Tree Risk Assessment Report

Site
The Old Rectory, Little Gaddesden, Herts, HP4 1PA

Client
George Godar

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

Date
12th January 2024

Project ref
TI07072301

1   INTRODUCTION

1.1   I am Patrick Stileman, Director of Patrick Stileman Ltd.   I have qualifications and experience in arboricultural consultancy, and I have given details of this in Appendix 3.

1.2   **Brief:** Patrick Stileman Ltd is instructed by George Godar to assess the risk posed by trees of causing harm or damage by their structural failure, which are located close to the southern and eastern boundary of his property, The Old Rectory, Little Gaddesden. We are to provide recommendations for work to the trees to bring the foreseeable risk that they pose to a level which we consider to be defensible.

1.3   **Previous inspection:** We have previously inspected these trees in December 2018.

1.4   **Report scope:** This report relates to the principal trees located close to the southern boundary with a neighbouring property, and along the eastern boundary adjacent to the Nettledon Road. An assessment of the possible effect that trees may have to structures through changes in soil volume is not included in this report. Trees were inspected from the site, the road, and from the neighbouring property to the south.

1.5   **Method of inspection:** Trees were inspected from ground level based on a technique called Visual Tree Assessment (VTA) in which growth features on trees (body language) are used to interpret internal defects and to assist the assessment of the likelihood of failure. This included a visual examination of each tree using basic survey equipment (where appropriate) including a nylon mallet to 'sound' the stems; metal probes to examine low cavities; and binoculars to examine aerial parts of the tree. The inspection did not include detailed investigations such as climbing inspections, soil excavation or use of decay mapping equipment.

1.6   **Tree recording and identification:** All trees inspected have been recorded in this report. The Tree Location Plan, included on Page 5 of this report, is based on the OS plan which was purchased for the site. The schedule providing details of recorded trees is included as Appendix 2.

1.7   **Risk assessment:** In order to assess the risk posed by trees in a consistent manner, a tree risk assessment system called Tree Hazard: Risk Evaluation and Treatment System (THREATS) was used. THREATS scores the three components of risk, being: the likelihood of failure; the nature of the land use within striking distance (the target); and the size of the tree, or part of tree in which failure is being considered. By scoring each of these and multiplying them together, a 'THREAT category' is determined which guides whether or not remedial work is required, and suggested time-scales. For a full description of the THREATS methodology, refer to Appendix 1.

1.8 **Legal status of trees:** I have looked at Dacorum Borough Council's GIS map which shows that trees at the site are not protected by a tree preservation order (TPO).

The site partially falls within the Little Gaddesden Conservation Area. The conservation area boundary is just within the site's southern boundary, and to that end it appears that the trees along the southern boundary are probably included within the conservation area. Trees along the road frontage are certainly within the conservation area.

Figure 1. Conservation area boundary – the site is indicated by a red arrow

1.9 **Timescales:** I use suggested timescales to indicate the relative degree of assessed risk posed by trees, and the priority that should be given to work in the event that it needs to be phased for financial reasons. The suggested timescales are not intended to predict a moment in time beyond which trees will fail. Where work has been recommended the trees are assessed to be posing an elevated level of risk now, and it is for land owners to decide how to phase the work accordingly.

1.10 **Date of site visit:** Trees at The Old Rectory were inspected by me, Patrick Stileman, on 20th December 2023.

2   SUMMARY OF RECOMMENDATIONS

2.1   The data for each recorded tree is contained in the schedule, included as Appendix 2. The schedule includes a description of defects observed, an assessment of the risk that each tree poses, and recommendations made for remedial work where we consider that this is required for reasons of risk management.

2.2   In this section I have summarised the work recommended, including the timescales that I consider the work should be completed within (see also 1.9).

2.3   **Table 1: Summary of work recommended within three months**

Tree No	Species	Work recommended
8	Ash	Remove

2.4   **Table 2: Summary of work recommended within eight months** (i.e. late summer 2024when still in leaf)

Tree No	Species	Work recommended
G1	Ash x4	Re-inspect

2.5   **Table 3: Summary of work recommended within one year**

Tree No	Species	Work recommended
1	Douglas Fir	Remove
4	Scots Pine	Remove
6	Scots Pine	Remove dead wood >20mm in diameter

2.6   **Re-inspection.**   I recommend that the trees are formally re-inspected by a suitably qualified arboriculturist within three years.

3   WILDLIFE

3.1   Nesting birds, bats and bat roosts are protected by law. It is the duty of the contractors to satisfy themselves prior to commencement that neither these, nor any protected species shall be adversely affected by the proposed work. Work should be undertaken in accordance with BS8596:2015: *Surveying for bats in trees and woodland – Guide.*

4   IMPLEMENTATION

4.1   All work is to be carried out in accordance with BS3998 (2010) *Recommendations for tree work*. The contractors should be trained in the work that they are performing; carry public liability insurance (it is for the client to satisfy themselves that a suitable level of cover is held by the contractor; however, £5 million is a minimum level generally considered to be acceptable); and undertake written risk assessments for the work being undertaken. I recommend that a certificate of insurance and site-specific risk assessments should be seen by the client prior to the contractor commencing work. If a reputable contractor is not known, a list of Arboricultural Association approved contractors can be viewed on line at https://www.trees.org.uk/ARB-Approved-Contractor-Directory

5   LEGAL CONSIDERATIONS

5.1   It is apparent that the trees are located within the Little Gaddesden Conservation Area, but are not protected by a TPO.

5.2   The conservation area designation imposes provisional statutory protection on trees. Written conservation area notification (Section 211 Notice) must be sent to the local authority in relation to work proposed for the trees listed in Tables 1 and 3 (with the exception of Tree 6 to which dead wood removal only has been recommended which is exempt from the need to give notification). Work may proceed either after a period of six weeks has elapsed from the issue of the notice (unless a TPO is made), or sooner if the council confirms in writing that it does not object.

6   REPORT LIMITATIONS

6.1   Trees by their very nature will always pose a certain level of risk. This report is not intended to provide recommendations for the complete removal of risks from trees. The report is based on our assessment of the trees and provides recommendations for reasonable levels of management required in order to bring them to a foreseeable level of risk which we consider to be defensible.

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

SITE ADDRESS
The Old Rectory, Little Gaddesden

CLIENT
George Godar

JOB REF
TI07072301
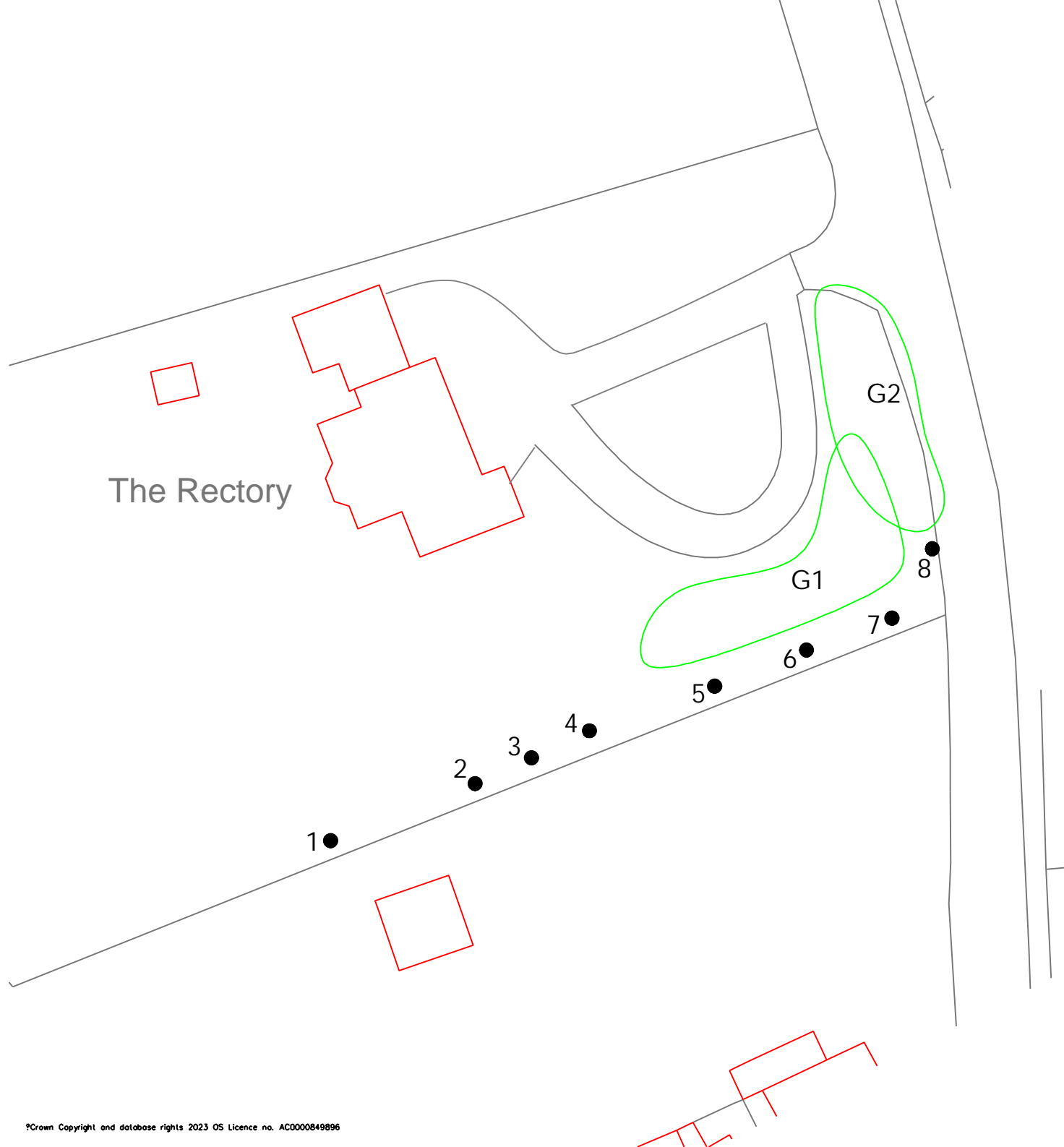
DRAWING NO
TI07072301.01

DATE
07/01/2019

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N

KEY

● Approximate position of recorded tree

◯ Approximate position of tree group

The Rectory

G2

G1

8

7

6

5

4

3

2

1

APPENDIX 1 THREATS METHODOLOGY

THREATS is an acronym for Tree Hazard: Risk Evaluation and Treatment System. It provides a methodology for applying quantification to the risk posed by trees based on the tree inspector's assessment of the condition of the tree and its location, to provide a systematic approach to the decision making process.

THREATS considers in turn the three components that inevitably combine to derive risk, being: the likelihood of failure; the target value (the likelihood of people, or objects of value being within striking range of the tree at any given time); and the likely impact of the defect being assessed if it were to fail.

Each of the three components described above are assessed, and awarded a numerical 'score'. These scores are derived in the following way:

- **Failure Score**: Using training and experience, the assessor identifies defects within the tree, and uses his or her judgement to assess the relevance of these defects. The assessor then chooses the defect with the greatest significance, and allocates one of five scores to that defect based on the likelihood and imminence of it causing failure.

Score	Probability of failure	Example defects
50	Imminent/Immediate	Uprooting; Extreme root loss; Collapsing structure, unimpeded hanging breaks
8	Probable/Soon	Altered exposure; Primary decay fungus; Severe inclusive bark/root loss, Fragile dead wood
2	Likely, foreseeable	Lapsed pollard; Overweight/subsiding limbs; Poor stem taper; Dieback
.8	Potentially with time	Early development of inclusive bark; Robust dead wood
0	Unlikely ever	Tree generally free of defects, or insignificant defects only

- **Target score**: This describes the relative value of the land use within likely striking distance of the component part affected by the selected defect. It also takes into account the likelihood of human occupancy at any given time. The assessor selects one of the following six scores:

Score	Value	Static target examples	Target occupancy examples
40	Very high	Building 24 hour use, railway	Constant vehicular traffic/busy playground
25	High	Building 12 hour use, ≥ 11Kv power lines	Frequent vehicular traffic/constant pedestrian use
20	Medium	Building/structure occasional use, <11Kv lines	Peak times traffic/intermittent use, eg commuter run
15	Low	Garage, Summer house, Listed wall	Occasional traffic/sporadic use, eg slow country road
7	Very low	Unlisted wall, paving, garden features	Infrequently used access/ public right of way/bridleway
0	None	Grass	Hardly ever used, eg remote path

- **Impact score**: The assessor makes a judgement on the likely consequences should the defect being assessed cause failure of the tree or part of tree in question if the target beneath it is occupied. The assessor selects one of the following four scores:

Score	Degree of harm and consequences (examples)	Agent: trees, mm, or branches, kg (size/weight for guidance only)		
10	Severe structural damage, vehicles crushed – passenger fatalities very probable	VL	> 750mm	> 500kg
6	Moderate structural/ severe vehicle damage – fatal/ disabling injuries likely	L	350-750mm	50-500kg
4	Minor damage/probable disabling/hospitalising injury to pedestrians	M	100-350mm	10-50kg
1	Fragile objects destroyed, superficial/recoverable injury to pedestrians	S	< 100mm	< 10kg

The three scores derived from the methodology described above are multiplied together to provide a 'hazard rating'. The hazard rating score will fall into one of seven 'threat category' score ranges, from 1 'insignificant' to 7 'extreme'. The threat category that is finally reached determines whether or not remedial work is required, and a timescale in which any remedial work should be carried out, or the tree re-inspected.

The following is an extract from the THREATS survey sheet, indicating the score ranges (derived from a multiplication of the three scores listed above), the 'threat category' that these score ranges fall into, and whether or not intervention is required based on the threat category, with timescales.

Score range	Threat Category	Recommended action & Completion deadline
4000+	7- Extreme	Evacuate/prevent access to impact site, emergency call-out of contractors
2001-3999	6- Serious	Close site if practical; arrange for work to be completed within 7 days
1000-2000	5- Significant	Arrange for work to be completed within one month maximum
350-999	4- Moderate	Remediate within 3 months, re-inspect after gales in the meantime (Force 7+)
160-349	3- Slight	Re-inspect annually/after storms (Force 10+), expect to schedule work within 2 yrs
50-159	2- Minimal	Re-inspect within 3 yrs if adjacent to public access, schedule work as required
0-49	1- Insignificant	Re-inspect within 3 yrs if Target Score = 20, 25 or 40. Otherwise reassess within 5 years.

APPENDIX 2

TREE SCHEDULE

Explanatory notes

- **Tree:** Tree number allocated to each tree during the survey. Where trees form distinct groups in which we considered it unnecessary to select trees individually, the prefix G is given.

- **Species:** The common English species name is used. If there is uncertainty regarding species a ? is used.

- **Age class:** An estimate the approximate stage of the tree's life, where Y = young, SM = semi-mature, EM = early-mature, M=mature, OM = over-mature.

- **Stem diam & Hgt:** The estimated diameter of the stem at 1.5m, or at ground level if multi-stemmed, in mm. The height of the tree is estimated to the nearest metre.

- **Condition, observations and defects:** A brief description of the tree's condition, with the principal defect(s) scored for the purpose of THREATS highlighted in **bold**.

- **FS:** Failure score (See Appendix 1)

- **TS:** Target score (See Appendix 1)

- **IS:** Impact score (See Appendix 1)

- **Score:** The hazard rating score is derived by multiplying FS, TS and IS.

- **Threat Cat:** Threat category from a range of 1 'insignificant' to 7 'extreme'. See Appendix 1.

- **Recommendations:** Based on the threat category, the decision is made whether or not remedial work is required, and in what timescale if it is. Recommendations made are based on our knowledge and experience.

- **Timescale:** suggested maximum timescale for either the work recommended as stated in the previous column, or future re-inspections to be undertaken. See also Section 1.9.

Tree schedule

Tree	SPECIES	Age class	Stem Diam & Hgt	Condition, Observations and defects	FS	TS	IS	Score	Threat Cat.	Recommendations	Time scale
1	Douglas Fir	M	600 29	Slender tree, drawn up from group competition. **Competing trees now no longer present leaving it exposed and vulnerable**. Base appears sound, but raised failure hazard during a storm. Tree does not lend itself to pruning.	2	20	4	160	3	Remove	1 year
2	Scots Pine	M	500 18	Distorted form from group competition. **Adjacent to tree which recently failed**. Crown has previously been reduced and does not appear unstable.	0.8	20	4	64	2	Re-inspect	3 years
3	Scots Pine	M	450 21	Upright form. Growing as companion with Tree 2. Minor dead wood not assessed to pose risk requiring intervention. No defects seen of apparent structural significance.	0	20	-	0	1	Re-inspect	3 years
4	Scots Pine	M	450 16	Slight lean and crown asymmetry to east. **Foliage brown throughout and tree appears to have died recently.**	2	20	6	240	3	Remove	1 year
5	Scots Pine	M	300 17	**Slender, distorted tree from group competition**. No defects seen of apparent structural significance.	0.8	20	4	64	2	Re-inspect	3 years
6	Scots Pine	M	400 20	Distorted form from group competition. Twin-stemmed from 10 metres. Union appears strong. **Moderate-sized dead wood** on south side poses slight risk over driveway.	8	20	1	160	3	Remove dead wood with diameter >20mm	1 year
7	Douglas Fir	M	750 26	Base of tree tested with sounding mallet and no decay or defects observed. **Crown confined to top of tree** with principal stem growing south due to competition with ash tree in garden. Crown structure appears strong. Relatively compact form and sheltered nature of tree. Failure not foreseeable.	0.8	20	6	96	2	Re-inspect	3 years
8	Ash	M	500 15	Frequent dead wood throughout and low vitality. Dense internal epicormic growth imply moderate **infection by ash dieback**. Tree is located immediately adjacent to road.	8	20	4	640	4	Remove	3 months

Tree	SPECIES	Age class	Stem Diam & Hgt	Condition, Observations and defects	FS	TS	IS	Score	Threat Cat.	Recommendations	Time scale
G1	Ash x4	M	500 18-20	4 mature trees set inside boundary edge. Occasional moderate-sized dead wood. **Possible early stages of ash die-back disease**, but not confirmed due to season. No defects seen of apparent structural significance at base or in primary structures. Past pruning to 2 trees.	0.8	20	4	64	2	Re-inspect	8 months (late summer 2024)
G2	Scots Pine, Douglas Fir	M	500 14-20	8 trees in group. Slender, upright form. No defects seen of apparent structural significance.	0	20	-	0	1	Re-inspect	3 years

APPENDIX 3

Qualifications and experience of Patrick Stileman BSc(Hons), MICFor, MRICS, 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 *N ch(arb)*

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

The Royal Forestry Society's Professional Diploma in Arboriculture *Dip.A rb(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(H ons).*

I hold chartered status, being a Chartered Arboriculturist and professional member of the Institute of Chartered Foresters *M IC For.* 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 within 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.