair	Fair			Asymmetrical crown spread suppressed to east. Ivy clad, estimated values as off site.
T9	Shrub		3	60;60;30;30	1	1	2	1	2	2	EM	C1	10	Fair	Fair			Small woody shrub of very low merit
T10	Hamamelis		4	60;60;75;80	2	2	2	2	2S	2W	M	C1	10	Fair	Fair			Heavily pruned
T11	Camelia		4	60;60;60;60	2	2	2	2		0	M	C1	10	Good	Fair			Previously heavily pruned shrub.
T12	Oak		16	760	8	7	7	7	2S	2S	EM	B1	40	Fair	Fair			Fairly sparse canopy, tip dieback and moderate deadwood throughout



