

# Tree survey at xxx

Prepared for xxx

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## 1.0 Summary

- Following an instruction from xxx I have surveyed a Common Ash, T1, in the garden of xxx adjacent to the boundary with xxx.
- T1 is in generally good health and lies within the xxx Conservation Area.
- The close proximity of a mature Leyland Cypress 'Castlewellan Gold' has resulted in a leaning habit & asymmetrical crown & root distribution. If left unchecked, the ultimate structural failure of T1 can be foreseen.
- The presence of a large amount of wood, rubble and other garden materials between T1 and the boundary wall has resulted in the transmission of forces generated by tree movement to the wall. Consequently, the wall is now significantly damaged and requires a major repair.
- The owner / occupier of xxx therefore owes a duty of care under common law to eliminate the nuisance and repair the damage. These findings should be communicated to the owner to give him/her an opportunity to respond to them.
- In this instance, abatement by pruning to the boundary would not be suitable since it would result in severe damage to T1 which could give rise to a counter-claim. It is also likely to be beyond the type of work that may be safely carried out.
- The most cost-effective solution would be to remove T1 and re-build the boundary wall along its current line. There would thus be no possibility of a problem arising from T1 in the future.
- An alternative that retains the tree would entail re-alignment of the wall to increase the gap between it and T1, construction of a lintel over the roots, and regular crown reduction. This would be costly and leaves open the possibility that damage may be caused in the future.
- Should it not prove possible to reach an amicable settlement then I believe you may have grounds to sue for damages and / or an injunction.

## **2.0 Background**

### **2.1 Instruction:**

- I have been instructed by xxx to conduct an arboricultural survey on a single early-mature Common Ash tree affecting the boundary wall between xxx andxxx.
- The client requires an assessment of tree health and safety, and of the effect the tree may be having on the wall.
- The initial enquiry was received verbally on July 24<sup>th</sup>, 2011 with preliminary visits made on July 29<sup>th</sup>, 2011, 21<sup>st</sup> March, 2012 and 20<sup>th</sup> May 2012. An instruction to proceed was received by e-mail on June 19<sup>th</sup>.
- Inspection took place on June 28<sup>th</sup>, 2012, at 08:00hrs.

### **2.2 Techniques used:**

- Visual Tree Assessment (VTA; Lonsdale, 1999).
- Aerial inspection.
- Desk-based enquiries: TPO / CA status, geological survey, mapping.

### **2.3 Limitations:**

- Specialist arboricultural surveys (decay detection, root collar examination) have not been made.
- Specific laboratory investigations of soil properties (plasticity index, moisture content & suction pressure) have not been made.
- Specific information relating to the foundation construction and any history of subsidence / recovery / heave (and its remediation) was not available.

### **2.4 Weather conditions:**

Overcast, drizzle, wind force 2.

### **2.5 Access conditions:**

Access was hindered by the presence of large amounts of wood & rubble between the tree and the wall, and by hard surfaces below T1.

### **2.6 Validity:**

- Plants are biological organisms and change with time. Assessment remains valid for six months from the date of inspection, or until a major storm is experienced, after which time a new inspection is required.
- The contents are intended for the sole use of the client in discussions with the tree owner. No liability is accepted for their use by any other parties.

### **2.7 Background information:**

- The tree lies within the xxx Conservation Area and xxx District Council will require notification of your intention to carry out any work to it. The presence of a Tree Preservation Order has not been investigated.

### 3.0 Results:

#### 3.1 Situation:

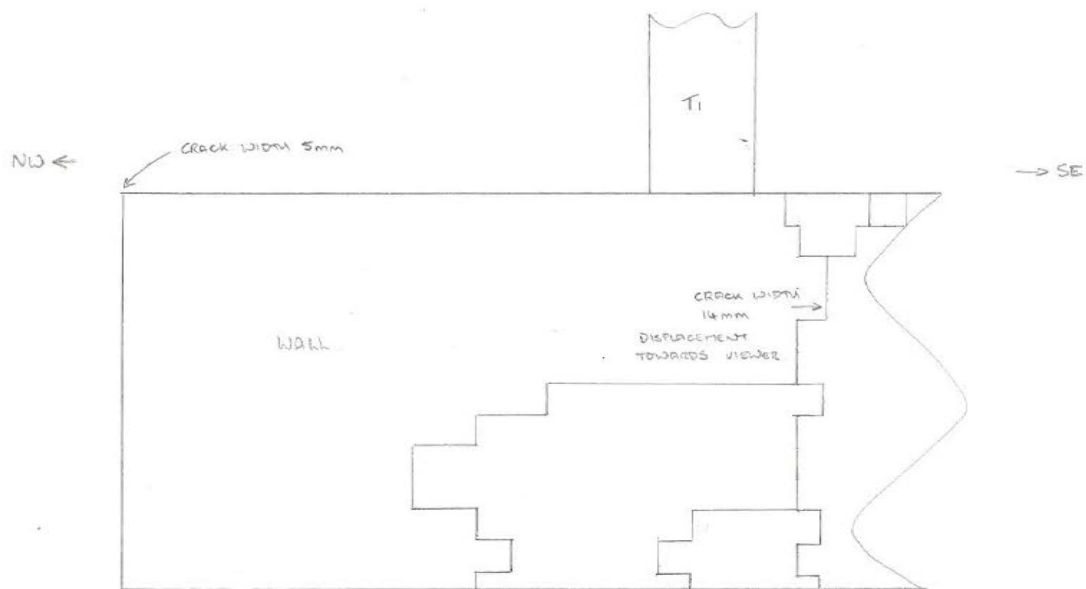
- The property occupies a gently sloping site at an elevation of approximately 60m (Ordnance Survey Explorer Sheet 193) in a residential suburban setting.
- This is a relatively unexposed location near the centre of Hitchin. Locally, ground rises gently towards xxx Hill in the south east (95m), and slopes away towards the River xxx nearby to the west (55m)
- Surface deposits are undifferentiated glaciofluvium (chalky sand & gravel. Underlying geology consists of Lower Chalk formations (BGS Sheet 221).
- Soil type is described as a slightly acid loamy and clayey soil with slightly impeded drainage of moderate to high fertility (LandIS).
- The Common Ash tree (T1) is situated in the garden of xxx close to a brick-built boundary wall with xxx. The wall is in the ownership of xxx while the tree is in the ownership of xxx; ownership has not been disputed.
- Damage to the wall has been noted and the tree implicated as its cause.

### 3.2 Site plan:

Plan removed to protect identity of parties.

Plan showing location of trees T1 and T2 at xxx

### 3.3 Wall damage:



- Wall of modern brick with older capstones built on concrete strip foundation of unknown depth. Style of brick is consistent with that used in the construction of the house at xxx. The house was constructed c.1991 and it seems reasonable to assume that the wall is of a similar age.
- Gap between tree and wall is 140mm at narrowest point and 250mm at widest. Gap full of wood / brick which contacts both tree and wall.
- Crack starts at top of wall immediately to east of tree and follows brick courses to ground level immediately below and to the west of the tree.
- Damaged section displaced towards south west by 12mm.
- Crack at right-angled intersection of wall with next garden wall 5mm wide. Walls not keyed in together.

### 3.4 Tree Assessment:

Ref. No.	Species	Height (max height) (m)	Girth (mm)	Stem diameter (mm)	Branch spread (m)		Crown clearance (m)	Age class	Physiological condition	Structural condition	Management recommendation	Estimated remaining contribution	Category Grading	Threat category
					N	S								
1	Common ash ( <i>Fraxinus excelsior</i> )	14 (23)	1100	350	N	0.5	5	EM	Fair	Fair	Remove deadwood	20-40	B2	Negligable
				E	4e									
				S	6									
				W	6									
2	Leyland cypress (x <i>Cupressocyparis leylandii</i> 'Castlewellan Gold')	17 (20)			N	4	2.5	M	Good	Good		20-40	A1	Negligable
				E	5									
				S	5									
				W	5									

#### Visual Assessment

- Overall T1 appears to be in good health: leaf flushing has proceeded throughout the tree at the same rate and is at an appropriate stage for the time of year. This is an early mature tree of good vigour and significant growth potential. The approximate age of the tree is 25-30years.
- The tree is heavily suppressed by the adjacent Leyland cypress 'Castlewellan Gold'. Consequently the stem leans by 5° to the south west (ie. towards the boundary wall. The stem crosses the boundary at approx 5m above ground.
- Crown distribution is similarly affected with the majority of the crown situated over the garden of xxx.
- The overall shape of the tree and presence of healing pruning wounds suggests that the tree has been crown lifted over 10 years ago. This may have coincided with the construction of the wall.
- A black tar-like exudate was noted emanating from pruning wounds on the south west side. No wood decay, hollows or cracks could be found. The severity of this exudate has been noted to increase in the summer months and lessen during the winter. The most likely explanation is the loss of sap from bark / cambium injured by pruning. Bacterial infection cannot be ruled out.

#### Root Distribution

- The ground around T1 was heavily obscured by wood, paved surfaces, rubble, garden waste and the close proximity of T2.
- The area between the tree and the wall to the south and east of T1 was cleared and the soil dug back to reveal the roots.
- A large structural root was found to abut the wall just below the surface to the south east. The root appears to project parallel to the wall for some distance. Smaller roots were observed projecting in a range of directions.
- A further large structural root was found to project towards the north in a girdling fashion.



- Structural roots are likely to fan out from T1 to the south east and northwest in a distribution affected by the wall and T2. This is likely to result in poor stabilisation against movement of T1 towards the south west (the lean and presence of T2 will restrict movement towards the north side).

#### **Implications of tree for wall**

- T1 appears to be in a sound condition and is not expected to suffer structural failure at this stage.
- The above ground parts of the tree do not directly contact the wall under still conditions. However, under conditions of moderate to strong wind, because T1 leans and has poor stabilisation against south-westwards movement, contact with the wall is expected.
- The presence of wood, rubble and other materials between the tree and the wall have the effect of transmitting forces generated by the wind and the lean of T1 to the wall under light to moderate wind conditions. As T1 grows, and the stem thickens, the forces generated will increase.
- Consequently, the wall has been damaged by the combined effects of the growth habit of T1 and the presence of material between the tree and the wall.
- Structural tree roots do not appear to be pushing the wall over at this stage.
- Smaller conductive and absorptive roots are likely to pass under the wall and into the garden of xxx.
- In the future, the close proximity of T2 will continue to affect the growth of T1 such that it will encroach further over the boundary. It is expected that damage to the wall and general nuisance caused will worsen.
- It can be reasonably foreseen that the combined effects of leaning habit, asymmetrical crown and root distribution, and the presence of T2 could lead to the structural failure of T1. This would clearly result in great damage to the wall, the garden of xxx and could, conceivably, result in personal injury of persons nearby.

### 3.5 Legal background

#### The Common Law remedy of Nuisance

- Trees may be held to cause a nuisance (in the legal sense) when they encroach on a neighbour's land either by branches or roots. In the case of *Davey vs. Harrow Corp* (1958): "In our opinion, it must be taken to be established that, if trees encroach, whether by branches or roots, and cause damage, an action for nuisance will lie."
- In the case of *Leakey vs. National Trust* (1980): there is "a duty to do that which is reasonable...to prevent or minimise the known risk of damage or injury..." which arises when, "the defendant has or ought to have had, knowledge of the existence of the defect and the danger thereby created."
- Ownership is crucial in determining liability. The owner of the tree bears a common law 'duty of care' towards those who might be affected by their property, ie. their neighbours and those who might enter their property.
- Mynors (2011) has written that in the case of overhanging branches, "the owners of the trees [should be notified] to see if some suitable works could be carried out," and in the case of actual damage that, "the owners of nearby trees [should be promptly notified] who should then carry out appropriate investigative work." Furthermore, "if a tree is (or probably is) responsible then either: the tree should be either pruned or felled as appropriate, or the building should be underpinned, or otherwise strengthened... Either will have to be at the expense of the tree owner."
- The common law remedy of 'abatement' means in its simplest form that an owner or occupier (but not his or her family, guests, lodgers or employees) has the right to cut back an overhanging tree to the boundary. However, this can be considered an un-neighbourly act likely to create more problems than it solves. The aim is to 'abate the nuisance' but that could harm the tree requiring the owner of it to carry out professional works for which a counter-claim could be levied. Indeed, in *Lemmon vs. Webb* (1895): "where some alternative remedy could be effected without mischief to the tree owner, that remedy ought to be preferred," and in *Dayani vs Bromley LBC*: works should be carried out with "reasonable care."
- There is no legal duty to give notice to the tree owner but I would strongly recommend that you do so.
- The material removed from the tree remains the property of the tree owner and should be offered back to them. If they decline to take it you are not at liberty to place it on their land since this could be construed as 'fly-tipping' and a trespass may occur. However, if receipt is declined then you may dispose of it by an appropriate means.
- In *Delaware Mansions Ltd. vs. Westminster City Council* (1998): "the owner [of the property affected by the tree] is... entitled to the reasonable cost of eliminating the nuisance if it is reasonable to eliminate it."
- If matters cannot be resolved amicably between the neighbours then the owner or occupier of the land on which the tree stands may be sued under the law of nuisance for damages and / or an injunction (for example, to remove the tree). However, the cost and complexity of this approach must be weighed against the actual value of the works needed to abate the nuisance and repair the damage.

#### The Statutory Law of Nuisance (Environmental Protection Act 1990)

- Under sections 79-82 of this act a provision exists for a Local Authority to bring to an end a state of affairs which is deleterious to an individual's health.
- This remedy has not been tried in the courts yet and is likely to open up a 'Pandora's Box'. It is therefore not worth considering further.

### The Access to Neighbouring Lands Act (1992).

- This act may be relevant where consent cannot be obtained from the owner of a tree for works to be carried out to it.
- The court must be satisfied that:
  1. [it] is reasonably necessary for the preservation of A's land to carry out "the treatment, cutting back, felling, removal or replacement of any hedge, tree, shrub or other growing thing which is [situated on B's land] and which is, or is in danger of becoming, harmed, diseased, dangerous, insecurely rooted or dead."
  2. that the work cannot be carried out, or would be substantially more difficult to carry out, without access to B's land; and
  3. that neither B nor anyone else would suffer inconvenience or interference with their enjoyment of B's land.
- The court may then make an 'Access Order' specifying what may be done, where, on what date and on what terms.

### **3.6 Legal implications in the present case**

- Tree T1 is causing actual damage to your boundary wall. Ownership of the wall and the tree is not disputed. Your neighbour therefore owes you a duty of care under common law to eliminate the nuisance caused by T1 and to repair the damage.
- Given the approximate relative ages of the tree and the wall, it would seem that T1 was a ten-year-old (or thereabouts) sapling at the time the wall was constructed. It has therefore grown to create a nuisance in a manner exacerbated by the close proximity of T2 and the presence of materials placed between T1 and the wall. The wall can be considered to be of a construction otherwise suitable for its purpose which has been destabilised by T1 and your neighbour's property.
- The provisions of common law are not qualified by the type or suitability of the building construction. This is therefore immaterial to the situation.
- In this instance, abatement by pruning to the boundary would not be suitable since it would result in severe damage to T1 which could give rise to a counter-claim. It is also likely to be beyond the type of work that you may safely carry out.
- Removal of T1 is the most cost-effective option since it is of poor form, its ultimate failure is foreseeable, and T2 dominates the landscape in that part of the garden. This would allow the wall to be re-built along its current line. Options that retain the tree would entail expensive re-alignment of the wall, the construction of a lintel over the roots, regular crown reduction and would leave open the possibility that the tree might cause further damage in the future.
- You should, in the first instance, communicate these findings to your neighbour and ask that he/she takes action to resolve the problem. Any failure to take such action once the problem has been communicated to her could then constitute negligence. Indeed, it may be possible to negotiate some other settlement amicably, an attempt at which would be a necessary precursor to legal action.
- Legal action should be a last resort and may entail recovery of costs and / or a direction to remove the tree.

#### 4.0 Recommendations:

- Communicate these findings to xxx and ask that she takes action to resolve the situation and repair the damage caused.
  - The most cost-effective solution would be to remove T1 and re-build the boundary wall along its current line. There would thus be no possibility of a problem arising from T1 in the future.
  - xxx District Council must be notified of your intention to remove this tree under Section 211 of the Town & Country Planning Act (1990) as amended April 2012.
  - Tree work should be carried out by competent, trained and insured arboriculturists in accordance with BS3998:2010.
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- An alternative that retains the tree would entail re-alignment of the wall to increase the gap between it and T1, construction of a lintel over the roots, and regular crown reduction. T1 has considerable growth potential and could be expected to cause further direct damage to the re-aligned wall in the future. Indeed, since it leans and is weighted heavily towards the south west, and is supported by a weakly distributed root plate, its eventual failure can be foreseen with predictable cost implications. However, you may feel that retention of the tree outweighs the additional costs and risks and that this represents the most desirable outcome. If this were so, an agreement as to costs (immediate, ongoing and future) and legal clarification of the re-aligned boundary would be required. In my opinion this would be an unsatisfactory outcome since matters would be left open for future discussion and possible disagreement.

## 5.0 References

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British Standards Institute (2010). BS3998:2010 – Standards for Tree Work. BSI Publications, London.

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Mynors, C. (2011). The Law of Trees, Forests and Hedges, 2<sup>nd</sup> edition. Sweet & Maxwell, London.

NHBC Chapter 4.2 (2007). National House Building Council, Amersham Bucks.

Ordnance Survey (2010). Luton & Stevenage. Explorer Sheet 193. 1:25,000. Ordnance Survey, Southampton.

5.0 Photographs



Fig. 1: General view of trees T1 & T2 and the damaged wall.



Fig. 2: Close-up of damage showing displacement by 12mm to the south west.



Fig. 3: Alternative view of damage.



Fig. 4: Crack to north west of T1 where the damaged wall (left) meets the undamaged wall at the rear of xxx (right).





Fig. 5: General view of the base of T1 (left) and T2 (right) showing the presence of wood etc.



Fig. 6: Close-up after removal of hazel rods showing wood packed in between T1 and the wall.



Fig. 7: Black tar-like exudate from old pruning wound on T1. This is thought to be sap of minor significance.



Fig. 8: Droplets of exudate on ivy leaves below T1.





Fig. 9: Close-up showing rubble below T1.



Fig. 10: Close-up showing root abutting the boundary wall and a girdling root passing northwards.