



MURRAY
TREE CONSULTANCY

TREE CONDITION ASSESSMENT

AT

4-5 ALMOND CLOSE
LIVERPOOL
L26 1XL

September 2024

PM/11/09/24

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Disclaimer

The tree(s) referred to in this report are living entities and are therefore subject to natural processes. They will also be subject to changes to their environment caused by human's activities and to exceptional weather conditions. The inspection undertaken by our qualified staff relies on visual attributes of tree health and structure which can be assessed from a ground based inspection. Hidden defects which are not readily visible may not be detected. We therefore cannot wholly guarantee the condition and safety of the trees inspected beyond what can be reasonably assessed from the procedure used. We would recommend that the trees are regularly inspected and our staff will advise on the suitable frequency of these inspections.

1.0 INTRODUCTION

1.1 Professional Details

- 1.1.1 My name is Peter Murray and I have been working and studying in the Arboricultural Industry since 1989. I have many years practical and consulting experience as a Local Authority arboriculturalist and more recently as a private sector practitioner.
- 1.1.2 I so far hold the Higher National Diploma in Arboriculture and am a professional member of the Arboricultural Association. I regularly attend numerous conferences and seminars keeping up to date with latest research and best practices.

1.2 Tree Condition Assessment

- 1.2.1 An authority or any person responsible for the safety of trees is under a duty to have them inspected by a competent person at reasonably frequent intervals so that any indication of disease, possible disease, structural defect or other problem present at the time of inspection can be noted and acted upon.
- 1.2.2 This report was commissioned by Countrywide Grounds Maintenance on behalf of their clients and its purpose was to carry out a site visit at Almond Close, Liverpool, L26 1XL and to make a visual assessment on the health and stability of two significant trees as shown on the Site Plan of Appendix E and their effect on the adjacent wall.
- 1.2.3 This document provides details of their condition and recommendations for management and should be read in conjunction with the data tables of Appendix B and site plan of Appendix E.
- 1.2.4 The survey on which the findings of this report are based was undertaken on Tuesday 27th August 2024 and the weather was dry and overcast.
- 1.2.5 All trees were inspected from ground level only and all comments and recommendations made have taken into account the location of each tree, their surroundings and their likely impact on persons or property.
- 1.2.6 The limitations of this report are restricted to the persons, time, information made available and purpose for which this report has been prepared. This report does not deal with tree root/building conflicts and no information has been provided regarding soil type and no analysis undertaken by this company.

2.0 ASSESSMENT

2.1 Tree Risk Assessment

- 2.1.1 A total of two individual trees were plotted and assessed, the results are clearly described within the data of Appendix B and site plan of Appendix E.
- 2.1.2 To give assistance in reading the assessment a full arboricultural glossary of terms has been produced and can be found within Appendix A of this report.
- 2.1.3 Mature trees on and immediately adjacent any site are the most likely to cause injury to persons or damage to property, due to the size of parts that may fall in the event of their whole or partial failure. These trees have been inspected with the aim of evaluating any potential risk they present to residents and visitors to Almond Close, Liverpool, L26 1XL and the adjacent highway. The word risk, within this context, refers to the likelihood of a tree shedding branches or falling and causing injury/damage.
- 2.1.4 'Tree risk assessment' involves the process of inspecting and assessing trees for their potential to injure people and/or damage property. There are three fundamental factors that should be considered when considering the risk of tree failure and the likely outcome of such an event:
- likelihood of failure – nature of defect/characteristic of tree,
 - impact potential – size/weight of the tree part most likely to fail and,
 - target object/s – what could be injured or damaged in the event of tree failure.

2.2 Trees of the Site

- 2.2.1 The Oak tree (T1) is in good condition for its age, species and location although it has not received much maintenance in recent years. The crown is very unbalanced and has low foliage over the highway with some deadwood present. It has been previously pruned on the housing side adding to the balance issues. The only evidence of surface roots are within the internal footpath, which has been repaired but needs uncovering again and attending to. The crown also requires pruning to address the balance issues and prune low foliage away from passing vehicles as well as removing any significant deadwood.
- 2.2.2 It is recommended that the crown be reduced and re-shaped, pruning mostly on the southern side in order to create a more balanced tree. The pruning should broadly be as illustrated within the photograph below. Pruning approximately 1-2m from the house side, 3-4m from the highway side also creating a 5.5m height clearance and approximately 1m from the top. Any significant deadwood should be removed at the same time.

Recommended pruning of T1



- 2.2.3 The Ash (T2) is suffering with Ash Dieback and is difficult to say how it will affect this tree long term. This tree is also very unbalanced, which can be mostly attributed to a large southern limb that has been recommended for removal. This tree has also be recommended to be reduced by approximately 1-2m in order to remove dead branch tips and promote healthy growth. The Ivy also need stripping from around the base and removing form the wall.

T2 large southern limb



- 2.2.4 Ivy can be a big problem with roadside trees as it rapidly ascends into the tree's crown, increasing wind resistance, concealing potential defects and reducing the tree's photosynthetic capacity. Therefore, maintenance of Ivy on certain trees can be recommended. However, it is often acceptable in woodland areas as a conservation benefit,
- 2.2.5 The stone wall is significantly buckled between these two trees with missing mortar and masonry. None of the trees appear to be physically touching the wall and it is hard to say what affect the buttress area and root systems of these two trees is having on the wall. As stated within the data tables of Appendix B no surface root activity is evident on the highway side.
- 2.2.6 The only way to establish the impact of roots on this wall and indeed repair the wall is to carefully take it down by hand and then decide how it is to be re-built. Some roots may need pruning or bridging over dependent on their size and importance to the trees stability. Therefore, some input from a competent arborist and engineer will be required once the foundations are uncovered. First impressions are that this wall can be repaired whilst retaining the trees.
- 2.2.7 The data tables and plan with the Appendices are self-explanatory but should any clarification be sought then please contact me directly.

3.0 RECOMMENDATIONS

- 3.1 It is recommended that all works to the trees be carried out in accordance with the data tables of Appendix A in order to bring them into good management and continue long-term tree cover in this area. The works required to establish acceptable levels of safety for the site are listed as Priority 1 and 2. They should be carried out within the time scales indicated. Priority 3 works are advisory to establish high levels of arboricultural management and are not necessary for safety reasons. All works are summarised within the table below: -

Priority	Tree Number	Species	Description of Works
1	n/a	n/a	n/a
2	T1	Oak	Reduce and re-shape tree to create a more balanced crown pruning mostly on southern/highway side as illustrated within section 2.2 of the main report. Remove significant deadwood. Protruding root – carefully remove tarmac and dig out subbase to expose root. Under consultation decide on whether to root prune or not. Add thin layer of sub-base and re-surface.

Priority	Tree Number	Species	Description of Works
2	T2	Ash	Reduce and re-shape tree by approximately 1-2m removing dead branch tips and remove large southern limb. Sever Ivy at base to 1m. Remove significant deadwood.

3.2 Standard of work

All tree work undertaken should be done in accordance with British Standard 3998:2010 and by competent contractors insured with public liability cover of at least two million pounds.

3.3 Statutory controls

If the trees on site are subject to any Tree Preservation Orders (TPO's) or are encompassed within a Conservation Area then statutory permission from the Local Planning Authority (LPA) will be required, other than certain exemptions, before any tree works take place. The works specified above are necessary for reasonable management and should be acceptable to the local authority. However, tree owners/managers should appreciate that they may take an alternative point of view and have the option to refuse consent. These two trees are reported to be protected by a TPO but I have no information on this and it is not available on the Councils website.

3.4 Wildlife

All operations should take account of wildlife needs and be planned to take advantage of weather conditions and time of year for minimum damage and disturbance. If any protected species or nesting birds are present or discovered while the works are taking place all work should cease until contact has been made with Natural England for further advice. Natural England can be contacted on 0300 060 3900 or by e-mail to: enquiries@naturalengland.org.uk. Specific consideration should be given to the possible presence of roosting bats, which are protected by the Wildlife and Countryside Act 1981 (schedule 5) and included in schedule 2 of the Conservation Regulations 1994. Ideally, a survey should be carried out to identify any potential roost sites and if bats are found to be present advice should be sought from a person qualified and experienced in handling such matters and fully conversant with the implications of the Act.

3.5 Repeat survey's

It is recommended that a repeat survey of the trees within the site should be carried out on a two-yearly basis; next 2026.

Signed



Peter Murray (HND. ARB, M, Arbor A)
Consulting Arborist

13th September 2024

APPENDIX A – Arboricultural Glossary of Terms

The following terms are concurrent with best Arboricultural practice and within the guidelines set by the International Society of Arboriculture (ISA), the Arboricultural Association (AA) and the British Standards Institute (BSI).

Age Range: Age is site specific and categorised:

Young (Y)	Out-planted trees that have not yet established
Semi-Mature (SM)	Established trees up to 1/3 of expected height and crown
Early Mature (EM)	Between 1/3 and 2/3 of expected height and crown
Mature (M)	Between 2/3 and full expected height and crown
Fully Mature (FM)	Full expected height and crown
Over Mature (OM)	Crown beginning to break-up and decrease in size
Senescent (S)	Crown in advanced stage of break-up

Height: Height was estimated and recorded in five metre intervals such as: 0-5, 6-10, 11-15, 16-20, 21-25 and 26+

Condition: Assessment of current physiological condition and structural morphology incorporating vigour and vitality and categorised:

- A – Tree needing little, if any attention
- B – Tree with minor, but rectifiable defects, or in the early stages of physiological stress
- C – Tree with significant structural and physiological flaws and/or extremely stressed
- D – Tree that is dead, biologically/physically moribund or dangerous

Priority Rating:

- E – Emergency – Should have been reported by other means for immediate action
- 1 – High - Action should be taken immediately (within 1-2 months)
- 2 – Moderate - Work should be implemented in a programme of works (within 6-12 months)
- 3 – Low - Work that would benefit the trees which is not essential, but should be implemented if funding becomes available (preferably within 12-24 months)

Definition of Physiological & Morphological Terms

Adaptive Growth - The process whereby wood formation is influenced both in quantity and in quality by the action of gravitational force and mechanical stresses on the cambial zone.

Bifurcation – Forked or divided union.

Brown Rot - Form of decay where cellulose is degraded, while lignin is only modified.

Cankers (target or tumorous) - A localised area of dead bark and cambium on a stem or branch, caused by fungal or bacterial organisms, characterised by woundwood development on the periphery. This may be annual or perennial.

Cavity - An open wound, characterised by the presence of extensive decay and resulting in a hollow.

Chlorotic Leaf - Lacking in chlorophyll, typically yellow in colour.

Compartmentalisation - The physiological process that creates the chemical and mechanical boundaries that act to limit the spread of disease and decay organisms.

Coppicing - Is an ancient form of woodland management that involves repetitive felling on the same stump, near to ground level, and allowing the shoots to re-grow from that main stump. (Also known as the coppice stool).

Crack - Longitudinal split in stem or branch, involving bark and/or underlying wood. These may be vertically and horizontally orientated.

Decay - Process of degradation of woody tissues by fungi and bacteria through decomposition of cellulose and lignin.

Deadwood - Deadwood is often present within the crown or on the stems of trees. In some instances, it may be an indication of ill health, however, it may also indicate natural growth processes. If a target is present beneath the tree, deadwood may fall and cause injury or damage and should be removed, otherwise deadwood can remain intact for conservation purposes (insects, fungi, birds etc.).

End Weight - The concentration of foliage at the distal ends of stems and deficient in secondary branches.

Girdling Root - Root which circles and constricts the stem or roots causing death of phloem and/or cambial tissue.

Hazard Beam - An upwardly curved branch in which strong internal stresses may occur without the compensatory formation of extra wood (longitudinal splitting may occur in some cases).

Included Bark Union - Pattern of development at branch junctions where bark is turned inward rather than pushed out. Potential weakness due to a lack of a woody union.

Ivy Growth - Ivy growth may ascend into the tree's crown, increasing wind resistance, concealing potential defects and reducing the tree's photosynthetic capacity. Ivy growth is often acceptable in woodland areas as a conservation benefit.

Live Crown Ratio - The relative proportion of photosynthetic mass (leaf area) to overall tree height.

Reaction Wood - Specialised secondary xylem, which develops in response to a lean or similar mechanical stress, attempting to restore the stem to the vertical.

Root Plate Lift - The physical movement of the rooting plate causing soils to shift and crack. May occur during adverse weather conditions. Trees may become unstable.

Structural Defect - Internal or external points of weakness, which reduce the stability of the tree.

Suppressed - Trees which are dominated by surrounding vegetation and whose crown development is restricted from above.

Topping - A highly disfiguring practise, likely to cause severe xylem dysfunction and decay in major structural parts of the wood.

White Rot - Form of decay where both cellulose and lignin are degraded.

Wound - Any injury, which induces a compartmentalisation response.

Woundwood - Wood with atypical anatomical features, formed in the vicinity of a wound and a term to describe the occluding tissues around a wound as opposed to the ambiguous term "callus."

Woodland Structure - The vertical and horizontal arrangement of trees within a group or woodland i.e. Dominant - trees with a crown above the upper layer of the canopy, Co-dominant - trees that define the general upper edge of the canopy, Intermediate - trees that have been largely overgrown by others, Suppressed - trees that have been overgrown and occupy an under storey position and grow slowly, often severely asymmetrical.

Note: The definitions described above, may not necessarily be included within the Arboricultural Survey Data.

APPENDIX B – Tree Survey Data

Tree Condition Assessment: 4 Almond Close, Liverpool, L26 1XL

Date: 27th August 2024

Weather: Dry & overcast

Surveyor: PM

Tree No.	Species	Height (m)	Age	Condition Rating	Comments	Recommendations	Priority Rating
T1	Oak	11-15	M	A/B	A large mature specimen located to rear of stone wall within slightly raised planter. Slight southern stem lean. Biased crown to the south over the highway due to orientation and previous pruning on the north side adjacent to housing. Low foliage over highway kept in check to some degree by passing vehicles. Stem shoots from previous pruning and old wounds. Good vigour and branch structure. Internal footpath highly raised due to root growth and has been previously repaired. It is hard to say what size root is beneath but sometimes a root can push on the sub-base making it look worse than it is. Minor deadwood in crown mostly on highway side, which hasn't been touched in a good while. The wall between these two trees has a significant lean into the highway with loose joints and missing mortar/masonry. This tree is not touching the wall but its buttress area may be affecting the foundations. No root activity was obviously visible from the highway side and there has previously been some trenching near the wall.	Reduce and re-shape tree to create a more balanced crown pruning mostly on southern/highway side as illustrated within section 2.2 of the main report. Remove significant deadwood. Protruding root – carefully remove tarmac and dig out subbase to expose root. Under consultation decide on whether to root prune or not. Add thin layer of sub-base and re-surface.	2

APPENDIX B – Tree Survey Data							
Tree Condition Assessment: 4 Almond Close, Liverpool, L26 1XL				Date: 27 th August 2024		Weather: Dry & overcast	
						Surveyor: PM	
Tree No.	Species	Height (m)	Age	Condition Rating	Comments	Recommendations	Priority Rating
T2	Ash	11-15	FM	B/C	A fully-mature specimen located to rear of stone wall within slightly raised planter. Biased crown to the south over the highway mainly due to one large limb and previous pruning on the north side adjacent to housing. Stem swamped in Ivy, which has also spread over wall. Internal footpath affected by root growth and has been previously repaired but has stayed fairly level. This tree is significantly affected by Ash Dieback and may have limited potential. Major and minor deadwood present. The wall between these two trees has a significant lean into the highway with loose joints and missing mortar/masonry. This tree is not touching the wall but its buttress area may be affecting the foundations. No root activity was obviously visible from the highway side and there has previously been some trenching near the wall.	Reduce and re-shape tree by approximately 2m removing dead branch tips and remove large southern limb. Sever Ivy at base to 1-2m. Remove significant deadwood.	2

Recommended works should be carried out to the *British Standard Recommendations for Tree Work, BS 3998:2010*

APPENDIX C – Digital Photographs

T2

T1

T1 Oak unbalanced crown



T1 major root disturbance to internal path

T2 Ash major southern limb and Ash Dieback



T2 previous footpath repair



T1 major southern crown spread over highway



Listing wall and deadwood from trees, Ivy on wall.



T2



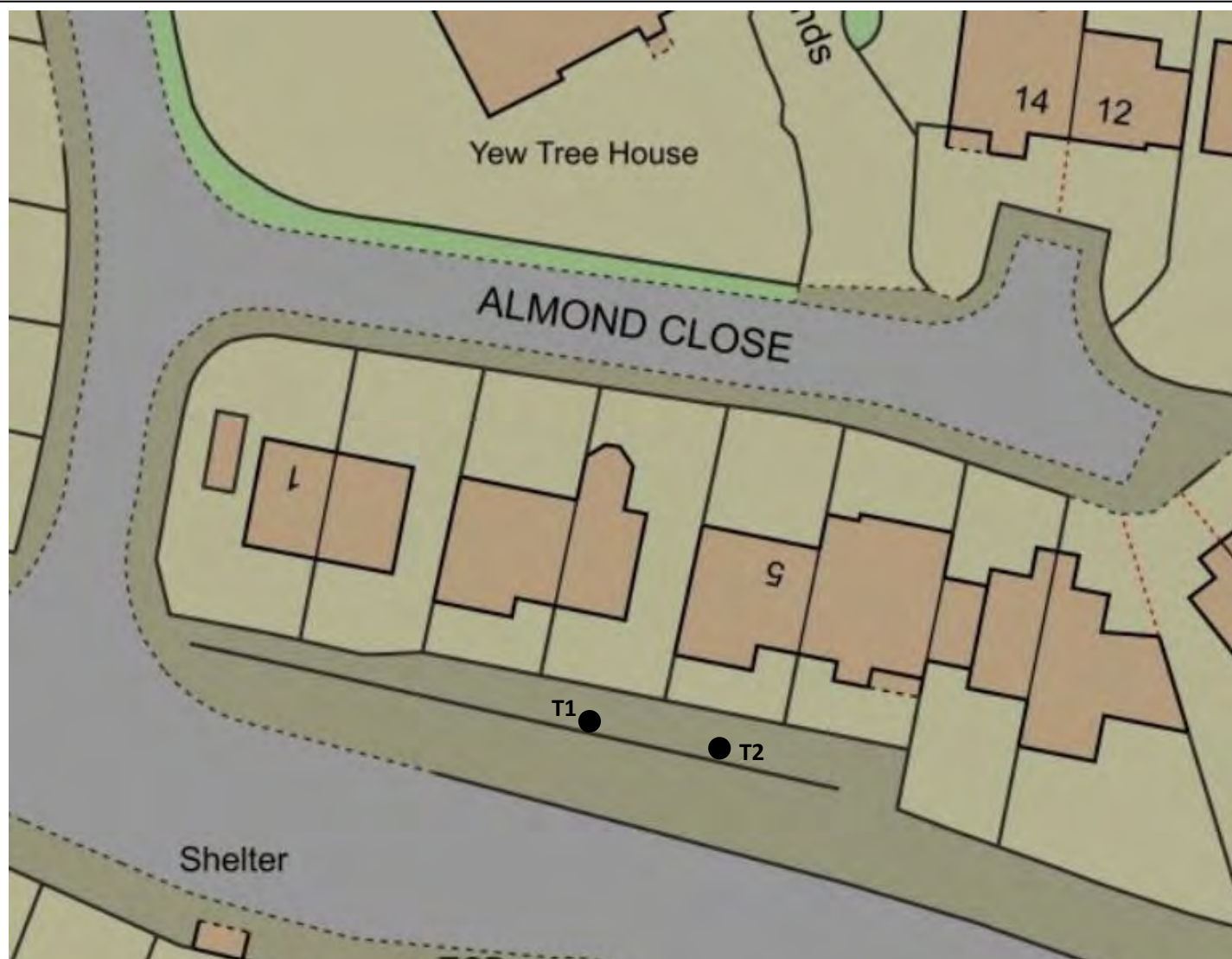
T1



APPENDIX D – Key References

1. *Lonsdale, D. (1999) Principles of tree hazard assessment and management, Research for amenity trees No. 2. HMSO, London. ISBN 0-11-753355-6*
2. *Mattheck, C. and Belier, H. (1994) The body language of trees. Research for amenity trees No. 4. HMSO, London. ISBN 0-11-753067-0*
3. *Shigo, A. L. (1989a) A new tree biology. Shigo and Trees Associates, Durham, New Hampshire. ISBN 0-943563-04-6*
4. *Stouts R. G. and Winter T. G. (1994) Diagnosis of ill-health in trees, Research for amenity trees No. 2. HMSO, London. ISBN 0-11-752919-2*
5. *British Standard BS 3998: (2010) Tree Work-Recommendations. ISBN 978-0-580-53777-6*

APPENDIX E – Site Plan



Tree Location Plan – 4 & 5 Almond Close, Liverpool, L26 1XL
Tree Condition Assessment – August 2024