PATRICK STILEMAN LTD
ARBORICULTURAL CONSULTANCY

Institute of Chartered Foresters
Registered Consultant

Principal Consultant: Patrick Stileman BSc(Hons), MICFor, MRICS, Dip. Arb (RFS), CUEW, RC.Arbor. A

9 Chestnut Drive, Berkhamsted, Hertfordshire, HP4 2JL • Tel: 01442 866112
Email: patrick@treeconsulting.co.uk • www.treeconsulting.co.uk

TREE SURVEY REPORT

In accordance with British Standard 5837 2012 '*Trees in Relation to design, demolition and construction – Recommendations*'

Project
23-31 Warren Road, Ickenham, UB10 8AA

Client
WE Black Ltd

Prepared by
Patrick Stileman BSc(Hons), MICFor, MRICS, Dip. Arb (RFS), RC.Arbor.A

Date
19th May 2022

Project reference:
DS20042201

1 INTRODUCTION

1.1 I am Patrick Stileman, Director of Patrick Stileman Ltd. I am acting on instruction of the client, WE Black Ltd. I have qualifications and experience in arboricultural consultancy and I have given details of this in Appendix 1.

1.2 **Brief:**

1.2.1 Patrick Stileman Ltd is instructed by the client to undertake a survey of trees which could potentially be affected by proposed development at land to the rear of 25-31 Warren Road, Ickenham.

1.2.2 The survey is to be undertaken in accordance with British Standard 5837:2012 '*Trees in relation to design, demolition and construction – Recommendations*' (hereafter referred to as BS5837). We are to survey all trees which could potentially be affected with stem diameters in excess of 75 mm at a height of 1.5 metres.

1.2.3 The purpose of the information provided at this stage is to give advice on the principal tree constraints in relation to development in order to assist the design process towards the preparation of an arboriculturally defensible scheme.

1.3 **Caveats:**

1.3.1 The survey must not be substituted for a tree risk assessment report. Detailed inspection including decay mapping, aerial inspections, root or soil analysis etc. was not undertaken.

1.3.2 The trees were viewed from public vantage points and within the site boundaries only. I had no access to third-party property.

1.3.3 This Tree Survey Report comprises Stage 1 of a five-stage arboricultural process relating to planning. Stage 2 is the arboricultural input required during layout design taking account of arboricultural features and constraints; Stage 3 is the preparation of an Arboricultural Implication Assessment detailing what impact the proposed development will have to trees; Stage 4 is the preparation of an Arboricultural Method Statement specifying how trees will be physically protected during the development process; and Stage 5 is the implementation, supervision and on-going monitoring of the works during development.

1.4 **Survey date:** Trees were surveyed by me, Patrick Stileman, on 17th May 2022.

2 TREE SURVEY

2.1 **Tree identification:** Individual trees have been allocated a number and groups of trees have been allocated a number prefixed by the letter G. Their locations are shown on the Tree Survey Plan dated 19th May 2022, drawing no: DS20042201.01, included on Page 11 of this report. Data pertaining to each tree is included in the Tree Survey Data on Pages 8-10 of this report.

2.2 **Tree data:** In carrying out the survey I assessed the following for each tree and group of trees:

- Dimensions (height, crown spread, stem diameter, and height of crown base).
- Root protection area, based on stem diameter.
- Life stage and physiological condition.
- Structural defects of significance, and general condition. Assessment of the value that the tree provides from a wider landscaping perspective.
- An assessment of the likely remaining useful contribution in years.

Based on the above information, I have allocated a category (A, B, C, U) indicating the quality and value for each tree or tree group (in accordance with BS5837), to be taken into account when planning any future development.

3 STATUTORY PROTECTION

3.1 The interactive GIS map on Hillingdon Borough Council's website shows that there are three tree preservation orders (TPOs) which affect land at the site. The plan shows the location of land covered by TPOs, but does not provide information as to what the TPO comprises (in terms of trees protected or TPO designation) so at this stage I am unable to see which trees are protected.

3.2 The council's interactive map shows that the site is not located in a conservation area (a designation which would impose provisional statutory protection to trees, if applicable)

3.2 Figure 1 below is an extract of the council's interactive plan showing the land on which TPOs apply.

Figure 1. *Extract from council's interactive map*

4 TREE CONSTRAINTS PLAN

4.1 Based on the information obtained by the tree survey I have prepared a Tree Constraints Plan (TCP), dated 19th May 2022, drawing no: DS20042201.02, included on Page 12 of this report.

4.2 On the TCP I have used different colours indicating tree crowns to distinguish between trees which could defensibly be removed in order to facilitate development (broken blue); and trees with a higher retention priority which should, initially, be considered for retention (solid green).

4.3 Category C trees are classified as trees of low quality; they should not impose significant constraints to design layout, and if necessary can defensibly be shown for removal in order to facilitate good design. If Category C trees can be satisfactorily retained within the proposed layout then consideration should be given for this.

4.4 Category B trees are classified as trees of moderate quality, which covers a large range. Some Category B trees are of insufficient value to impose significant design constraints, such that their removal can be justified in order to promote good design.

4.5 Category A trees are classified as trees of high quality and there should be an initial presumption for retention of these trees.

4.6 The TCP shows the position of the Root Protection Area (RPA) for trees with a higher retention priority as broken pink lines. BS5837 (Section 3.7) defines the RPA 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'*. In other words, the RPA represents the **minimum** area around each tree in which the ground should remain largely undisturbed. The RPA is an area based on a circle with a radial distance of 12x the stem diameter at 1.5 metres in the case of single-stemmed trees, or 12x the combined stem diameter (calculated in accordance with a formula set out in BS5837) for trees with more than one stem.

4.7 In situations where the site conditions clearly prevent consistent rooting around the tree (for example the presence of roads or buildings within the notional RPA circle) I modify the shape of the RPA to take this into account. At this site I have not adjusted the RPA shape for any tree, and RPAs shown are all based on circles.

4.8 At the design stage (Stage 2 – see Section 1.3.3), detailed advice should be given by the arboriculturalist, specifically in relation to the above ground constraints, namely:

1. Future growth predictions for the key retention trees where this is likely to be significantly different to their existing dimensions.

2. The effects of dominance and shading posed by trees in a) their current context, and b) taking account their future likely growth.

This level of detailed advice is beyond the scope of this report which is preliminary in nature.

5 SOIL

5.1 I am not aware if a detailed soil analysis has been undertaken at this site. I did not take soil samples while on site however I have looked at the British Geological Survey plan to establish the likely nature of the soil present. This indicates that the bedrock geology comprises the London Clay Formation with no superficial deposits.

5.2 The Cranfield University 'Soilscapes' website indicates that the soil associated with the prevailing geology comprises slowly-permeable, seasonally wet acidic loamy and clayey soils with low fertility.

5.3 There may be local anomalies not shown in the British Geological Survey maps and a more detailed site-specific soil assessment should be undertaken if required.

6 KEY TO TREE SURVEY DATA

6.1 **Tree / Group reference:** Tree numbers as shown on the Tree Survey Plan. Where trees form a coherent group, they have been assessed as a group, and are shown in the survey and on the plan prefixed with the letter G.

6.2 **Species:** These are listed in the schedule by their common name. The botanical names of the principal species present are as follows:

Pedunculate oak: *Quercus robur*
Hawthorn: *Crataegus monogyna*
Norway spruce: *Picea abies*
Laurel: *Prunus laurocerasus*
Pear: *Pyrus communis*
Orchard apple: *Malus domestica*
Cherry: *Prunus avium*
Sycamore: *Acer pseudoplatanus*
Cherry-Plum: *Prunus cerasifera*
Ash: *Fraxinus excelsior*
Leyland cypress: *x Cupressocyparis leylandii*
Contorted willow: *Salix babylonica* 'Tortuosa'
Laburnum: *Laburnum anagyroides*
Elder: *Sambucus nigra*
Horse chestnut: *Aesculus hippocastanum*
Lawson cypress: *Chamaecyparis lawsoniana*

6.3 **Ht. (m):** The height of the tree is measured or estimated to the nearest half metre for dimensions up to 10 m, and to the nearest whole metre for dimensions over 10 m.

6.4 **Crown spread – NSWE:** Radial crown spread measured or estimated, rounded up to the nearest metre, for north, south, west and east.

6.5 **Crown base:** The height above ground level and orientation of the lowest permanent crown base (excluding basal, and small epicormic growth).

6.6 **Stem count:** For trees recorded as individuals, the number of stems recorded for the purpose of RPA calculation (where stem numbers exceed 5 an average diameter is assessed).

6.7 **Stem dia:** In the first column the stem diameter is recorded for trees with a single stem, or the first measured stem where there are fewer than five, or the average stem diameter for trees with more than 5 stems. The diameter of individual stems for trees with up to five stems is recorded in columns 2-5. Measurements are shown in mm, rounded to the nearest 10. In some situations it is not possible to measure the diameter of stems, and for these estimates are made. When stem diameters have been estimated they are written in *italics*. Measurements are taken in accordance with BS5837 Annex C. For tree groups, stem measurements are recorded for the largest tree in the group.

6.8 **RPA Rad:** This shows the radius of the notional RPA circle in metres to be centered on the tree, based on the calculation made using the stem diameter.

6.9 **RPA Area:** This shows the calculated RPA in m^2 for each tree (as individuals or within groups). If the notional RPA circle is adjusted (see 4.6) the area must be maintained. The RPA area is capped at 707 m^2, equivalent to a circle with a radius of 15m.

6.10 **Life Stage:** An assessment of the tree's stage of life, where: Y = young, SM = semi-mature, EM = early-mature, M = mature, and OM = over-mature.

6.11 **Phys. Condition:** The physiological condition of the tree, reflecting the condition of the vascular system as indicated by leaf and shoot vitality. The physiological condition is not a comment on the tree's structural condition. The physiological condition codes used are G = good; F = fair; P = poor; D = dead.

6.12 **Condition and observations:** Description of general tree condition, including structural integrity, the presence of hazards, pests and diseases which may affect the tree's retention span.

6.13 **Preliminary management recommendations:** Work required to trees for reasons of sound arboricultural management only, **not for development facilitation**. This is not to be taken as a list of tree work required prior to development activity, but provides management recommendations for trees in their current context. This may include the further investigation of suspected defects. Where trees are located in neighbouring property, this is usually not applicable.

6.14 **Ret span:** Estimated remaining likely retention span based on species, condition & context. The following longevity bands are used: <10; 10-20; 20-40; >40. The retention span assessment is based on trees in their current context.

6.15 **Category:** BS5837:2012 Category where:

6.15.1 **U = Trees unsuitable for retention**. Trees 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. These trees are shown on the tree plans with dark red centres.

6.15.2 **A = Trees of high quality**. Trees of high quality with an estimated remaining life expectancy of at least 40 years. These trees are shown on the tree plans with green centres.

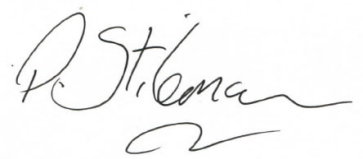
6.15.3 **B = Trees of moderate quality**. Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. These trees are shown on the tree plans with blue centres.

6.15.4 **C = Trees of low quality.** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. These trees are shown on the tree plans with grey centres.

6.15.5 Trees of notable quality are graded as Category A or Category B. These trees are divided further into sub-categories. Sub-category 1 is allocated where it has been assessed that the tree has mainly arboricultural qualities. Sub-category 2 is allocated where it is assessed that the tree has mainly landscape qualities. Sub-category 3 is allocated where it is assessed that the tree has mainly cultural qualities, including conservation.

6.15.6 Trees may be allocated more than one sub-category. All sub-categories carry equal weight, with for example an A3 tree being of the same importance and priority as an A1 tree.

6.15.7 I do not allocate sub-categories to Category C trees.



PATRICK STILEMAN BSc(Hons), MICFor, MRICS, Dip.Arb(RFS), RC.Arbor.A
Chartered Arboriculturist. Arboricultural Association Registered Consultant

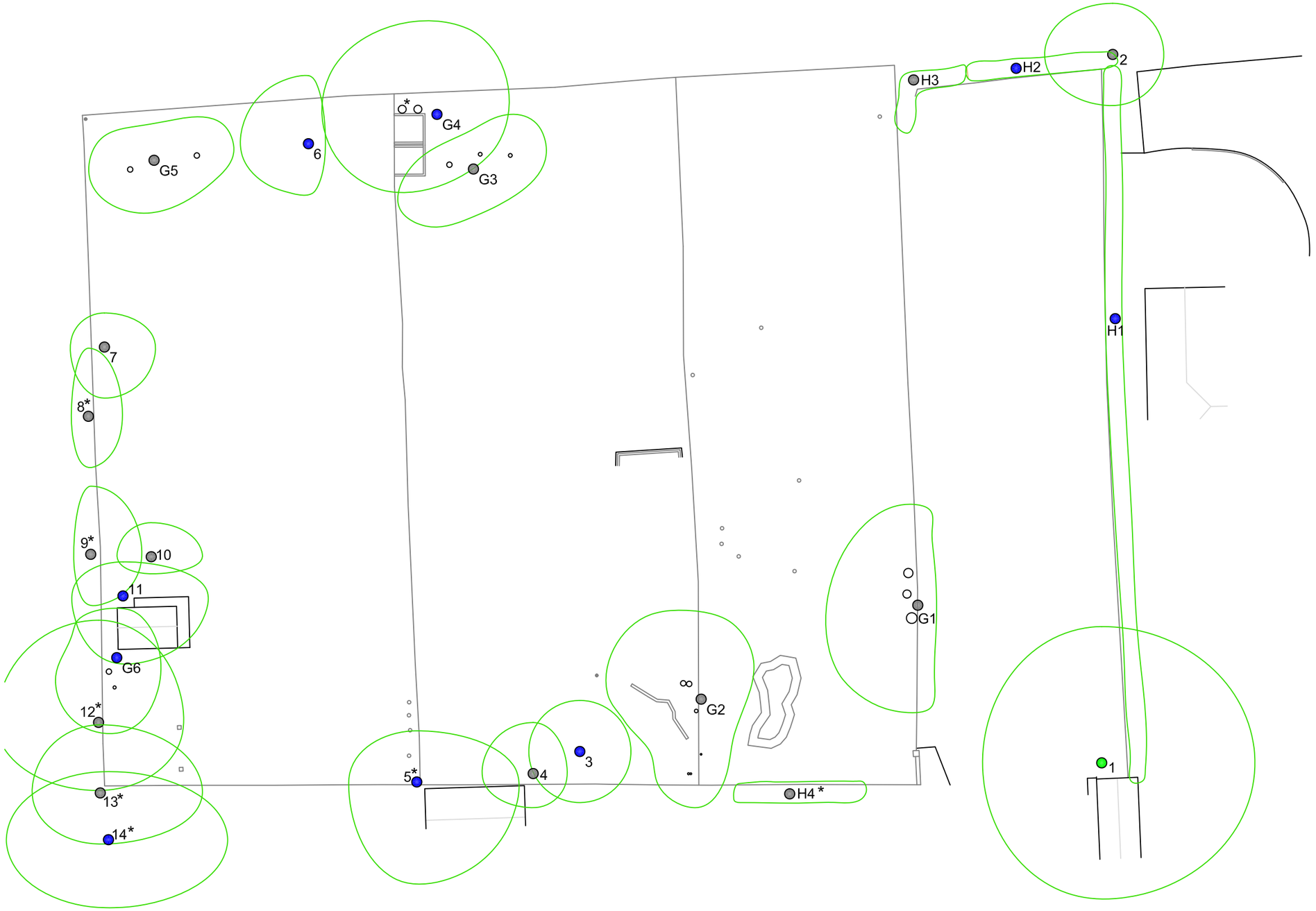
Director Patrick Stileman Ltd

TREE SURVEY DATA : 25-31 WARREN ROAD, ICKENHAM

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Prelimianry management recommendations	Ret. Span <10, 10+ 20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
1	Pedunculate oak	17	8	8	7	9	3m N	1	810					9.72	297	M	G	Prominent tree with good form. Wide, well-balanced crown. No defects seen of apparent structural significance. Tree of high quality and value.	No action required at time of survey	>40	A1
2	Hawthorn	8	3	3	4	3	2m W	4	*120*	*150*	*250*	*100*		3.97	49	M	F	Located to east of No. 31 - ownership uncertain. Multi-stemmed from 0.5 metres. Low vitality with slightly sparse foliage. Dense ivy through crown.	No action required at time of survey	10+	C
3	Norway spruce	11	3	3	3	3	3m N	1	180					2.16	15	SM	G	Small tree with reasonable form, and just crossing B grade threshold.	No action required at time of survey	>40	B1
4	Laurel	4	3	2	3	2	1m N	2	*120*	*80*				1.74	10	SM	F	Small, suppressed shrub. Some contribution to screening on boundary, but relatively scrappy.	No action required at time of survey	20+	C
5	Pedunculate oak	12	3	6	4	6	3m E	1	360					4.32	59	EM	G	Distorted growth to south-east from competition with former tree no longer present. Crown over out-building of property adjacent. Potential to recover and improve form. No defects seen of apparent structural significance.	No action required at time of survey	>40	B1
6	Pear	9	4	3	4	1	3m W	1	270					3.24	33	M	F	Partially suppressed by G4. Reasonably prominent on boundary. Tree of moderate quality and value.	No action required at time of survey	20+	B1
7	Apple	4	2	3	2	3	0m N	1	*100*					1.20	5	SM	P	Small, scrappy tree of relatively low significance.	No action required at time of survey	10+	C
8	Cherry	6	4	3	1	2	2m E	1	*200*					2.40	18	SM	F	Located off-site. Heavily cut back to west. Tree of relatively low significance.	No action required at time of survey	20+	C
9	Cherry	6	4	3	1	3	2m N	1	*220*					2.64	22	SM	F	Located off-site. Heavily cut back to west. Tree of relatively low significance.	No action required at time of survey	20+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Prelimianry management recommendations	Ret. Span <10, 10+ 20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
10	Sycamore	7	2	1	2	3	1m W	2	90	60				1.30	5	Y	F	Twin-stemmed from ground level. Leaning, squirrel-damaged stems. Poor future prospects.	No action required at time of survey	10+	C
11	Cherry plum	7	2	4	3	5	2m E	2	140	120				2.22	15	SM	F	Corrected growth following partial root plate heave. Screening function on boundary - just crosses B grade threshold.	No action required at time of survey	20+	B2
12	Ash	15	6	4	6	5	2m E	1	*400*					4.80	72	M	G	Located off-site. Formerly twin-stemmed, but one has been removed. Low vitality at time of inspection with new growth apparently stripped by defoliating insects. Relatively poor form.	No action required at time of survey	10+	C
13	Hawthorn	8	4	3	4	6	2m E	2	*250*	*200*				3.85	47	M	F	Located off-site. Wide, spreading crown, though largely clear over site. Scrappy form.	No action required at time of survey	20+	C
14	Leyland cypress	13	4	4	6	7	4m E	2	400	400				6.79	145	M	F	Located off-site. Twin-stemmed from 1 metre. No access to view stems. Prominent boundary tree.	No action required at time of survey	20+	B1
G1	Leyland cypress	21	4	6	5	1	1m N	1	710					8.52	228	M	P	Three trees in short linear group. Most branches on east side cut back to stem, leaving trees entirely bare on that side. Foliage gappy elsewhere. Tall trees with poor form, and with moderate further growth potential.	No action required at time of survey	20+	C
G2	Contorted willow, laburnum, hawthorn, laurel	7	5	4	6	6	3m N	5	120	200	230	250	150	5.27	87	M	F	Group dominated by multi-stemmed willow at northern end which has wide spreading, subsiding branches, with high end-loading and short likely retention span. Remaining trees are suppressed and distorted. Group of relatively low significance.	No action required at time of survey	10+	C
G3	Apple x2, elder, hawthorn	7	2	4	2	4	2m E	1	*350*					4.20	55	M	P	Four scrappy, suppressed trees in group, with poor form and poor future prospects.	No action required at time of survey	10+	C

Tree / Group reference	Species	Ht. (m)	Crown Spread (m)				Crown base (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m2)	Life Stage Y-SM-EM-M-OM	Phys. Condition G-F-P-D	Condition and observations	Prelimianry management recommendations	Ret. Span <10, 10+ 20+, >40	Grade U-A-B-C
			N	S	W	E			1 / mean	2	3	4	5								
G4	Horse chestnut	14	6	6	6	6	2m W	1	510					6.12	118	M	G	Two closely-spaced trees in group with single canopy. Good vitality. No sign of bacterial bleeding canker. Prominent on boundary.	No action required at time of survey	>40	B2
G5	Apple, pear	5	4	4	4	4	2m N	1	*250*					3.00	28	M	P	Small group comprising scrappy trees. Dense bramble and climbers through crown. Group of low quality and value.	No action required at time of survey	10+	C
G6	Lawson cypress	14	4	4	2	4	2m E	1	310					3.72	43	M	F	Two trees in group on boundary, partially suppressed by Tree 12. Some screening function.	No action required at time of survey	20+	B2
H1	Lawson cypress	3	1	1	1	1	0.5m W	1	*200*					2.40	18	M	G	Tightly clipped hedge with useful screening function on boundary.	No action required at time of survey	>40	B2
H2	Lawson cypress, elder	2	1	1	1	1	0m S	2	*100*	*100*				1.70	9	EM	F	Short hedge section with some screening function. Small scrappy elder growing through hedge at western end.	No action required at time of survey	20+	B2
H3	Photinia, laurel	2	1	1	1	1	0m S	4	*50*	*50*	*50*	*50*		1.20	5	SM	F	Small scrappy hedge section with limited screening function.	No action required at time of survey	20+	C
H4	Leyland cypress	5	1	2	2	2	1m S	1	*350*					4.20	55	EM	P	Located off-site. Heavily cut back on north side exposing bare stems.	No action required at time of survey	10+	C



TREE SURVEY PLAN

SITE ADDRESS
25-31 Warren Road, Ickenham,
UB10 8AA

CLIENT
WE Black Ltd

JOB REF
DS20042201

DRAWING NO
DS20042201.01

DATE
19/05/2022

Patrick Stileman Ltd
9 Chestnut Drive, Berkhamsted, Herts,
HP4 2JL 01442 866112

N

KEY

Tree / tree group canopy spread

BS 5837 Category key

- Category U tree
- Category A tree
- Category B tree
- Category C tree

SCALE
1:250 @ A3

0 5m 10m

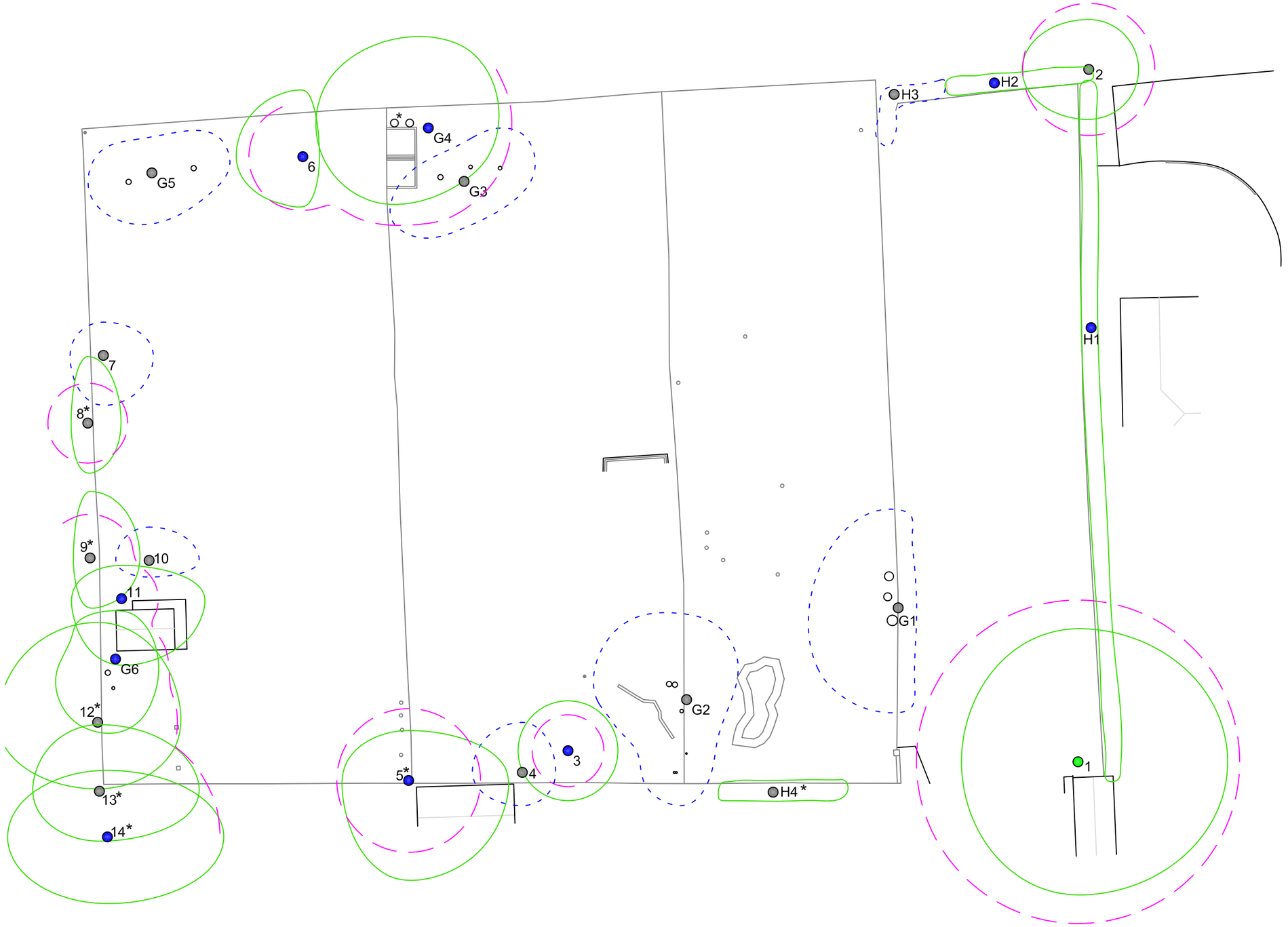
NOTE:

Stem diameters are not drawn to scale. See schedule for dimensions

Tree positions are based on the topographic survey provided by the client. Trees not included on the topographic survey have been plotted approximately, and are indicated with a *

This drawing must be viewed in colour

No. 31



This drawing must be viewed in colour

TREE CONSTRAINTS PLAN

SITE ADDRESS
25-31 Warren Road, Ickenham, UB10 8AA

CLIENT
WE Black Ltd

JOB REF
DS20042201

DRAWING NO
DS20042201.02

DATE
19/05/2022

Patrick Stileman Ltd
9 Chestnut Drive, Berkhamsted, Herts, HP4 2JL 01442 866112

N

KEY

Tree / tree group initially recommended for retention

Tree / tree group which could reasonably be considered for removal

Root Protection Area (RPA) for suggested retention trees

BS 5837 Category key

- Category U tree
- Category A tree
- Category B tree
- Category C tree

SCALE
1:250 @ A3

0 5m 10m

NOTE:

Tree positions are based on the topographic survey provided by the client. Trees not included on the topographic survey have been plotted approximately, and are indicated with a *

APPENDIX 1

Qualifications and experience of Patrick Stileman BSc(Hons), MICFor, Dip.Arb(RFS), M.Arbor.A

I am Patrick Stileman, Director of Patrick Stileman Ltd Arboriculltural Consultancy.

My qualifications in arboriculture are as follows:

National Certificate in Arboriculture *Nch(arb)*

The Arboricultural Associations Technicians Certificate *Tech.Cert (Arbor.A)*

The Royal Forestry Society's Professional Diploma in Arboriculture *Dip.Arb(RFS)*

In addition to the qualifications listed above which are specific to the field of arboriculture, I also hold an Honours degree in Environmental Science *BSc(Hons).*

I hold chartered status, being a Chartered Arboriculturist and professional member of the Institute of Chartered Foresters *MICFor.* I am a professional member of the Royal Institution of Chartered Surveyors *MRICS*.

I am a Registered Consultant with the Arboricultural Association, a scheme for which I am also an assessor.

I am a trained expert witness, and hold the Cardiff University Bond Solon Expert Witness Certificate.

I am a member of the Royal Forestry Society.

I have been working in the arboricultural industry since 1994 and as a consultant since 2001. I am frequently instructed by professionals to provide advice and assistance relating to trees within the planning process; I have a wide client base in this field including developers, architects, planning consultants, and Local Planning Authorities. I am experienced with providing arboricultural input in planning appeals as written representation, informal hearing and public local inquiry.

I am regularly instructed to assist with tree risk assessments, and to provide guidance relating to tree safety. Past clients for this work include local authorities, schools, residents' associations, large organisations including zoos and estates, and private individuals.

I provide advice in relation to alleged tree-related damage to buildings. Clients for this work are typically domestic homeowners, but have also included local authorities. Other work that I undertake involves the provision of tree planting schemes; and advice relating to the general management of trees.

I have worked as an arboricultural expert witness for public and private sector clients in both civil and criminal cases.

Prior to running my current consulting practice, I was a partner in an arboricultural contracting business in which I was involved with the practical aspect of organising, and execution of contract tree work.