

LYNWOOD AVENUE/
LYNWOOD ROAD,
EPSOM

TREE REPORT

For

MR STEERE



Written By:	M. Jones
Checked By:	H. Pinn
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Table of Contents

1. Instructions and Terms of Reference	3
2. Statutory Controls	3
3. Scope and Method of Inspection	5
4. Discussion and Conclusions	5
5. Recommendations and Options	9
APPENDIX 1: TREE SURVEY SCHEDULE	12
APPENDIX 2: TREE LOCATION PLAN	13

1. Instructions and Terms of Reference

1.1. ACD Environmental was instructed to visit Lynwood Avenue/ Lynwood Road Junction, Epsom by Mr Steere in October 2021, and to survey the subject tree, making tree management recommendations as required.

1.2. The controlling authority is Epsom and Ewell Borough Council, who can be contacted at:

Address: Development Control
Epsom & Ewell Borough Council
Town Hall, The Parade
Epsom
Surrey
KT18 5BY
Email: businessadminhub@epsom-ewell.gov.uk
Telephone: 01372732000

1.3. Any questions relating to the content of this report should be directed in the first instance to: ACD Environmental, 4 & 5 The Old Mill, Fry's Yard, Bridge Street, Godalming, Surrey, GU7 1HP 01483 425 714/07796 832 490, quoting the site address and report reference number.

2. Statutory Controls

2.1. We have consulted the Epsom and Ewell Borough Council interactive mapping system, and this suggests that the subject tree is not protected by a Tree Preservation Order (TPO). However, the tree is located within the Burgh Heath Road Conservation Area, as shown at Figure 1 below.

Figure 1: Extracts from the TPO Schedule and Map of TPO 1502/2015, confirming that both trees are covered by the order.



2.2. Therefore, the LPA will require notification of any intention to undertake work to the subject tree. The LPA then has a statutory consultation period of six weeks in which to either approve the proposed specification, or to make a new TPO to preserve the tree; it cannot simply refuse a notification.

3. Scope and Method of Inspection

- 3.1. We have been instructed to assess only the tree included in the tree survey schedule shown at Appendix 1.
- 3.2. This inspection has been carried out from ground level using the Visual Tree Assessment (VTA) system (Mattheck & Breloer 1994). Visual tree assessment has been the conventional method of assessment used in surveying and inspecting trees for a number of years. This term describes a general approach to tree surveying using visual observation and recording, combined with experience and knowledge of tree biology and structure, to draw conclusions about tree condition. The VTA system is a systematic approach that guides the inspector through a process from initial biological and mechanical observations through to diagnosis, using knowledge of failure criteria.
- 3.3. No tissue samples were taken nor was any internal investigation of the subject tree undertaken.
- 3.4. The survey is a report of what was noted at the time. Trees can change condition quickly over time and therefore regular inspections are recommended.

4. Discussion and Conclusions

- 4.1. The primary driver for ACD being instructed to complete this survey was the perceived, gradual increase in the angle at which the trees' trunk leans.
- 4.2. On inspection, it was noted that a large proportion of the notional circular Root Protection Area (RPA), determined by a formula based on the diameter of the trunk, was covered in non-porous, tarmac hard surfacing which makes up the wearing courses of both Lynwood Avenue and Lynwood Road, and this surfacing extends to within 1m of the base of the tree; direct damage to roots in these areas may have occurred historically.
- 4.3. The morphology of the root-trunk transition zone shows some evidence of reactive growth and swelling, presumably to stabilise the tree's heavily leaning trunk, which is weighted towards the west.

Photographs 1 and 2: showing the tree's current location and growing environment (below left) and a detailed photo of the root-stem transition zone, with some reactive growth (below right).



Photograph 3: showing significant surface roots

4.4. Moreover, the shallow surface roots on the north-east aspect now protrude through the mown grass area and are visible to approximately 3.5m from the trunk, where there is evidence of damage on their upper sides, consistent with being struck by a lawnmower or similar, before they then drop below the grass again. The formation of this rooting habit is likely due to a combination of factors: firstly, the heavily leaning trunk requires reactive



growth to compensate for forces acting on the canopy, and the underlying soil geology, which is likely to be predominantly chalk, which may pose a physical barrier to deep root growth. Soil information is referenced via the Geology of Britain interactive map by The British Geological Survey, available at [this link](#).

- 4.5. As reactive growth on broad-leafed trees is typically found on the tension side of a lean, as opposed to a coniferous specimen where reaction growth is typically found on the compression side, it could reasonably be expected that there would be more abundant reactive growth than shown at Photograph 2 above if the angle of lean had remained constant.
- 4.6. The Client alleges that the angle of trunk lean has increased continually over the past few years. Our assessment of the condition and morphology of the tree is inconclusive. However, on balance, the morphological features of the tree's lower stem and root system suggest that a sudden increase may have occurred, but that the tree is actively seeking to react to any potential change. It is acknowledged that the tree is located within a sub-optimal growing environment, which may have some bearing on future management requirements.
- 4.7. As a secondary observation, we noted the presence of *Auricularia auricula-judae* (Wood Ear) fungus near a historic pruning wound on a low branch in the western portion of the canopy. The fungus is largely considered saprotrophic but can act as a weak parasite and is indicative of dysfunction when located near pruning wounds and may be an indicator of the more problematic Massaria Disease (*Splanchnonema platini*), on London Plane trees.
- 4.8. Massaria Disease is a discrete fungal infection that causes strip cankers to form on the upper surfaces and along the length of infected branches. Due to its inconspicuous nature, it is often not visible from ground level and can lead to the sudden failure of infected branches if not identified.

Photographs 4 and 5: showing the location and detail of the fruiting bodies of *A. auricula-judae* fungus



4.9. To quantify the risk posed by the observations discussed above, we have used the International Society of Arboriculture’s (ISA) Tree Risk Assessment Qualification (TRAQ) methodology, as detailed at Table 1 below.

Table 1: ISA TRAQ matrices.

Defect	Likelihood of failure	Likelihood of impact	Combined likelihood	Consequences of failure	Risk rating
Leaning trunk	Possible	Medium	Unlikely	Severe	Low
<i>A. auricula-judae</i> fungus	Possible	Medium	Unlikely	Significant	Low

4.10. In both cases, a low overall risk rating has been generated using this formulaic approach. The acceptable level of risk posed by a tree should be determined by The Client, based on the observations of a suitably qualified professional, balanced with the need to preserve trees for amenity and ecosystem service provision; but it is stressed that the safety of the public is of utmost importance.

4.11. Therefore, our recommended pruning specifications are presented below. These seeks to further minimise the risk posed by the tree, whilst striking a balance with the above factors.

5. Recommendations and Options

Principal recommendation

1. **Within 6 months:** Reduce canopy with a long-term objective to reduce the tree to 6m in height.
 - First reduction in height to be to c. 10m and lateral branches to c. 3m. A period of physiological recovery of two years should be allowed before further works are completed.
 - **Then, within 3 years:** reduce canopy to final height of 6m and lateral spread of 1m.
 - **Thereafter:** maintain extents by undertaking biennial removal of new growth.

This approach will progressively reduce the trees overall stature, and therefore the forces acting upon it, including gravity and torsional forces created by the wind, to such an extent that in the event of total failure at its base, only the road will be affected.

Alternative options

2. **Within 6 months:** Section fell the tree to ground level and replace with another London plane tree.

This option is likely to be the most cost-effective way of managing the risks posed by the tree.
3. **Within 6 months:** Undertake an aerial inspection of the tree to determine whether Massaria Disease is present, and to what extent.

Further recommendations to be based on this assessment if completed.

5.1. Irrespective of the preferred management option, a cyclical inspection regime should be employed, with an inspection of the tree's condition taking place no later than 2 years from the date of this inspection, and continually thereafter on a recurring basis.

5.2. As the tree is within a conservation area, any work will require the council's consent for which a conservation area notification will be required. This report can be used to support this process.

5.3. Attention is drawn to the provisions of the Occupiers Liability Acts, which place a responsibility upon landowners to ensure the safety of others entering their land. There is a special responsibility to ensure the safety of children, who may be unaware of danger. Regular inspections of your trees by a competent person, or following storm conditions if sooner, together with implementation of any recommendations, should ensure compliance with the legislation regarding tree safety.

5.4. Notice must also be taken that it is an offence under the Wildlife and Countryside Act and Countryside and Rights of Way Act to disturb a nesting bird or roosting/breeding bat. Further advice, particularly if bats are discovered during tree work, may be obtained from ACD's Ecologist, if required.

Matthew Jones *FdSc MArborA*
Senior Arboriculturist

15 October 2021

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CLIENT: Mr Steere
SURVEYOR: Matthew Jones
SITE: Lynwood Avenue/ Lynwood Road Junction, Epsom
DATE: October 2021

TAGGED? No

APPENDIX 1: TREE SURVEY SCHEDULE

Ref	Species	Measurements	Description	Survey Notes	Condition	Inspect Period
T001	London Plane <i>(Platanus x hispanica)</i>	Height (m): 14 Crown Radius (m): 7 DBH (cm): 65 Life Stage: Mature Life Exp.: 20+ Years	Overhangs Junction between Lynwood Road and Lynwood Avenue. Targets include pedestrians, cars and third-party property	Tarmac extends to within 1m of base on SW aspect; evidence of damage associated with incremental growth of structural roots within tarmac, extending to 1.9m; prominent surface rooting on NE aspect extending to 3.5m, consistent with expected biomechanical adaptation of broad-leafed species to heavy trunk lean; depression forming between individual surface roots to the N and NE; some reaction wood noted at root-stem transition zone on NE aspect but quantity and angle of transition zone is below expectation for a long-standing stem lean, possibly suggestive of a sudden increase in stem lean at some point; little evidence of notable self-correction on main trunk for c. 10m of structure; lateral growth largely parallel with ground level; <i>Auricularia auricula-judae</i> noted on historical pruning wound in lower canopy on S aspect; overall vitality appears consistent with a healthy specimen in terms of leave size, colour and density; subject of a c. 5-yearly cyclical pruning regime	Fair	2 Years

Notes: Dia (stems): trunk diameter in mm at 1.5m above ground level | **HT (crown):** Tree height | **Life stage:** **Y:** Young (obviously planted within the last three years (unless as a heavy or extra-heavy standard)). **SM:** Semi mature (recently planted and yet to attain mature stature; up to 25% of attainable age.). **EM:** Early mature (almost full height, crown still developing and seed bearing; up to 50% of attainable age.). **M:** Mature (full height, crown spread, seed bearing; over 50% of attainable age.). **OM:** Over mature (full size, die-back, small leaf size, poor growth extension.)

APPENDIX 2: TREE LOCATION PLAN



Head Office

Rodbourne Rail Business Centre
Grange Lane
Malmesbury
SN16 0ES
Tel: 01666 825646

Surrey Office

4 & 5 The Old Mill
Fry's Yard
Bridge Street
Godalming
GU7 1HP
Tel: 01483 425714

Hampshire Office

Suite 6
Crescent House
Yonge Close
Eastleigh
SO50 9SX
Tel: 02382 026300

Email: mail@acdenv.co.uk

Website: www.acdenvironmental.co.uk

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MANAGEMENT**