

Tree Survey

Trees at

1, The Fairway, Bognor Regis,
West Sussex. PO21 4EL.

Prepared for
Mr & Mrs Batra.
August 2010

ARBORTECH(Consultancy)

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Informative : Retained Trees & Development Sites.

TREES NEED ROOTS FOR :

- Anchorage i.e Stability.
- Water and nutrient uptake i.e general health.
- Energy storage i.e for drought periods.
- Breathing i.e Vertical gaseous exchange

DAMAGING TREE ROOTS MAY :

- Kill the tree.
- Weaken the tree.
- May cause the tree to fail.

TREE ROOTS CAN BE DAMAGED BY :

(Any may deny their needs for survival)

- Root severance
- Soil compaction.
- Escape of toxic fluids i.e Oil, Bitumen.
- Impermeable surfaces i.e Concrete



Tree Survey.

A Tree Survey records information about the trees on (or adjacent) a site, independently of any design proposal. Trees, groups of trees and woodlands are assessed for their physiological and structural condition and preliminary Health & Safety works are recommended. In addition the trees are categorised for their quality and value within the existing context. The tree categories are then differentiated on a tree survey plan. The results of the Tree Survey may then be incorporated into a Tree Constraints Plan to assist with site layout.



Arboricultural Impact Assessment.

Further to a tree survey, consideration is given to how a proposed development and retained trees will co-exist and interact in the present and future. It can identify and remove any potential conflicts between trees and the requirements of the development.

An AIA aims to identify, evaluate and mitigate the direct and indirect impacts on retained trees, that may arise as a result of the implementation of the layout proposal.



Arboricultural Method Statement for Protection of Trees during Construction.

This is a statement which is used to describe how construction works can be carried out close to trees and how the above and below ground parts of the trees will be adequately protected during this process.

Works are carried out in accordance with British Standard 5837:2005 *Trees in relation to construction – Recommendations* and good arboricultural practice.

1. INTRODUCTION

Client : Mr & Mrs Batra

Job Reference : Batr/ATRep/17810

Site Details : 1, The Fairway, Bognor Regis, West Sussex. PO21 4EL.

Date of site inspection : 12th August 2010

1.1 Instruction and Purpose of the Report.

I have been instructed by Mr & Mrs Batra to prepare an arboricultural report to include :

- Tree Survey in accordance with BS 5837.
- Trees along ditch on site and South boundary.

1.2 Documents and Information provided :

Ivon Blumer Architect provided me with the following documents :

- Land Survey Drawing (Existing).
- Proposed Site Layout Drawing No:IBA/333/MP1.

Mr Blumer advised me that :

- The site is situated within a Conservation Area.
- The site is covered by an Area Tree Preservation Order dating from 1957.

1.3 Qualifications and experience : I have based this report on my site observations and the documents provided, and I have come to conclusions in the light of my experience. Details are listed at Appendix 4.

1.4 Scope of this report:

- This report includes a preliminary assessment based on the site visit and the documents provided.
- The works have been carried out in accordance with British Standard 5837:2005 *Trees in relation to construction – Recommendations*.
- A Visual Tree Assessment (VTA) was undertaken from ground level.
- The Visual Tree Assessment was restricted at the time of inspection, due to the trees being in full leaf.
- All dimensions are estimated.
- No detailed investigations have been undertaken.
- Only trees over 150mm in diameter (at 1.5m in height) have been included within the report in accordance with BS:5837.
- Terms and Conditions Apply

2 TREE SURVEY.

2.1 Identification and location of the trees :

The trees can be identified on the '*Tree Survey Plan*' at Appendix 1.

2.2 Tree Observations/Comments: I visually inspected the significant trees and recorded the Individual tree information on the '*Tree Survey Schedule*' at Appendix 2.

T1 – T5

These trees are not considered sustainable within the context of development due to their deteriorating condition and short-term safe useful life expectancy.

T6 – 10

These trees are currently in adequate condition to retain. However, past management has limited their life expectancy.

Group 1 C2.

Location : South boundary of site.

Various Species comprising : Conifer/Birch/Thorn/Holm Oak/Beech.

Height : Approximately 6-7m.

Stem diameter at 1.5m in height : Range = 150mm – 400mm.

Observations/Comments :

- The majority of individuals in this line are of low quality and have been previously topped.
- Being located adjacent the boundary, this linear group of trees offers existing screening/softening benefits to the immediate locality in respect of views into and out of the site.
- A small number of trees are encroaching upon the neighbouring property.
- It is inevitable that individuals in the line have a limited life due to species and past management.
- 2 trees were noted to be dead.

The Tree Survey Schedule and Plan should be read in conjunction with Appendix 3 '*Tree Survey Notes*'.

3. RECOMMENDATIONS

3.1 Tree Work Recommendations :

Trees T1 – T5 Category C/R – R.

- Fell and re-plant with suitable replacement specimens for location.

Trees T6 – 10 Category C

- No Action.

Group 1 C2.

- Remove 2 dead trees in line.
- Prune trees back from neighbouring property (to avoid the occurrence of damage).
- Maintain hedge and monitor (in consideration of seasonal soil desiccation(subsidence))

See also See Section 4 '*Other Considerations*'.

- 3.2 Implementation of tree works : The contractor should carry out all tree works to BS 3998 *Recommendations for Tree Work* (1991) as modified by research that is more recent.

The arborist undertaking the tree works should be instructed to advise if they notice any further defects other than those identified at Appendix 2. Further assessment of those situations will then be required.

It would be prudent to undertake a Bat survey prior to carrying out any works to trees with significant cavities and to avoid work at times when birds are likely to be nesting. See Section 4 'Other Considerations'.

- 3.3 Future Considerations :
All trees on site should be inspected on a regular basis by a qualified arboriculturist.

4 OTHER CONSIDERATIONS

4.1 Trees subject to statutory controls.

Consultation with the Local Planning Authority will be required prior to any pruning works (other than certain exemptions) to trees covered by a Tree Preservation Order or located in a Conservation Area.

4.2 Risk.

The Occupiers Liability Act 1957 & 1984 places a "common duty of care" upon the owner occupier of a site to take reasonable steps to minimise the risk of personal injury or damage to property arising from any tree on that site.

8.2 Trees outside the property.

Trees located in the adjacent property are effectively out of the control of the owners of 1, The Fairway. By common law, branches from trees on adjacent properties extending over boundaries can be pruned back to the boundary line without the permission of the owners. However the guidance on statutory controls still applies.

4.3 Wildlife.

Your attention is drawn to the wildlife and Countryside Act 1981 and related legislation which provides statutory protection for nesting birds and bats and their roosting sites, some mammals, invertebrate species and plants.

5 BIBLIOGRAPHY / REFERENCES

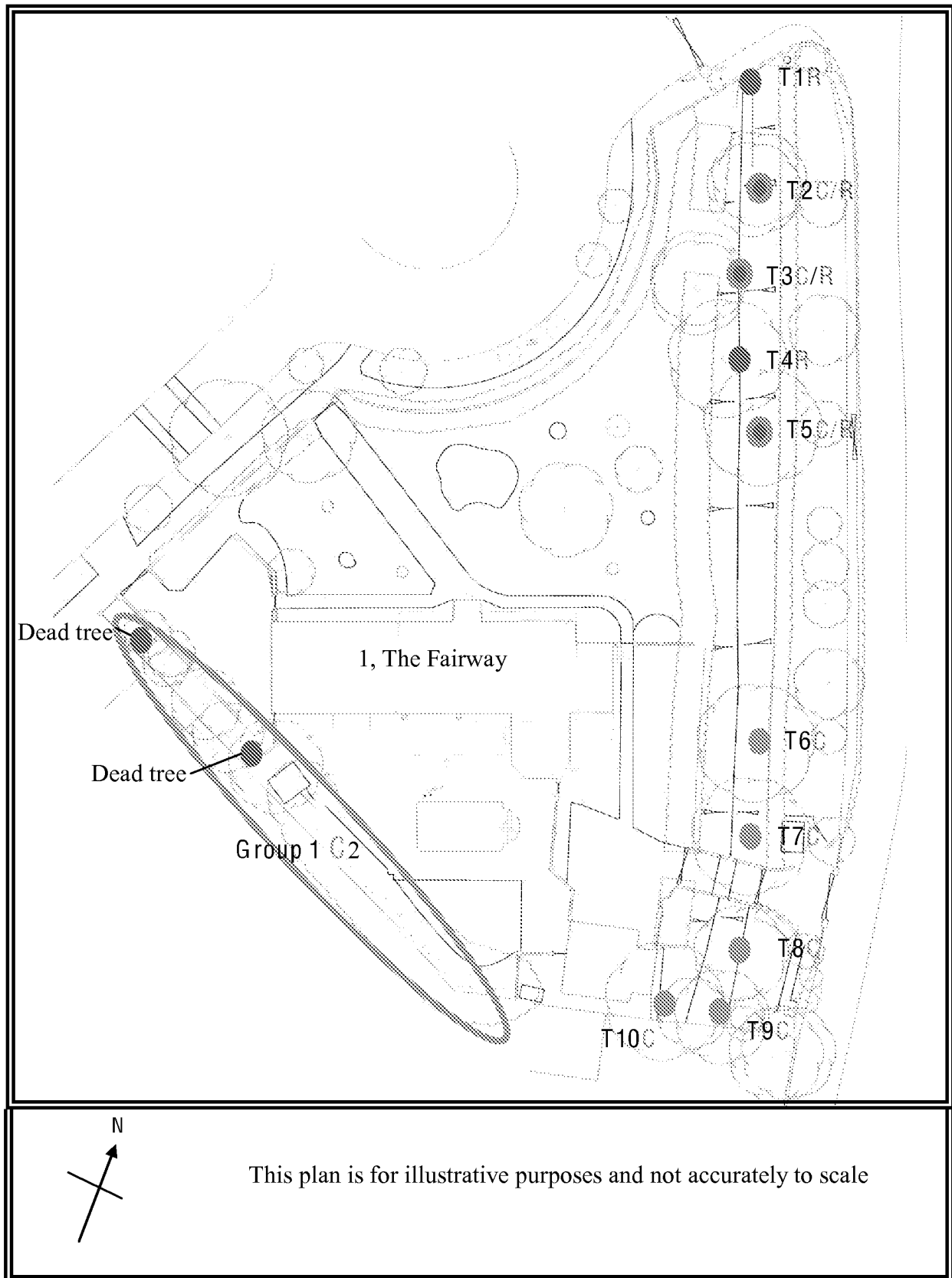
- British Standard 5837 '*Trees in relation to construction - Recommendations*' : 2005.
- British Standard 3998 '*Recommendations for Tree Work*' (1989)
- Occupiers Liability Act 1957 & 1984.
- Town & Country Planning Act 1990.
- Wildlife & Countryside Act 1981.
- CRoW Act 2000.

Report Authorisation.

Signed..... **Print.....**

Date.....

APPENDIX 1
 TREE SURVEY PLAN (Existing)
 Indicating tree location on site.



APPENDIX 2 TREE SURVEY SCHEDULE

Tree Reference No	Species	Height (m)	Stem Diameter @ 1.5m (m)	Crown Spread (m)	Height of crown clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated remaining contribution (years)	Category Grading
T 1	Sycamore <i>Acer pseudoplatanus</i>	9	250	N 5 S 2.5 E 3 W 4	3	SM	Poor	Fair/Poor	<10	B
Observations : - Single stem with lean to North. - Base of main stem growing over pipe (encased in concrete) spanning ditch. - Chlorotic foliage. - Dieback in upper crown.										
T2	Sycamore <i>Acer pseudoplatanus</i>	11	900 At base	N 5 S 3 E 5 W 4	4.5	M	Good	Fair/Poor	<10	C/R
Observations : - Two stems arising from base. Ivy obscuring visibility of base and lower stem. - Tree appears to have been previously topped at approximately 8m – dieback and decay from this point. <u>Stem to South</u> : Decayed stem stub with large cavity at this point (Fungal fruiting body evident – ‘<i>Polyporus squamosas</i>’) also decayed stem stub to South. - Decayed pruning wounds evident on lower stem also cavity at pruning wound to North at 1m. - Wound on stem to East below 1m with good callus growth and area of surrounding bark necrosis. - Stem to North : Large wound from 750mm – 2.2m with good callus growth.										

Tree Survey at 1, The Fairway, Bognor Regis West Sussex. ©
By ARBORTECH(Consultancy). August 2010.

Tree Reference No	Species	Height (m)	Stem Diameter @ 1.5m (m)	Crown Spread (m)	Height of crown clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated remaining contribution (years)	Category Grading
T 3	Sycamore <i>Acer pseudoplatanus</i>	10	1200 At base	N 4 S 3 E 4 W 5	4.5	M	Fair/Poor	Poor	<10	C/R

Observations :

- Main stem divides at a height of 750mm – stem to East divides again at 1200mm.
- Ivy obscures visibility of stems from base to low/mid crown.
- Stem To East – Fungal fruiting body developing at base.
- Previously topped at approximately 8m - dieback and decay from this point.
- Crown previously lifted to a height of 5m – decayed tear wounds evident.
- Foliage slightly chlorotic

T 4	Sycamore <i>Acer pseudoplatanus</i>	9-10	810 At base	N 4.5 S 2.5 E 4 W 3	4	M	Poor	Poor	<10	C/R
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Observations : Main stem (swept to East) bifurcates at approximately 500mm above ground level.

- Ivy obscures visibility from base to low crown (North).
- Decayed cavity at base of main stem to South East - Fungal fruiting body at 1200mm to East.
- Very tight compression union of main stems to a height of 1500mm.
- Large area of bark necrosis on lower stem to North West.
- Sparse crown with small chlorotic foliage.

Tree Reference No	Species	Height (m)	Stem Diameter @ 1.5m (m)	Crown Spread (m)	Height of crown clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated remaining contribution (years)	Category Grading
T 5	Sycamore <i>Acer pseudoplatanus</i>	9	380	N 4.5 S 3 E 4 W 3	4	M	Fair/Poor	Poor	<10	C/R
Observations : - Single stem with slight lean to North East. - Large extensively decayed stem stub at base to East. - Previously crown lifted to a height of 4m - Numerous pruning wounds evident on lower stem with decay. - Crown slightly sparse with slightly chlorotic foliage.										
T 6	Sycamore <i>Acer pseudoplatanus</i>	13	950 At base	N 4.5 S 5 E 5 W 4.5	5	M	Good	Fair	10	C
Observations : - Trifurcated from base – All three stems fairly upright. - Previously crown lifted to a height of 5m - Small number of pruning wounds on main stem with cavities evident.										

Tree Reference No	Species	Height (m)	Stem Diameter @ 1.5m (m)	Crown Spread (m)	Height of crown clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated remaining contribution (years)	Category Grading
T 7	Sycamore <i>Acer pseudoplatanus</i>	11	500	N 4 S 4 E 4 W 3	4.5	M	Good	Fair	10	C
Observations : Exposed surface roots to South. • Single upright stem which bifurcates at approximately 7m. • Small pockets of decay at base to East. • Previously topped at 8m. • Upper stem to North extensively decayed with woodpecker holes. • Evidence of 2 large stems removed at base to North with decay.										
T 8	Sycamore <i>Acer pseudoplatanus</i>	8	470	N 4 S 3 E 4 W 3.5	5	M	Fair	Fair	10	C
Observations : • Main stem previously topped at approximately 7m – some dieback from this point. • Previously crown lifted to a height of 5m. • Minor deadwood in crown.										

Tree Reference No	Species	Height (m)	Stem Diameter @ 1.5m (m)	Crown Spread (m)	Height of crown clearance (m)	Age Class	Physiological Condition	Structural Condition	Estimated remaining contribution (years)	Category Grading
T 9	Sycamore <i>Acer pseudoplatanus</i>	9	330	N 2.5 S 4 E 3 W 2.5	3.5	SM	Fair	Fair	10	C
Observations : • Single upright stem which bifurcates at 2.5m. • Minor deadwood in crown.										
T 10	Sycamore <i>Acer pseudoplatanus</i>	9	700	N 4 S 4 E 2.5 W 2.5	3	M	Fair	Fair	10	C
Observations : • Main stem bifurcates at approximately 1200mm with tight compression union. • Previously Pollarded at approximately 3m and Topped at approximately 7m.										

APPENDIX 3.

Tree Survey Notes

GENERAL TREE SURVEY NOTES.

- The pre-development site survey is based on guidelines set out in British Standard 5837 : 2005 and good arboricultural practice.
- Tree species has been determined (common name and scientific)
- All tree dimensions are estimated, height and spread being measured in metres and trunk diameter measured at 1.5m above ground level or at basal flare if stem divides below 1.5m.
- The tree age classification is made in terms of the trees site specific maturity within the landscape.

Age groups are indicated as

J	-	Juvenile tree
SM	-	Semi-mature tree
M	-	Mature tree
OM	-	Over mature

ASSESSMENT AND CATEGORY CLASSIFICATION.

The condition of trees included in the survey has been assessed by a person being qualified and experienced in arboriculture. In making the assessment particular consideration has been given to :

- Tree species.
- Tree dimensions.
- Health, Age and Vigour of tree.
- Tree conformation including any structural defects.
- The location of the tree, relative to the existing site and surroundings.
- The landscape and environmental/habitat value.

On the basis of this individual assessment, the trees are classified into one of the following categories, or intermediate categories.

A	(GREEN)	Trees of high quality and value making/to make a sustainable contribution.
B	(BLUE)	Trees of moderate quality and value making/to make a significant contribution.
C	(GREY)	Trees of low quality in adequate condition until new planting established.
R	(RED)	In current context could be removed.

In addition, the above categories may be attributed one or more of the following criteria :

- 1 Arboricultural values.
- 2 Landscape values.
- 3 Cultural values including Conservation.

A Tree Survey is primarily a data collection exercise and assessment of general tree condition at the time of surveying. It consists of a visual tree assessment from ground level. It should highlight any obviously visible signs of ill health or major defects. It is not an individual tree inspection or schedule of works, but should act as a guide for work which might be undertaken.

APPENDIX 4

QUALIFICATIONS and EXPERIENCE.

Arboricultural Consultant : Mr J.R Hayes. Tech.Cert.(Arbor.A).
Technicians Certificate in Arboriculture 1998.
City & Guilds Tree Surgery for Craftsmen 1990.

Arboricultural Surveyor : Mrs J.A Hayes.
Lantra Professional Tree Inspection Award 2.
Natural England Bat Licence holder-20010/11.

Arboricultural Consultant to :

Bedales School
Biggin Hill Airport
Chichester District Council
Chichester Cathedral.
Chichester City Council
Goodwood Estate
Halburn Ecological Consultants.
Mansell Construction.
Martlet Homes Housing Association.
John Mowlem & Company PLC.....

Members of : The Arboricultural Association.
(Bat Conservation Trust)

Continuing Professional Development :

We are informed of up-dated techniques in Arboriculture and regularly attend training courses to further our professional development.

Insurance cover :

Employers liability	10,000,000
Public liability	5,000,000
Professional indemnity	1,000,000

TERMS OF ENGAGEMENT

1. Any report is provided for the sole use of the named Client and is confidential to the Client and his professional advisors. The Consultant accepts responsibility to the Client alone for the stated purposes of the report. No responsibility whatsoever is accepted to any person other than the Client himself. Any other such person relies upon the report at entirely his own risk. Neither the whole nor any part of the report or any reference thereto may be reproduced or transmitted, in any form or by any means, nor sold, hired or divulged to any third party without the Consultants prior written approval.
2. The content of any information supplied to the consultant by the client, including such items as reports, plans diagrams letters, data etc will be deemed to be true and accurate and such items will not be investigated or checked for their validity. Any information supplied subsequently found to be inaccurate, misleading or false may render the contents of the report invalid.
3. The report remains the property of the Consultant until payment has been received in full. The Client shall pay the Consultant his fee regardless of any outcome. In addition the Client will reimburse the Consultant the cost of all reasonable out of pocket expenses which he may incur. Payment in full of the total amount due must be made within 14 days and the Consultant shall be entitled to charge interest both before and after any judgement on the amount unpaid, at the rates listed below (delayed payment surcharge) per month (30 days) from time to time, until payment in full is made (a part of a month being treated as a full month for the purpose of calculating interest). No discount nor retention or set off against the same due is allowed unless agreed previously by the Consultant in writing.
DELAYED PAYMENT SURCHARGE.
Accounts not settled within the 14 day period will be surcharged as follows :
2.5% for payment within 1 month.
5% for payment within 2 months.
10% for payment within 3 months (maximum time limit)
Surcharges are not an offer of extended credit.
4. The consultant reserves the right to charge the client for a proportion of the services undertaken, should the client, further to instructions, cancel the agreed commissioned services.
5. Any information in relation to the tree(s) survey/inspection must be provided at the time of the survey/inspection process, prior to the compilation of the report document. Any information received by the consultant after this time will not have been considered and an additional re-assessment of the trees may be necessary at the clients expense.
6. In making the report, the following assumptions will be made by the Consultant (and these are therefore matters for which no responsibility can be accepted by the Consultant);
 - (i) that there are not underground pipes, wires, cables, or other services or installations which might be damaged as a result of work recommended or necessary.
 - (ii) that no tree(s) is the subject of or protected by a Tree Preservation Order or the terms of a planning consent (unless stated), in relation to which the Client must make his own enquiries of the Planning Department responsible.
7. It is possible that the report will suggest further investigation works to be carried out by a specialist firm or person eg. Structural Engineer, Surveyor, drain or electrical engineer or other. On no account will liability be accepted by the Consultant in respect of matters on which the client is recommended to obtain such other specialist advice or if the Client proceeds or acts without obtaining and acting upon the relevant further advice.
8. The report will not purport to express an opinion about or to advise upon the condition of un-inspected parts of the land or tree(s) and should not be taken as making any implied representation or statements about such parts.
9. Preliminary surveys are visual inspections which do not include any information on engineering, no root or soil samples are taken for analysis and trees are not climbed (unless stated).
10. The Consultant will inspect as much of the land and tree(s) as is practicable given the scope of his instructions and the level of fee agreed. He will be under no obligation to inspect those areas that are unexposed or not readily accessible.
11. The tree survey and inspection process requires good, clear access to the trees being inspected. Any obstructions will limit the inspection process and will be noted within the survey / inspection assessment. The removal of any obstructions such as dense undergrowth, climbing plants etc will not be undertaken as part of the process, unless this additional operation has been previously agreed with the client.
12. The statements made in this report do not take account of the effects of extreme climate, vandalism or accident whether physical, chemical or fire. We cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct or professional manner in accordance with current good practice. The authority of this report ceases at any stated time limit within it, or if none stated after 1 year from the date of the survey or when any site conditions change, or pruning or other works unspecified in the report are carried out to, or affecting the subject tree(s), whichever is the sooner.
13. Any trees referred to in this report should be re-inspected further to storms or extreme weather conditions due to the potential for deterioration in tree condition/situation.
14. All trees referred to in this report are assessed in the situation and site usage as seen on the day of inspection.
The client should inform the consultant of any foreseeable changes/variations prior to the site visit.
15. Any verbal information given by the Consultant prior to the Clients receipt of the written report shall not be construed as a representation or warranty and should not be relied or acted upon.
16. Any claim by the Client which is based on any defect in the nature or quality of the Consultants services shall be notified to the Consultant within 7 days from the date of supply.
17. Except in respect of death or personal injury caused by the Consultants negligence, the Consultant shall not be liable to the Client by reason of any representation, or implied warranty, condition or other term, or any duty at common law, or under the express terms of any contract, for any consequential loss or damage (whether for loss of profit or otherwise), costs, expenses or other claims for consequential compensation whatsoever (and whether caused by the negligence of the Consultant his employees or agents or otherwise) which arise out of or in connection with the Consultant's services, except as expressly provided in these conditions.
18. The Consultant shall not be liable to the Client or be deemed to be in breach of the contract by reason of any delay in performing, or any failure to perform any of the Consultants obligations in relation to the services he renders.
19. The identification of fungi, insects or tree disorders are based on field observations and do not include a laboratory analysis (unless requested).
20. The contract between the Client and the Consultant shall be governed by the laws of England.

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