



Welsh-Wood

Arboricultural Consultancy

Tree Condition Survey (Hazard Assessment)

Arboricultural Report

Presented to:

Mr. Guy & Mr. Griffiths

Regarding:

12/14 Applewood Close,
Wrexham
LL13 7GU

Ref: NEB 20002

Executive Summary

- S1** Welsh-Wood Arboricultural Consultancy has been instructed to undertake a tree condition survey of all Birch trees located at the listed addresses, and make recommendations for their management. The listed addresses are two neighboring residential properties.
- S2** The trees form part of a larger row of trees running along the rear garden boundaries between Applewood Close and Valley Way. The trees are subject to Tree Preservation Orders. This information was provided verbally by Wrexham County Borough Council.
- S3** A site visit was undertaken on 19th August 2020. Three of the trees (T1 – T3) are in a fair to good condition requiring no remedial action. T4 has been recommended for removal due to its poor condition and the presence of a decay pathogen. T5 has been scheduled for retention however given its condition should be considered for long term removal and replacement. In addition it has been recommended that this tree is inspected on a more frequent regime if retained.
- S4** These factors are all discussed in more detail within this report and a full inspection record for the trees can be found within Appendix 1.
- S5** It must be noted that trees provide essential habitat for birds and bats and as such any proposed works must be carried out in full consideration of the law. Birds, bats and their habitats are afforded protection within the Wildlife and Countryside Act 1981 and The Conservation of Habitats and Species Regulations 2010 (as amended).

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1.0 Introduction

- 1.0.1 This report details the findings of a tree condition survey (hazard assessment) at the listed address and has been prepared in compliance with best industry practice.
- 1.0.2 All trees inspected by Welsh-Wood are surveyed using current visual tree assessment (VTA) methods. The Visual Tree Assessment methodology (VTA) as devised by Prof. Dr. Claus Mattheck is an internationally recognised industry standard for tree inspection.

1.1 *Brief/Instruction*

- 1.1.1 Welsh-Wood Arboricultural Consultancy has been instructed by Mr. Guy to undertake a survey of all Birch trees within the boundary of 14 Applewood Close. Mr. Griffiths is resident at No. 12 and requested a similar inspection within his property as an addition to the initial commission. The purpose of the survey is to assess the trees, report on the findings and make recommendations for their management.

1.2 *Qualifications and experience of surveyor*

- 1.2.1 The author holds the Higher National Certificate in Arboriculture, and LANTRA Professional Tree Inspector qualifications, and has worked in the arboricultural industry for 18 years as a Local Authority Tree Officer, Arboricultural Consultant and Lecturer in Arboriculture.

1.3 *Caveats and Limitations*

- 1.3.1 This report relates specifically to the condition of the tree upon the day that the inspection was carried out.
- 1.3.2 Inspection was carried out from ground level, with use of binoculars where necessary. No climbing inspection was conducted.
- 1.3.3 No detailed analysis of soil samples was undertaken. Root areas and possible underground conflict interaction were only investigated insofar as a surface visual inspection.
- 1.3.4 All legal documentation and information given to and used for the purposes of this report by Welsh-Wood Arboricultural Consultancy is presumed accurate.
- 1.3.5 The report is valid only for typical weather conditions. Healthy trees, or parts of healthy trees, may fail in unusually high or unpredictable winds or violent storms and as such the

consequences of such weather phenomena are unforeseeable. It follows that Welsh-Wood Arboricultural Consultancy cannot be held liable for any such failures.

- 1.3.6 Where trees fall under the protection of the Local Council, for example by means of Tree Preservation Orders or Conservation Areas, permission for or notification of works will be required before any works begin. It should be noted that the Local Council may not share the views presented in this report.
- 1.3.7 All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means; electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without the written permission of Welsh-Wood Arboricultural Consultancy. Its content and format are for the exclusive use of the addressee in dealing with this claim / site / situation. It may not be sold, lent, hired out or divulged to any third party not directly involved in this claim / site / situation without written consent from Welsh-Wood Arboricultural Consultancy.

2.0 Survey

2.1 Site Visit

- 2.1.1 A site visit was undertaken by the author on 19th August 2020. The weather conditions during the site visit were dull with light rain which posed some constraint to assessment as light levels were low. In addition wet bark appears dark and can as such can mask some defects, signs or symptoms.
- 2.1.2 There were no other significant constraints to assessment although as the trees were in full leaf some parts of the canopy were obstructed. No action to facilitate a more detailed inspection of the trees is deemed necessary at this time.

2.2 Site description

- 2.2.1 The site consists of two neighboring residential properties. Both number 12 and 14 are detached properties serviced by front and rear gardens.
- 2.2.2 The rear gardens contain a row of trees set along the west site boundary, which affronts the rear gardens of additional residential properties.
- 2.2.3 The properties were built circa 1999 and as such the trees were likely present at the time of development and retained as a screen between the two opposing rows of houses.
- 2.2.4 The rear garden of No.14 comprises formal lawns and shrub and flower beds. The rear garden of No.12 has been landscaped and consists predominantly of gravel beds over vegetative barriers.
- 2.2.5 The overall site topography is flat and there is no evidence of a prevailing wind.

3.0 Tree Condition Assessment

3.1 Tree Description

- 3.1.1 This report relates to the survey of 5 trees, 2 situated in the rear garden of No.14 and 3 situated in the rear garden of No.12. All trees are along the western site boundary.
- 3.1.2 A full schedule for the trees can be found in Appendix 1 of this report however significant factors are discussed below.

3.2 Species and Age Distribution

- 3.2.1 All 5 trees are Silver birch or Weeping Birch (*Betula pendula*). They have been classified as mature and semi mature in age, although it must be noted that an age category relates to a period of a trees life that may cover several decades or in case of some other, longer lived trees centuries.

3.3 Structural Condition

- 3.3.1 Structural condition relates to the form of the trees, in particular a specimen that has developed as multi stemmed from the base or may have developed poor branch structure that renders it susceptible to failure in the future.
- 3.3.2 No significant structural defects were noted however, T3 has self-bracing branches. Self-bracing branches occur when the path of two or more branches meet and they begin to grow together or coalesce. No remedial action to address this is deemed necessary.
- 3.3.3 T5 was originally multi stemmed at the base however two stems have subsequently been removed.

3.4 Physiological Condition

- 3.4.1 Physiological condition relates to the health of the tree surveyed.
- 3.4.2 T3 has two pruning wounds between 1.0-1.5m with decay visible. The extent is unknown but not deemed as a significant defect at this time.
- 3.4.3 T4 has buttress wounding with advanced decay and necrotic bark. *Kretzschmaria deusta*, an aggressive root and stem rotting fungus, is also present. *Kretzschmaria*

deusta is particularly discrete and appears as small black crusted areas which are the fruiting body of the fungus itself.

- 3.4.4 In addition a pruning wound with advanced decay and pseudoschlerotial plating was noted on T4 at 1.5m. Pseudoschlerotial plating is a sign of infection from a decay pathogen.
- 3.4.5 Decay pathogens in trees degrade live wood and can result in branch or tree failure. Kretzschmaria deusta is associated with root and stem rot. It causes what is known as a soft rot, which preferentially degrades the cellulose in wood, the component that facilitates flexibility. As such the resultant fracture of the stem is brittle and may be sudden. As a result T4 has been scheduled for removal. (LONSDALE 1999)
- 3.4.6 T5 has two large pruning wounds at the base as a result of the historic removal of two main stems. Both are decayed and appear stained however the extent of the decay is unknown. The crown of the tree is suppressed and in decline with die back and deadwood throughout. It is deemed premature to recommend the removal of this tree at this time; however consideration should be given to its long term removal and replacement due to its condition and the presence of the decay pathogen on site.

3.5 *Summary of Works*

- 3.5.1 The removal of T4 has been recommended under a *five day notice provided to the Local Planning Authority with regard the Tree Preservation Order. It is also recommended that consideration is given to the removal of T5.
- 3.5.2 No other remedial action has been specified at this time.
- 3.5.3 *Given the presence of Tree Preservation Orders it is necessary to either make a supported application for any proposed tree works, or give 5 days' notice of the intent to carry out works to a dead or dangerous tree. This notice must be given in writing and it is likely that the Arboricultural Officer will complete a site visit to confirm that the proposed works are justified under the 5 days' notice and can proceed.

4.0 Recommendations

4.1 *General Recommendations*

- 4.1.1 On receipt of permission from the Local Planning Authority the tree works should be completed by an appropriately qualified and insured arboricultural contractor, following the specification provided in this report.
- 4.1.2 It is also important that the contractor sanitises their equipment appropriately on completion of the works to prevent spread of the identified pathogen.

4.2 *Future Inspections*

- 4.2.1 It is recommended that the remaining trees are inspected again in 2 years from the date of this report and the inspection record updated accordingly.
- 4.2.2 However it would be prudent to inspect T5 in 1 year from the date of this report, given its condition and historical wounding relevant to the on-site pathogen if it is retained.
- 4.2.3 All inspections should be carried out by a qualified and competent arboricultural consultant who must be made aware of the details of this survey.
- 4.2.4 If any significant changes to the trees appearance is noted in the meantime the advice of an arboricultural consultant should be sort. This includes any significant changes to the immediate and adjacent environment the tree is situated in such as any ground disturbance.

Appendix 1 - Tree Survey Data

Name: N Brewin **Site:** 12/14 Applewood Close, Wrexham LL13 7GU
Date: 19/08/2020

Tree ID	Numerical value assigned to the tree or group, includes TPO feature reference where applicable.	
Botanical & Common Name	Botanical and common name recorded	
Height	Height estimated to the top of the central canopy in metres	
DBH	Depth of main stem measured at 1.5m in centimetres	
Age Class	One of five categories: Y - Young, under 10 years of age, SM - Semi mature, well established but yet to reach full potential, M - Mature, more or less full height and large girth, increasing only slowly, OM - Over mature, beyond two thirds of the life expectancy of their species. No significant extension growth. Crown starting to break up and decrease in size. V - Veteran, Tree that shows features of biological, cultural or aesthetic value that are characteristic of an individual surviving beyond the typical age range for the species.	
Condition Category	One of four categories: Good - Tree in healthy condition or with minor defects of no significance, Fair - Trees with some defects which can be rectified without removing the tree or those that may require more frequent inspections, Poor - Trees with one or more significant defects, Dead - Trees which show no signs of life.	
Comments	Significant comments relating to condition, form or environment	
Management Prescriptions	Works recommendations	
Works Priority	One of three categories: (H) High-recommended works to be carried out within three months, (M) Medium- recommended works to be carried out within six months, (L) Low-recommended works to be carried out within one year.	

Tree ID	Botanical Name	Common Name	Height (m)	DBH (cm)	Age Class	Condition Category	Comments	Management Prescriptions	Priority
1	<i>Betula pubescens</i>	Silver birch	13	59	M	Good	Two primary co-dominant stems at 2m. Vigorous crown. Ivy on stem severed and now dead.	No works required.	N/A
2	<i>Betula pubescens</i>	Silver birch	11	25	SM	Fair	Asymmetrical form due to adjacent tree cover and suppressed form. Limited dieback and deadwood (1 - 2 branches). Pruning wound decay at 2m, appears superficial.	No works required.	N/A
3	<i>Betula pubescens</i>	Silver birch	14	ave 35	M	Fair	Multi stemmed at 1m (3 stems). Self braced primary limb. Pruning wounds and decay at 1.0m and 1.5m. Pruning stubs in crown.	No works required.	N/A
4	<i>Betula pubescens</i>	Silver birch	12	38	SM	Poor	Damaged buttress with some decay. Decayed wood and bark and suspected Kretzschmaria deusta bracket. Pruning wound at 1.5m with advanced decay and pseudosclerotial plating. Dieback and deadwood throughout crown.	Remove to ground level. Remove all arisings from site.	H
5	<i>Betula pubescens</i>	Silver birch	12	38	SM	Poor	Originally multi stemmed at base (3 stems) 2 stems removed. Decay at basal pruning wounds evident, extent unknown, staining noted. Suppressed form due to adjacent tree. Thin crown, dieback and deadwood through approximately 30% of the tree. Pruning wounds and stubs in crown. Nest in situ.	No works required. (Consider for long term removal and replacement)	N/A

Appendix 2 – Photographs



T1 & T2

T1

T2

T3 & T4



T3 Stem

T3 Pruning Wound

T4 Buttress decay & pathogen

T4 Pruning wound & advanced decay



T5



T5 Stem base



T5 Pruning wound 1



T5 Pruning wound 2

Appendix 3

Bibliography

1. Davison M W. (1981). Field Guide to the Trees & Shrubs of Britain. Readers Digest, London.
2. Lonsdale D. (1999). Principles of Tree Hazard Assessment and Management. 2007 Reprint. Office of the Deputy Prime Minister, London
3. Mattheck. C & Breloer. H. (2003). The Body Language of Trees - A Handbook for Failure Analysis. Office of the Deputy Prime Minister. London
4. More D & White J. (2003). Cassell's Trees of Britain and Northern Europe. Cassell, London
5. National Tree Safety Group (2011). Common Sense Risk Management of Trees. Forestry Commission, Edinburgh.
6. Roberts J Jackson N & Smith M (2006).Tree Roots in the Built Environment. Office of the Deputy Prime Minister. London
7. Shigo A. (2003) Modern Arboriculture. Shigo & Trees Associates, New Hampshire, USA.
8. Strouts. G. R & Winter. G. T. (2005). Diagnosis of Ill-health in Trees. Office of the Deputy Prime Minister. London.
9. Thomas P A. (2000). Trees: Their Natural History. Cambridge University Press.
10. Weber K & Mattheck C. (2003). Manual of Wood Decays in Trees. The Arboricultural Association, Hampshire.

Appendix 4 – Tree Location Plan

