



Tree Risk Management Report

The Loudwater Estate
Chorleywood Road
WD3

Ref: 101 514
Date: August 2020

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1.0 INTRODUCTION

1.1. Brief

We are instructed by Loudwater (Troutstream) Estate Ltd to inspect trees in regard to their:

- * Health, condition and notably risk rating: Tree Risk Assessment (TRA).
- * Any required general tree management recommendations.

For the purposes of this survey we have used the procedures and practices as set out in the International Society of Arboriculture “Tree Risk Assessment Manual” (2013). This report should be read in conjunction with The Loudwater Estate *Tree Risk Management Strategy* (February, 2015).

Trees were assessed within a time-frame of 16 months. Rationale: Trees are living organisms whose health and condition are (annually) subject to the influence of many factors and unpredictable change. One of these important factors is the changing seasons with their high winds, storms and snowfall.

If required, tree works are given a priority (1-3) for their implementation. Please refer to the appended tree survey schedule and site plan map.

1.2 Visual Tree Assessment (VTA)

VTA is an integral part of any TRA. VTA is an internationally recognised tree hazard assessment method developed by Prof. Claus Mattheck: *Body Language of Trees – a handbook for failure analysis* (HMSO, 1994). The basis of VTA is the identification of (external) symptoms which a tree produces in reaction to a weak spot or area of mechanical stress. These can then be interpreted in terms of potential hazard features within a tree.

1.3 VTA Assessment in a Seasonal Context

There are both advantages and disadvantages to carrying out VTA assessments in summer versus the winter:

Spring/Summer

Advantages: Vitality can be easily assessed and deadwood is clearly visible.

Disadvantages: Trees in full (heavy) leaf (e.g. Lime) can obscure assessment of branch/trunk defects. Pathogenic fungal bodies are not always present at this time of year.

Autumn/Winter

Advantages: Branch/trunk structure more readily visible from the ground and pathogenic fungi are best spotted at this time of year.

Disadvantages: Vitality is not so readily assessed and deadwood is not so identifiable.

For these reasons, spring/summer and autumn/winter VTA assessments are best alternated.

1.4. Qualifications and Experience

We have based this report on our site observations and investigations, and have come to the conclusions and recommendations (in section 3 below) in light of our experience, interpretation of site indicators and technical knowledge in arboriculture. We have experience and technical qualifications in arboriculture.

2.0 TREE INSPECTION RESULTS (to be read in conjunction with the appended Tree Survey Plan & Schedule)

2.1 Across the site we surveyed approximately 400 trees covering a species range of ash, cypress, fir, lime, oak, pine sycamore and yew. We are advised that the site is within a Conservation Area.

2.2. Recommendations for Tree Works (by way of a reminder see Tree Risk Management Strategy *Risk Rating & Work Priority* at appendix A)

Please see the table below.

RECOMMENDED TREE WORKS	
PRIORITY 1 (EXTREME)	-
PRIORITY 2 (HIGH)	T83, T85-T88, T92, T93 & T99-T102
PRIORITY 3 (MEDIUM)	T78, T95, T103, T105, G5, G7 & G8
PRIORITY 4 (LOW)	-
GENERAL MGT. RECS.	T79-T81, T84, T89-T91, T94, T96, T97, T98, T104, G9 & G10

Yr. 2019 tree works/assessments not completed: Before the yr. 2020 tree works are set out below, it is important to note that a significant amount of tree work/Phase III assessments* as recommended via the 2019 Tree Risk Assessment (TRA) have not been carried out**. We appreciate that a number of these are third-party trees, with limited control to 'enforce' these tree works on their owners. This does not, however, diminish in any way the legal liability of these tree owners in the event of any (now foreseeable**) tree failure and any subsequent harm and/or damage. We further appreciate that funds may be limited to have the Phase III assessments carried out. However, the same legal liability applies*** should any of these trees fail causing harm and/or damage.

* Include: T11, T15, T16, T20, T25, T33, T46-T48, T50, T54, T62, T65, T66, T68 and T70-T73

** As identified during this year's walkover survey.

*** Occupiers Liability Acts for England, Wales, Scotland and Northern Ireland - 1957/1984, 1960 and 1987

2.2.1. Priority 1 and 4: There were no extreme or low risk trees.

2.2.2 Priority 2: Works to these high risk acutely declining / structurally-compromised / pathogenic colonized trees should be carried out within the next 1-2 months. See also section 2.2.7 below.

2.2.3 Priority 3: These medium risk trees are now beginning to exceed their *risk tolerance level* for safe retention, and include a dead elm in a non-high target area. We recommend that these works are carried out within the next 12 months.

2.2.4. Priority 4: There were no such trees.

2.2.5 General Management Recommendations: This work consists of deadwood (mostly), hanger removal including the removal of basal (chronic) trunk ivy* and low-branch lifting/pruning to provide vehicle/cable clearance. We recommend that this work is carried out within the next 12 months.

* Using a hand/chainsaw with care so as not to damage any underlying tree bark.

2.2.6 Phase III assessment: No such assessments are required for this year though there are a number outstanding from the yr. 2019 TRA. We look forward to having details of these assessments for consideration once they have been completed.

2.2.7 Third-Party Trees T92, T93 and T100 (possibly T102): During the survey we attempted to contact these tree owners and this was noted where this contact was/not achieved*. Regardless of any verbal advice, we recommend that the Trust makes contact with these owners *in writing* regarding the condition of their tree, with a copy of the Tree Survey and specifying the *timeframe* for action: within the next 1-2 months.

* As indicated on the appended Tree Survey.

2.2.8 Re-Assessment Trees: The cherry T48 and beech T62 (with no action presently required) will require re-assessment during the next (yr. 2021) TRA and as such these have been left in the schedule to ensure they are re-assessed.

2.2.9 Newly planted woodland alongside Violet Road: This area is populated with a number of early-mature elms that periodically succumb to Dutch Elm Disease. It may make economic sense to remove these trees rather than employing a tree contractor for repeat visits over-time to remove trees as they die.

2.2.10 Increase Woodland Bio-Diversity: We recommend that the arising (trunks, branches & deadwood) from the removal operations on trees within Barnes Wood are habitat-piled (tidy log heaps) across the woodland area. These will provide valuable refuge sites for insects and fungi as these arising rot-down. **NB** These arising should not be placed around tree bases as it can obscure a clear view around these bases for the VTA.

2.2.11 Trunk Ivy Clearance: We were impressed with the basal trunk ivy clearance that was carried out prior to this tree survey. This greatly aided the VTA assessment for each tree. **NB** Before the next TRA it is important that this trunk ivy removal is repeated.

2.2.12 Basal trunk epicormic shoots on common lime: As opposed to trunk-base ivy growth that can obscure full VTAs, basal epicormic shoots around the trunk-bases of common lime are a natural feature of this tree species. The photo-synthates (starch) they produce are used to aid trunk-taper and woody-root buttress development: all associated with stability. Correspondingly, their removal would be detrimental to the development of the latter structural features. In general, pathogenic fungi fruiting bodies (FFBs) are found between woody-root buttresses. Given, as explained above, the beneficial nature of common lime epicormic shoots, our view is that to remove these shoots, to allow a full VTA trunk-base inspection, would be counterproductive. We endeavor however to make concerted efforts to look through/between these shoots to observe any trunk-base FFBs that may be present.

3.0 CONCLUSIONS & RECOMMENDATIONS

3.1 Given the extensive tree stock at the Loudwater Estate, the amount of Priority 2 and 3 tree works is relatively minor. Works to these high and medium risk trees should be carried out within 1-2 and 12 months respectively. There were no extreme or low risk trees. We recommend that the general management tree works are carried out within the next 12 months.

3.2 Whilst this report does not seek to authorise any tree works the above hazard tree works would be exempt under the Conservation Area designation that covers the site. We recommend however that this report is sent to the Tree Protection Officer (TPO) at Three Rivers Council (for information only) *before* the tree works are carried out. This will provide an opportunity for a site visit to inspect the required work before it is carried out. See General Information appendix section Aii.

- 3.4 Thirty party trees: The Trust should make contact with these owners *in writing* regarding the condition of their tree (as per our Tree Survey): for their attention and prompt action.
- 3.5 Tree re-assessments: The cherry T48 and pine T83 should be re-assessed during the next TRA.
- 3.6 The incomplete yr. 2019 tree works/assessments should be carried out without further delay. We note that a number of these are third-party trees, with limited control to ‘enforce’ these tree works on their owners. See aforementioned legal liability of these tree owners in the event of any (now foreseeable**) tree failure, and any subsequent harm and/or damage.
- 3.7 Before the next TRA the trunk- ivy (from base–1.5m up the trunk) should be removed using hand-tools only. If any cavities and/or fungal fruiting bodies are observed then this should be reported to the client for further investigation.
- 3.8 We recommend that the next TRA survey is carried out (within the next 16 months) when the trees are out-of leaf. See rationale in section 1.3.
- 3.9 Tree Contractors carrying out tree pruning or felling works should carry out a Risk Assessment – in line with recognised industry best practice – before each tree is climbed/worked on.
- 3.10 Please refer to Appendix 1 on statutory tree protection, tree work best practice & wildlife legislation. Please also note the appended Terms & Conditions: notably section 5 ‘Report Validity’.

NB Trees in close proximity to high Target Areas should be inspected for structural defects after major storm events.

4.0 REFERENCES

- National Tree Safety Group (2011). Common Sense Risk Management of Trees, Forestry Commission.
- Dunster, Julian A., E. Thomas Smiley, Nelda Matheny, and Sharon Lilly. (2013). Tree Risk Assessment Manual. Champaign, Illinois: International Society of Arboriculture.
- BS 3998; 2010 ‘Tree Work Recommendations’ British Standards Institute, London.
- Mattheck, C. (1994). Body Language of Trees - A Handbook for Failure Analysis. HMSO, London.
- E. Thomas Smiley, Nelda Matheny, and Sharon Lilly. (2011). Best Management Practices. Tree Risk Assessment. Champaign, Illinois: International Society of Arboriculture.
- HSE. 2013. Sector Information Minute - Management of the Risk from Falling Trees or Branches. Health & Safety Executive, Bootle.

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Appendix A

9.0 TRMS: RISK RATING AND WORK PRIORITY

<i>Risk Rating</i>	<i>Description</i>
<i>Extreme</i>	<i>Work to be completed immediately</i>
<i>High</i>	<i>Work to be completed within 1-2 months</i>
<i>Medium</i>	<i>Work to be completed within 12 months</i>
<i>Low</i>	<i>Work to be completed when resources allow</i>

APPENDIX I
GENERAL INFORMATION
Sounding Hammer Use, Tree Protection, Tree Works Best Practice & Wildlife
Legislation

Ai) USE OF A NYLON SOUNDING HAMMER

This may be referred to in the assessment sheets. It is a recognised field test and is a useful tool in aiding Visual Tree Assessment. It involves tapping around areas of suspected decayed wood (in trunks & branches) to compare with areas of wood which are not (i.e. solid). The aim is to listen for hollowing (e.g. with a dull thud) as this indicates unsound wood, internal cavities and/or delaminated (loose) bark.

Aii) STATUTORY TREE PROTECTION

Trees can be protected in law – via Tree Preservation Orders (TPOs) or by virtue of them growing in a Conservation Area – by the Government's Town & Country Planning Act 1990 (the Act). Trees may also be protected by Planning Conditions. In all these instances, written Council (Local Planning Authority: LPA) permission/consent is required before protected trees can be pruned or felled. Contravention of the Act may carry a fine of up to £20,000 and a criminal record.

Aiii) TREE WORKS - BEST PRACTICE

Subject to LPA written permission/consent (if applicable - see section Aii), all tree works must conform rigorously to BS 3998 (2010) 'Recommendations for Tree Work' and as modified by research more recent. All trees to be retained should be inspected annually by an Arboriculturist to assess the significance of any future physiological, morphological or environmental changes.

Aiv) WILDLIFE LEGISLATION

The Wildlife and Countryside Act (1981) Chapter 69 forms the basis for the legal wildlife protection in Great Britain. Amongst other protected flora and fauna, nesting birds and all species of bat are afforded statutory protection. In brief, it is an offence to:

Intentionally kill, injure or take a bat.

Sell, hire, barter or exchange a bat, dead or alive.

Be in possession or control of a bat or anything derived from them.

Disturb a nesting bird.

It is recommended that the client and/or their agent review the Act - <http://www.jncc.gov.uk/page-3614> - for further information and guidance.

Av) WILDLIFE HABITATS

A cursory assessment of wildlife habitat values of trees and hedgerows on the site was carried out during the survey. No protected or exceptional habitats were identified and details were not recorded. However, trees and hedgerows of most species provide valuable nesting sites for a wide range of birds and it is likely that nesting birds will be present on the site during the period March to September. We have not been made aware of the presence of roosting bats and have not identified any obvious signs of roost sites. However, this does not mean that roost sites are absent.

Avi) TREES AND IVY

Whilst ivy can be a valuable wildlife habitat, for trees it can obscure structural defects (& any associated decay fungi) in trunks and branches. Ivy can also increase the wind-sail area and weight of crowns. For these reasons, ivy on trees adjacent to roads, paths, buildings and other targets should be managed (see photo below).



Failure of a live ivy-clad hawthorn tree across a road (the extra weight of ivy caused this tree failure)

".....in a gale a tree that is heavily laden with ivy is like a fully-rigged ship, unable to lower its sails. Over it goes!"

*Jennifer Sandy - Richard Mabey's **Flora Britannica***

INDIVIDUAL TREE RISK SURVEY

SITE:	LOUDWATER ESTATE, RICKMANSWORTH
CLIENT:	LOUDWATER TROUT STREAM ESTATE LTD.
BRIEF:	CARRY OUT AN ISA LEVEL 2 TREE RISK ASSESSMENT

SURVEYORS:	R. BALL C. WALLIS
ASSESSMENT DATE:	JULY 2020
VIEWING CONDITIONS:	SUNNY - CLEAR
JOB REFERENCE:	101 514

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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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Exceeds Tree Risk Tolerance Level = A previous tree defect or condition that now requires remedial works or a Phase III assessment.

T11 (0376)	Beech	M	20	7	900	G	Low scaffold limb failed/lost – resulting in a cavity @ 10m on north eastern side. Heartwood decay visible on the underside of the resulting wound.	Phase III climbing inspection (CI) required to probe & Sounding Hammer test cavity and (1) ascertain the extent of the visible wounding/decay and (2) assess any further internal heartwood decay into the main trunk. Phase III Assessment not undertaken following Feb 2019 recommendation. Following the CI carry out any recommended remedial tree works within the specified timeframe.	?	If tree retained within 16 months
T15 (0373)	Beech	M	24	9	800	G	<i>Ganoderma</i> spp. fungi brackets on stem base - increased numbers of fruiting bodies since previous assessment in 2017. Extent of <i>Ganoderma</i> spp. disease now Exceeds Tree Risk Tolerance Level. Audible resonance (Sounding Hammer) test OK. Major deadwood (over 25mm dia.) suspended in crown over the road on eastern side. Location: southern crossover at “COURTLANDS”.	Phase III: Picus Tomograph and/or Resistograph testing required. Phase III Assessment not undertaken following Feb 2019 recommendation. Carry out any recommended remedial tree works and within the specified timeframe, following result of Phase III assessment. If tree retained - remove deadwood overhanging road.	?	If tree retained within 16 months

HEADINGS & ABBREVIATIONS

TREE NO.	REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE
SPECIES:	COMMON NAME
AGE RANGE:	Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
HEIGHT:	OTHER THAN WHERE THE HEIGHT OF A TREE IS CRITICAL TO THE OUTCOME OF THE RISK ASSESSMENT, TREE HEIGHT IS ESTIMATED
CROWN SPREAD:	MEASURED OR ESTIMATED DIAMETER OF CROWN AT THE WIDEST POINT
DIA:	STEM DIAMETER - MEASURED AT A HEIGHT OF APPROXIMATELY 1.3 METRES.
VITALITY:	A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD

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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T16 (0558)	Beech	M	20+	10	900	G	Fused limbs, western side x 2. NB Only the lower limb was removed following the previous assessment in 2017. Cankered limb (= stress notch) remains overhanging the road. Torn out limb @12m – Cavity visible. Major dead-wood (over 25mm dia.) suspended in low southern crown. Suspected <i>Ganoderma spp.</i> Emerging – small fruiting bodies visible @7m on NW side on trunk wound. Location: outside “BEECHWOOD”.	Target prune remaining damaged branch back to stem. Remove all major dead-wood over road. Further investigation of suspected <i>Ganoderma spp.</i> during aerial pruning works. Not undertaken following Feb 2019 recommendation.	M	Within 16 months
T20 (0344)	Ash	M	22+	8	950	G	Degrading fungal brackets of suspected <i>Trametes versicolor</i> (Turkey Tail)* on west side of crotch of co-dominant trunks (@ 1.5m). *Saprophytic on deadwood indicating possible internal decay.	Phase III: Picus Tomograph and/or Resistograph testing required of the suspected decay point. Phase III Assessment not undertaken following Feb 2019 recommendation. Carry out any recommended remedial tree works and within the specified timeframe, following result of Phase III assessment.	?	If tree retained within 16 months
T25 (0280)	Ash	SM	18	6	450	M	Major dead-wood (over 25mm dia.) including broken branches overhanging the road opposite “TROUTSTREAM COTTAGE” Location: Right-hand side of “RUPAM” crossover.	GMR. Remove all dead-wood and hanging branches. Not undertaken following Feb 2019 recommendation.	-	Within 16 months



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T33 (0128)	Sycamore	M	26	6	900	G	Emerging juvenile <i>Ganoderma</i> spp. fungi fruiting bodies present between buttress roots on north and east sides (across 50% of the trunk base).	Phase III: Picus Tomograph and/or Resistograph suspected decay point. Phase III Assessment not undertaken following Feb 2019 recommendation. Carry out any recommended remedial tree works and within the specified timeframe, following result of Phase III assessment.	?	If tree retained within 16 months
T46 (-)	Lime	M	18	2	400	M	Abundant, dense ivy growth covers the tree. Location: near footpath on the verge. Opposite Apex pointed wall (square hole) – Access road to “LOUDWATER HOUSE”.	GMR. Chainsaw required to girdle/remove basal ivy stems with upmost care to avoid damaging underlying tree bark. Not undertaken following Feb 2019 recommendation.	-	Within 16 months
T47	Ash x 2	SM	20	7	600	M	Abundant, dense ivy growth covers the tree. Location: south side of “RIVERSIDE” (“MAYFLY” entrance road).	GMR. Chainsaw required to girdle/remove basal ivy stems with upmost care to avoid damaging underlying tree bark. Not undertaken following Feb 2019 recommendation.	-	Within 16 months
T48 (0117)	Cherry	M	8	5	400	M	<i>Ganoderma</i> spp. fruiting bodies east side of stem base. Insipient decay, solid around the fruiting body (Sounding Hammer test). Tree on the verge between “WYCHWOOD” and “BENCH HOUSE”.	None at time of survey. Re-assess on next TRA.	Low	Within 16 months

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T50 (0423)	Pine	M	18	5	400	P	Major sized low-crown deadwood overhanging the road with possible 'elbow' trunk decay. July 2020 Update: Vitality reduced to Poor. Major sized deadwood (over 25mm dia. increased since Feb 2019 assessment). Now exceeds risk tolerance levels for safe retention. Access road to "LOUDWATER HOUSE".	Remove tree. (Replace tree – if subject to TPO) – Requires confirmation of TPO status.	?	If tree retained within 16 months
T54 (0920)	Sycamore	Y	14	3	100 250	P	Third-party tree Stem 1 - Dead. Stem 2 – Top section has died off. Major sized dead-wood. Tree located at the end of the triangular corner section of the garden at "CALDBEC".	Remove tree. Attempt made to advise owner at the time of the survey – no answer at the house. L.T.E. Ltd. to ADVISE OWNER. TARGET ASSESSMENT – Road. Tree remains following the same advice given after the Feb 2019 recommendation.	H	-
T62 (0972)	Beech	M	20	9	800	M	Old co-dominant stem failure @ 10-11m on the northwest side. Estimated 70% stem remains intact. Crown loaded towards the top of the ridge (south) – Low target value. Little change since Feb 2019 assessment. Now advised that the tree is " off site " by L.T.E. Ltd. Unlikely to reach the site should the tree fail due to unbalanced crown loading away from the site.	None at time of survey. Re-assess on next TRA. NB This is an off-site tree.	Low	Within 16 months

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T65 (0593)	Sycamore	M	18	7	(9) Avg. 500	M	<p>Third-party tree.</p> <p>Significant dead branches over 5m in length overhang the road. (central co-dominant stem, 50% has died off).</p> <p>Inside the boundary of "FLINT COTTAGE".</p> <p>(Owner unavailable to advise at the time of the survey).</p>	<p>Remove all deadwood overhanging the road.</p> <p>Attempt made to advise owner at the time of the survey – no answer at the house.</p> <p>L.T.E. Ltd. to ADVISE OWNER.</p> <p>TARGET ASSESSMENT – Road.</p> <p>Not undertaken following Feb 2019 recommendation.</p>	H	Within 16 months
T66 (6060)	Sycamore	M	26	7	1000	M	<p>Third-party tree (?)</p> <p>Large open cavity, south side of trunk @ 1.2m. 800mm approx lateral decayed heartwood. Insect wood borer activity evident (abundance of frass inside the cavity).</p> <p>Probe test of stem cavity recorded in excess of 40% lateral decay.</p> <p>On verge outside "MONT AU SOURCE".</p> <p>July 2020 update: Now exceeds risk tolerance level for safe retention.</p> <p><i>(Possibly third-party tree according to supplied Land Registry map – L.T.E Ltd to clarify ownership).</i></p>	Crown reduction by 9m.	?	If tree retained within 16 months (subject to tree ownership confirmation)

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T68 (397)	Sycamore	SM	15	2	250	P	Epicormic growth which is a sign of physiological stress. Dead limb on the south side. Suppressed, dead upper crown. Poor quality tree. On verge outside "MONT AU SOURCE". <i>(Possibly third-party tree according to supplied Land Registry map – L.T.E Ltd to clarify ownership).</i>	Remove tree. (If under L.T.E. Ltd ownership). Or: Advise owner - (If third-party tree). Not undertaken following Feb 2019 recommendation.	H	-
T70 (399)	Sycamore	SM	15	3	300	M	Dense Ivy from stem base to tip. On verge outside "MONT AU SOURCE". <i>(Possibly third-party tree according to supplied Land Registry map – L.T.E Ltd to clarify ownership).</i>	GMR: Remove dense Ivy growth with up most care using a hand saw to avoid damaging underlying bark. Not undertaken following Feb 2019 recommendation.	-	Within 16 months (subject to tree ownership confirmation)
T71 (0248)	London Plane	M	15	6	900	M	Abundant dense ivy growth on the trunk and significantly into the crown framework. <i>N.B. Main Ivy stems are present on the southeast side of the trunk.</i>	GMR. Chainsaw required to girdle/remove basal ivy stems with upmost care to avoid damaging underlying tree bark. Not undertaken following Feb 2019 recommendation.	-	Within 16 months
T72 (-)	Sycamore	Y	12	1	200	D	Third-party tree. Dead tree, front eastern corner of garden at "TARA"	Remove tree. Tree remains following the same advice given after the Feb 2019 recommendation. L.T.E. Ltd. to ADVISE OWNER. TARGET ASSESSMENT – Road.	H	-

INDIVIDUAL TREE RISK SURVEY

SITE:	LOUDWATER ESTATE, RICKMANSWORTH
CLIENT:	LOUDWATER TROUT STREAM ESTATE LTD.
BRIEF:	CARRY OUT AN ISA LEVEL 2 TREE RISK ASSESSMENT

SURVEYOR:	R. BALL C. WALLIS
ASSESSMENT DATE:	JULY 2020
VIEWING CONDITIONS:	SUNNY - CLEAR
JOB REFERENCE:	101 514

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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T73 (-)	Cherry	SM	14	5	400	M	Abundant, dense ivy growth on trunk and into the crown framework.	GMR. Chainsaw required to girdle/remove basal ivy stems with upmost care to avoid damaging underlying tree bark. Not undertaken following Feb 2019 recommendation.	-	Within 16 months
T78 (0512)	Ash	EM	26	4	450	M	Trunk scar 0.5 –1.8m high on west side, with exposed heartwood. Good flanking wound wood, but hollowing now detected with sounding hammer test. Now exceeds risk tolerance level for safe retention. Opposite “THE SHEILING”.	Remove tree.	M	-
T79 (0611)	Sycamore	EM	20	6	400	G	2 x major sized dead limbs on east & north sides @ 6-8m high. Opposite “THE SHEILING”.	General Management Recommendation (GMR): Remove major deadwood. <i>Thereafter, in survey, major deadwood = >2.5cm dia.</i>	-	Within 16 months
T80 (0513)	Sycamore	EM	16	4	250	G	1 x major sized dead limb on north side @8m high. Opposite “THE SHEILING”.	GMR: Remove major deadwood.	-	Within 16 months
T81 (0500)	Sycamore	EM	16	6	300	G	Major sized deadwood and hangers suspended in the upper crown framework @ 6-13m high on north side. Opposite “CELLANDINE”.	GMR: Remove major deadwood.	-	Within 16 months
T82 (0632)	Sycamore	Y	10	4	200	G	Lost co-dominant stem on south side. Water filled cavity: probe tested with minimal lateral decay detected. Opposite “CELLANDINE”.	None at time of survey.	-	Within 16 months



INDIVIDUAL TREE RISK SURVEY

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SURVEYOR:	R. BALL C. WALLIS
ASSESSMENT DATE:	JULY 2020
VIEWING CONDITIONS:	SUNNY - CLEAR
JOB REFERENCE:	101 514

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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T83 (0436)	Pine	M	12	6	300	P	Very poor vitality, declining physiological health. Along access road to "LOUDWATER HOUSE".	Remove tree.	H	-
T84 (0913)	Beech	M	26	9	750	N	Major sized deadwood overhanging the road. Opposite "THE PAVILLION".	GMR: Remove major deadwood.	-	Within 16 months
T85 (0223)	Sycamore	EM	20	6	400	G	Fungal fruiting bodies of <i>Kretzschmaria deusta</i> on south-east side: between basal woody roots and on root crown. On western edge of woodchip-path and south of Horse Chestnut (T84).	Remove tree.	H	-
T86 (0311)	Cherry	M	13	5	500	P	Decay cavity on north side of stem base. (hidden beneath ivy). Poor/no flanking reaction wood. Probe test discovered in excess of 50% lateral stem decay and vertical decay channel into the root plate (min. 900mm). Opposite "TANGLEWOOD".	Remove tree.	H	-
T87 (0316)	Larch	Y	12	2	250	P	Tree is serious physiological decline. Outside "TANGLEWOOD".	Remove tree.	H	-
T88 (0381)	Holly	M	10	3	1-200 2-200	P	Decay cavity from stem base to 2m high with also root-plate decay. Severe crown dieback, very sparse foliage production. Verge in front of "WHISPERWOOD".	Remove tree.	H	-
T89 (0338)	Field Maple	M	12	5	500	G	Chronic, dense ivy from the stem base into and throughout the crown framework. Opposite "KINGFISHER COTTAGE".	GMR: Ivy removal using a hand/chain saw with care to prevent damage to underlying tree bark.	-	Within 16 months



INDIVIDUAL TREE RISK SURVEY

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SURVEYOR:	R. BALL C. WALLIS
ASSESSMENT DATE:	JULY 2020
VIEWING CONDITIONS:	SUNNY - CLEAR
JOB REFERENCE:	101 514

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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T90 (0340)	Ash	M	18	8	800	P	Sparse crown. Major sized deadwood throughout the crown framework and overhanging the road. Opposite "SOUTH WINDS".	GMR: Crown clean to remove all major sized deadwood.	-	Within 16 months
T91 (0342)	Oak	SM	18	8	450	G	Major sized deadwood throughout the crown framework and overhanging the road. Right of "BROADOAKS" gates (verge).	GMR: Crown clean to remove all major deadwood.	-	Within 16 months
T92 (-)	Beech	M	25	6	600	P	90% crown dieback. Tree within falling distance of the road. Third party tree in the garden of "DORNEY".	Remove tree. Attempt made to advise owner at the time of the survey – no answer at the house. L.T.E. Ltd. to ADVISE OWNER. TARGET ASSESSMENT – Road.	H	-
T93 (-)	Beech	Y	5	5	250	P	90% crown dieback. Tree within falling distance of the road. Third party tree in the garden of "DORNEY".	Remove tree. Attempt made to advise owner at the time of the survey – no answer at the house. L.T.E. Ltd. to ADVISE OWNER. TARGET ASSESSMENT – Road.	H	-
T94 (0070)	Oak	M	18	8	500	G	Major sized deadwood overhanging the road. Opposite "HAUT BOIS".	GMR: Remove major sized deadwood.	-	Within 16 months
T95 (0647)	Oak	M	18	6	1-400 2-500	G	Stem wounding (west stem) – historical vehicle strike @1.5m & 4-6m high. Poor reaction wood. Now exceeds risk tolerance level for safe retention.	Reduce the western crown (i.e. the crown of the damaged stem) by 3.5m.	M	Within 16 months



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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T96 (-)	Oak	M	18	10	600	G	Low branching over road and interfering with overhead service cables.	GMR: Crown lift over the road by 2m to allow for passage of vans and other service vehicles and remove branches to clear around cables.	-	Within 16 months
T97 (0620)	Beech	M	24	8	700	G	Major sized deadwood overhanging the entrance to VIOLET WAY – (next to White gate) – adjacent to “LA CHIMERE”.	GMR: Remove major deadwood.	-	Within 16 months
T98 (0604)	Ash	EM	16	9	250	G	Major sized deadwood overhanging the road at the “Give Way” point: “DANGER NARROW BRIDGE” sign.	GMR: Remove major deadwood.	-	Within 16 months
T99 (0153)	Cherry	M	9	5	400	P	90% crown dieback. Tree in serious physiological decline which exceeds risk tolerance levels for safe retention. Opposite “DOVECOTE”. Target Assessment: Road.	Remove tree.	H	-
T100 (-)	Ash	M	18	6	900 +	D	Dead off-site tree within the garden of “KIRIWINA”. Within falling distance of the road should the tree fail.	Remove tree. OWNER ADVISED AT THE TIME OF THE SURVEY (JULY 2020).	H	-
T101 (0521)	Ash	SM	14	5	600	P	30% crown dieback. Old “pollard” with long false crown framework branches. High target (road junction x2). Opposite the supervised barrier gate. (Estate access road).	“Re-pollard” to previous points.	H	Within 16 months
T102 (0569)	Ash	Y	18	3	250	P	50% crown dieback, physiological decline. High target (road junction x2). Verge of “RAJAH SHANTH”.	Remove tree. “SUBJECT TO CONFIRMATION OF TREE OWNERSHIP” – (MAY BE THIRD PARTY TREE. IF SO, L.T.E. LTD TO ADVISE OWNERS).	H	-



INDIVIDUAL TREE RISK SURVEY

SITE:	LOUDWATER ESTATE, RICKMANSWORTH
CLIENT:	LOUDWATER TROUT STREAM ESTATE LTD.
BRIEF:	CARRY OUT AN ISA LEVEL 2 TREE RISK ASSESSMENT

SURVEYOR:	R. BALL C. WALLIS
ASSESSMENT DATE:	JULY 2020
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General Management Recommendations = GMRs

TREE NO.	SPECIES	AGE RANGE	HEIGHT (M)	CROWN SPREAD	DIA. (MM)	VITALITY	COMMENTS	MANAGEMENT	RISK RATING	REVIEW MONTHS
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The July 2020 Tree Survey starts with T78 (previous trees are from the yr. 2019 Tree Survey: tree works/assessments not complete)

T103 (0011)	Oak	SM	18	6	400	G	Historical vehicle strike at stem base. Exposed heartwood. Sounding hammer testing suggests some decay hollowing, but good reaction wood is evident. Tree beginning to exceed risk tolerance level for safe retention. Low value group tree on right-hand side verge of estate access road.	Crown reduce by 8-9m.	M	Within 16 months
T104 (0562)	Pine	M	20	8	700	G	Major sized deadwood (x 1) overhanging the road. Right-hand side verge of estate access road.	GMR: Remove major deadwood.	-	Within 16 months
T105 (0532)	Elm	OM	9	1.5	100	D	Dead tree (last remaining tree in G4) – ivy clad CLOSE TO FOOTPATH OPPOSITE “CALBDEC”	Remove tree	M	-



The following section details the findings and management recommendations for tree groups which were visually assessed during the tree assessment survey undertaken in July 2020.

Trees detailed below were considered as collective “groups” rather than individuals due to their close concentration in certain areas of the Loudwater Estate.



Group 5 (0960): Barnes Wood

Group 5 consists of 3 x dead Elm trees within the wooded area, south the “No Exit Ahead” sign.

Avg. Height = 8-10m

Avg. Stem Diameter = 100mm

Avg. Crown Spread = 2m

Comments:

Trees in Group 5 were not removed following the February 2019 assessment.

The middle tree in G5 is tagged (0960).

Numerous Elm trees in this area have died off completely or are in an advanced state of decline due to Dutch Elm Disease: see section 2.2.9 in the Report narrative.

Recommendations:

Remove the 3 x dead Elm trees: in close proximity to the footpath and pose an unacceptable risk to pedestrians using the footpath.

Risk Rating: Medium

For the benefit of the local ecology and wildlife, it is recommended that wood resulting from the felled trees is stacked to create habitat piles inside the surrounding wooded area.



Group 7 (-): Barnes Wood

Group 7 consists of 4 x dead Elm trees and 3 x declining Elm trees in the wooded area (newly planted copse – with staked shelters) opposite “CELANDINE and VIOLET WAY”.

Comments:

Numerous Elm trees in this area have died off completely or are in an advanced state of decline due to Dutch Elm Disease: see section 2.2.9 in the Report narrative.

Recommendations:

Remove the 4 x dead Elm trees and 3 x declining Elm trees in this area, which pose an unacceptable risk to pedestrians using the woodland footpath.

Risk Rating: Medium

For the benefit of the local ecology and wildlife, it is recommended that wood resulting from the felled trees is stacked to create habitat piles inside the surrounding wooded area.



Group 8 (0555): Barnes Wood

Group 8 consists of 5 x dead/declining Elm trees in the wooded area beyond the staked fence line to the left of the access road to “LOUDWATER HOUSE”. (Opposite “CALDBEC” garden – where T54 is located).

Comments:

One tree next to the woodland footpath is tagged - (0555).

Numerous Elm trees in this area have died off completely or are in an advanced state of decline due to Dutch Elm Disease: see section 2.2.9 in the Report narrative.

Recommendations:

Remove the 5 x dead and declining Elm trees in this area, which pose an unacceptable risk to pedestrians using the woodland footpath.

Risk Rating: Medium

For the benefit of the local ecology and wildlife, it is recommended that wood resulting from the felled trees is stacked to create habitat piles inside the surrounding wooded area.

Group 9 (-)

Group 9 consists of 5 x multi-stemmed Sycamore trees.

Comments:

All 5 trees are host to chronic, dense Ivy growth on the stems, which travels extensively into the crown frameworks. The trees are located on the right hand side of the main entrance road, close to the main Estate Sign – (“No through road” etc).

Recommendations:

General Management Recommendation: Ivy removal from all trees using a bow saw (due to very thick Ivy vines); with care not to damage the underlying bark.



Group 10 (0399) NOT ALL

Group 10 consists of a mixed group of 13 x Sycamore and Lime trees. 7 trees are located west of the west side driveway access point of "MONT AU SOURCE", 6 trees are located east of the west side driveway access point of "MONT AU SOURCE".

Comments:

All 13 trees are host to chronic, dense Ivy growth on the stems, which travels extensively into and throughout the crown frameworks.

The tagged tree (0399) is a Sycamore (Height = 18m, Stem Diameter = 450mm, Avg. Crown spread = 6m, Vitality = Good.

The Sycamore has a co-dominant split out wound on the west side, with a deep water filled cavity. Good reaction wood is present around the wound.

Probe testing suggested no significant lateral decay beyond the rear wall and sounding hammer testing suggests solid heartwood around the wound.

N.B. The trees in Group 10 are possibly third party trees, in the linear road side wooded copse adjacent to "MONT AU SOURCE".

Recommendations:

L.T.E. Ltd. to confirm the ownership and management responsibility for all trees in Group 10.

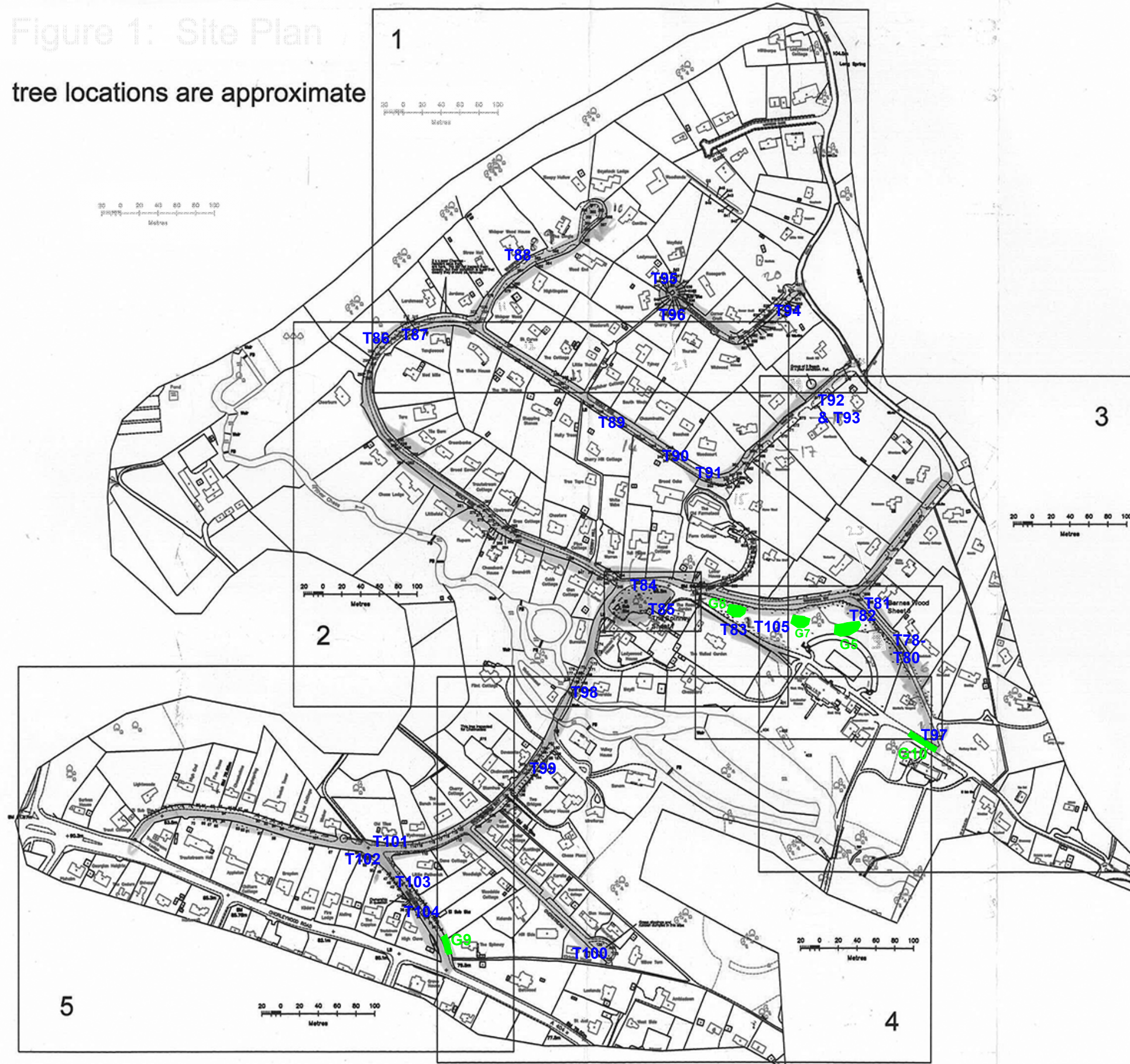
If under L.T.E. Ltd. management:

General Management Recommendation: Ivy removal from all trees using a bow saw (due to very thick Ivy vines), with care not to damage underlying bark.

Review the condition of the Sycamore (0399) in next Tree Risk Assessment survey (16 months).

If third party trees:

L.T.E. Ltd. to advise the tree owners of the above assessment comments and the recommended remedial works.



Arbol EuroConsulting

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The Loudwater Estate Rickmansworth
TREE LOCATION PLAN
(Feb. 2019 Tree Works/Assessments not carried out)

SCALE :
N/A

DATE :
8/14/2020

MAP FILENAME :
101 334

Pear Technology Services Ltd; Email: info@peartechnology.co.uk
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tree locations are approximate

