

BRITISH STANDARD 5837

TREE SURVEYS ARBORICULTURAL IMPLICATION STUDIES

TPO/PLANNING ADVICE/ PROJECT MANAGEMENT

TREE INVENTORIES AND RISK ASSESSMENTS

WOODLAND MANAGEMENT PLANS

TREE PLANTING SCHEMES

TPO RE-SURVEY



TREE HEALTH ASSESSMENT

AT

LAND AT NEW HEYS
RIDING GATE
HARWOOD

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1.0 Introduction

- 1.1 This report was commissioned by Mr D Taylor and its purpose was to carry out a site visit and to make a visual assessment of three trees within the boundary of the site as shown on the site plan within Appendix Two.
- 1.2 This document provides details of their condition and recommendations for management and should be read in conjunction with the data tables of Appendix One and site plan of Appendix Two.
- 1.3 The survey on which the findings of this report are based was undertaken on Saturday 27 January 2024.
- 1.4 The limitations of this report are restricted to the persons, time, information made available and purpose for which this report has been prepared.

2.0 Findings

- 2.1 The three trees within the boundary of the site plan of appendix Two were visually assessed. The results are clearly described in the data table of Appendix One and plan of Appendix Two.
- 2.2 To give assistance in reading the findings the following glossary has been produced.

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.

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:

- 1 – High - Action should be taken immediately.
- 2 – Moderate - Work should be implemented in a programme of works within a period of 6 months.
- 3 – Low - Work that would benefit the trees which is not essential, but should be implemented if funding becomes available.

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.

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.

3.0 Recommendations

- 3.1 It is recommended that all works to the trees be carried out in accordance with the data table of Appendix One in order to bring them into good management and continue long-term tree cover in this area. These works can be summarised as follows:

Priority	Prune	Fell
1	-	-
2	-	T1, T2 & T3
3	-	-

- 3.2 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 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 before any tree works take place.
- 3.4 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 0845 600 3078 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 It is recommended that a repeat survey of all the trees within the site should be carried out every three years.

APPENDIX

ONE

Survey Data

Tree No.	Species	Height (m)	Age	Condition Rating	Comments and Recommendations	Priority Rating
T1	Willow	11 to 15	OM	C/D	An individual multi-stemmed specimen with a number of included unions at its base these unions are displaying signs of internal decay along with recent separation. Due to the defects it is not possible to predict its likely failure. - Fell and replant with Oak	2
T2	Willow	11 to 15	OM	C	An individual multi-stemmed specimen with a number of included unions at its base which are displaying signs of internal decay. Due to the defects it is not possible to predict its likely failure. – Fell and replant with Oak. The removal of the tree will benefit the adjacent Oak.	2
T3	Willow	11 to 15	M	B/C	A poor-quality specimen with poor form and minor stem decay which will have a detrimental impact upon its long-term useful life expectancy- Fell and replant with Oak	2

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

APPENDIX

TWO

Site Plan

Associated West
Pennine Couriers

all Cres

all Cres

Birchfi

Nex Ex

T1

T2 T3

