

Full Tree Condition Survey Dukes Rise, Shepton Mallet





Instructed by: Gemma Verdon

Client Name: 20830 Dukes Rise (Phase 7) Shepton Mallet

Survey Address: Dukes Rise

Shepton Mallet

Somerset BA4 4FS

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Bawden Contracting Services T/a

Bawden Tree Care

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Scope of Survey

- 1. The survey is concerned with the arboricultural aspects of the site only.
- 2. No discussions took place between the surveyor and any other party concerning the trees.
- 3. The trees were inspected based on the Visual Tree Assessment method expounded by Claus Mattheck in The Body Language of Trees Encyclopedia of Visual Tree Assessment, 2015.
- 4. Any recommended tree works will be required to be carried out in accordance with BS3998:2010 Recommendations for Tree Work.
- 5. The planning status of the trees on site was not investigated.
- 6. Any observations made with regards to the condition of built structures are from the viewpoint of a lay person.

Report Limitations

- 1. The tree survey was undertaken from ground level observation of the trees using only binoculars, rubber mallet and probing tool to aid tree assessment. No invasive or non-invasive decay detection devices have been used to assess tree health.
- 2. The recommendations and conclusions in this report relate only to the conditions found on the site visit and inspection. The recommendations laid out in this report are valid for a period of one year from the date of the report.
- 3. Any alterations made to the site that may affect the trees in question, i.e. changes to ground level, tree works, extreme weather, hydrological changes etc., may invalidate the findings of this tree survey and lead to the need for re-inspection of the trees.
- 4. This report is carried out for the assessment of risk and the health and condition of the trees only.
- 5. Trees are living organisms and their structural condition is subject to rapid change in response to a wide range of biotic and abiotic factors. Trees have the potential to fail structurally without any prior indication from reasonable visual symptoms. It is not possible, therefore, to state that any tree is 'safe'.
- 6. It is beyond the scope of this report to comment in relation to indirect or direct structural damage existing or potential that might be linked to vegetation growth causing soil subsidence or heave.
- 7. Any recommendations set out in this report are purely advisory and preliminary in nature and relate to the trees within the current site use.

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Site Detail

Dukes Rise is a housing estate siting between the A371 and A37 on the Southeast outskirts of Shepton Mallet. The majority of the tree stock are young trees, predominantly located on the central green areas. The below image shows an overview of the site. The red line shows the approximate site boundaries.



Date of Inspection and Weather Conditions

The site was inspected on the 6th of February 2024. The weather was cloudy but dry for the duration of the survey.



Subject Trees

Out of a total of a total of 22 trees and groups, 8 require action. The majority of the works recommended are pruning works, only 2 trees are recommended to be removed.

Two trees recommended to be removed are;

- T12 Semi-mature Ash (Fraxinus excelsior). Located on the South boundary of the
 estate, on a grassed area in close proximity to a garage. This tree is in poor
 condition, with risk of branch and stem failure.
- T13 Semi-mature Horse Chestnut (Aesculus hippocastanum). The overall condition of this tree is poor. The crown has good bud development and showing good vitality however, there are pruning wounds throughout the crown from historical reduction works, which appear to have been quite significant and have effected the form of this tree. there is extensive wounding to the stem and branches which appear to have be caused by Phytophthora cactorum (Bleeding canker), there dose not appear to be any visible decay to the effected areas at time of inspection however the wounding is extensive with exposed heartwood in areas. Increasing growth could lead to limb failures however, repeated reductions works will likely lead to reduced vitality. It is recommended that a more appropriate long term management stratagem would be to remove and replant.

Trees requiring Pruning are T04 & T20 removal of epicormic growth. T14, T16 & T17 crown raise to 2.5 metres. T15 crown raise to 2.5 metres and crown thin 10-15%.



Survey Summary

		Timescale of works				
<u> </u>	Total number of trees	Critical / 1 month	3 months	6 months	1 year/part of cyclical maintenance programme	No works required
Tree	20	1	5	3	0	12
Tree group	2	0	0	0	0	2
Woodland						
Plantation area						

Recommendations for maintenance are given within Appendix A of this survey (see separate Tree Report PDF). The recommended works should be carried out, as a minimum, to the standards set out in BS3998:2010 Recommendations for Tree Work and only undertaken by contractors capable of working to the British Standard. The contractor's staff should have appropriate craft Certificates of Competency.

In the exercise of your duty of care in terms of tree safety, it is recommended that trees in areas of frequent use should be re-inspected every 18 months or after a period of extreme weather or a change in site circumstances.

In recent years there have been a number of high-profile court cases involving death and injury from trees, reinforcing the need for those responsible for trees on their property to act to prevent injury or death, or damage to property. It is recommended that Acts of Parliament section of this report, be considered.

The Birmingham Case. Birmingham City Council (BCC) was operating a reactive tree management system. A tree fell and killed three people. The Health and Safety Executive brought and won a court case against BCC under the Health and Safety at Work Act 1974. Expert witnesses confirmed that the tree had obvious defects that would have been noted and acted upon had the tree been inspected by a suitably experienced Arboriculturalist. BCC had not ensured that their property was safe for staff, contractors or the public because they did not have a proactive system of inspecting and maintaining their trees.



Chapman v Barking and Dagenham LBC. A Council owned tree failed and caused harm. The summary included the following:

"I am satisfied that, despite all encouragement and advice both from external sources and to some extent from their own officers, the defendant Council did not at any relevant time to appreciate the distinction between making lists of trees and routine maintenance, as opposed to systematic expert inspection as often as would reasonably be required. I find that no such inspections were ever made, that it was a clear duty on the defendants to make them and that they have failed in that duty."

These cases indicate that landowners have a duty to employ a qualified Arboriculturist to systematically inspect their trees on a regular basis.

Next Inspection

The next inspection should take place in August 2025.

Wildlife

Consideration should be given to wildlife, birds and bats. Care needs to be taken to protect the valuable habitat and to balance these interests before carrying out work to trees. The Wildlife and Countryside Act 1981 (as amended) protects the roosts and nesting sites of birds and bats and requires consultation with the statutory bodies, i.e. Natural England, before carrying out harmful operations. For instance, unlimited fines and up to six-month prison sentence can be implemented. The Countryside and Rights of Way Act 2000 also makes it an offence to damage or destroy bats and other species. Stronger legislation is now in place with the Conservation of Habitats and Species Regulations 2017, listing many of the species under threat. It may be prudent to carry out a bat survey prior to any work carried out to mature trees with significant cavities and bark crevices and to check carefully for nesting birds. Trees heavily covered in ivy are potential roosting sites and should be checked by tree surgeons prior to carrying out work and perhaps delaying works until nesting is finished. If in doubt, always seek advice from the statutory body.



References

Glossary of Terms

Trees are a major concern for estate owners and managers who must often juggle the preeminent demand of ensuring public safety with the emotional response that felling seemingly healthy trees invariably generates amongst the public they are seeking to protect.

Bawden Tree Care provides a comprehensive tree survey and reporting service for the management of health and safety risks, planning applications, tree and woodland management programmes and other general arboricultural purposes. Our surveyors use the latest software from Pear Technology and hand-held GPS devices to produce a range of digital drawings and maps to suit your individual requirements.

Undertaking a regular survey of your tree stock helps identify the warning signs of tree stress and prevent unexpected and potentially dangerous incidences of limb drop. Proactive rather than reactive tree management is safer and makes financial sense.

Arboricultural Works

The following survey may identify work that is required to ensure your trees are maintained in a healthy and safe condition. Bawden Tree Care's highly qualified tree surgeons operate to the British Standard 3998:1989 Recommendations for Tree Work and carry full Public Liability insurance cover to £10m.

Comprehensive site-specific risk assessments are carried out prior to commencement of any works and where trees are adjacent to the public highway or, through storm damage for example, obstruct pedestrian or vehicular access, Bawden teams have members qualified under Part 1 of the Traffic Signs Manual Chapter 8: Roadworks and temporary situations (2009). All team members are trained and qualified in aerial rescue techniques in the unlikely event of an emergency.

Our tree teams are fully qualified to undertake the following works:

- Section felling and pruning
- Crown cleaning, lifting, shaping, reduction
- Storm damage repair
- bracing
- Hedge cutting
- Site clearance
- Stump removal



Terminology for the specification on report

Tree pruning may be necessary to maintain a tree in a safe condition, to remove dead branches, to promote growth, to regulate size and shape or to improve the quality of flowers, fruit or timber. Improper pruning can lead to trees becoming unsightly, diseased and/or potentially dangerous.

It is important that clients understand the basic terms commonly used to describe tree work operations so that they can ask for what they want or understand what the Arboriculturist is recommending. Did you know, for example, that a 'crown thin' will not reduce the height of the tree? Nor will a 'crown lift to 4m'.

The three main pruning options are shown below, and after that a glossary of other terms that you may find helpful. These are very general summaries and the Arboricultural Association can provide more detailed guidance by leaflets and other publications.

The British Standards most relevant to Arboricultural work are:

BS3998: 2010 Tree Work Recommendations.

BS5837: 2012 Trees in Relation to Design, Demolition and Construction - Recommendations.

A word of caution: many trees are legally protected. Felling or even just pruning a protected tree without permission from your Local Planning Authority may be a criminal offence. Always check for Tree Preservation Orders or Conservation Area restrictions with your local council's Tree Officer and/or Planning Department before carrying out any works.

Main Pruning Definitions

Crown Thinning

Crown thinning is the removal of a portion of smaller/tertiary branches, usually at the outer crown, to produce a uniform density of foliage around an evenly spaced branch structure. It is usually confined to broad-leaved species. Crown thinning does not alter the overall size or shape of the tree. Material should be removed systematically throughout the tree, should not exceed the stated percentage and not more than 30% overall. Common reasons for crown thinning are to allow more light to pass through the tree, reduce wind resistance, reduce weight (but this does not necessarily reduce leverage on the structure) and is rarely a once only operation particularly on species that are known to produce large amounts of epicormic growth.

Crown Lifting or Crown Raising

Crown lifting is the removal of the lowest branches and/or preparing of lower branches for future removal. Good practice dictates crown lifting should not normally include the removal of large branches growing directly from the trunk as this can cause large wounds which can become extensively decayed leading to further long-term problems or more short term biomechanical instability. Crown lifting on older, mature trees should be avoided or restricted to secondary branches or shortening of primary branches rather than the whole removal wherever possible. Crown lifting is an effective method of increasing light transmission to

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areas closer to the tree or to enable access under the crown but should be restricted to less than 15% of the live crown height and leave the crown at least two thirds of the total height of the tree. Crown lifting should be specified with reference to a fixed point, e.g. 'crown lift to give 5.5m clearance above ground level'.

Crown Reduction

The reduction in height and/or spread of the crown (the foliage bearing portions) of a tree. Crown reduction may be used to reduce mechanical stress on individual branches or the whole tree, make the tree more suited to its immediate environment or to reduce the effects of shading and light loss, etc. The final result should retain the main framework of the crown, and so a significant proportion of the leaf bearing structure, and leave a similar, although smaller outline, and not necessarily achieve symmetry for its own sake. Crown reduction cuts should be as small as possible and in general not exceed 100mm diameter unless there is an overriding need to do so. Reductions should be specified by actual measurements, where possible, and reflect the finished result, but may also refer to lengths of parts to be removed to aid clarity, e.g. 'crown reduce in height by 2.0m and lateral spread by 1.0m, all round, to finished crown dimensions of 18m in height by 11m in spread (all measurements approximate.)'. Not all species are suitable for this treatment and crown reduction should not be confused with 'topping', an indiscriminate and harmful treatment.

The importance of correct pruning cuts

Every pruning cut inflicts a wound on the tree. The ability of a tree to withstand a wound and maintain healthy growth is greatly affected by the pruning cut — its size, angle and position relative to the retained parts of the tree. As a general rule branches should be removed at their point of attachment or shortened to a lateral which is at least 1/3 of the diameter of the removed portion of the branch, and all cuts should be kept as small as possible.

Other useful terms associated with tree work

Adaptive growth

An increase in wood production in localised areas in response to a decrease in wood strength or external loading to maintain an even distribution of forces across the structure.

Adventitious/epicormic growth

New growth arising from dormant or new buds directly from main branches/stems or trunks.

Bracing

Bracing is a term used to describe the installation of cables, ropes and/or belts to reduce the probability of failure of one or more parts of the tree structure due to weakened elements under excessive movement.

Branch bark ridge and collar

See diagram 3 section 3. Natural features of a fork or union that may or may not be visually obvious. Neither the branch bark ridge nor collar should be cut.

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Callus

Undifferentiated tissue initiated as a result of wounding and which become specialised tissues of the repair over time.

Cavity

A void within the solid structure of the tree, normally associated with decay or deterioration of the woody tissues. May be dry or hold water, if the latter it should not be drained. Only soft decomposing tissue should be removed if necessary, to assess the extent. No attempt should be made to cut or expose living tissue.

Co-dominant stems

Two or more, generally upright, stems of roughly equal size and vigour competing with each other for dominance. Where these arise from a common union the structural integrity of that union should be assessed.

Coppicing

The cutting down of a tree within 300mm (12in) of the ground at regular intervals, traditionally applied to certain species such as Hazel and Sweet Chestnut to provide stakes etc.

Crown

The foliage bearing section of the tree formed by its branches and not including any clear stem/trunk.

Deadwood

Non-living branches or stems due to natural ageing or external influences. Deadwood provides essential habitats and its management should aim to leave as much as possible, shortening or removing only those that pose a risk. Durability and retention of deadwood will vary by tree species.

Decline

When a tree exhibits signs of a lack of vitality such as reduced leaf size, colour or density.

Dieback

Tips of branches exhibit no signs of life due to age or external influences. Decline may progress, stabilise or reverse as the tree adapts to its new situation.

Dormant

The inactive condition of a tree, usually during the coldest months of the year when there is little, or no growth and leaves of deciduous trees have been shed.

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Drop Crotching

Shortening branches by pruning off the end back to a lateral branch which is at least 1/3 of the diameter of the removed branch.

Fertilising

The application of a substance, usually to the tree's rooting area (and occasionally to the tree), to promote tree growth or reverse or reduce decline. This will only be effective if nutrient deficiency is confirmed. If decline is the result of other factors such as compaction, physical damage, toxins etc., the application of fertiliser will not make any difference.

Formative pruning

Minor pruning during the early years of a tree's growth to establish the desired form and/or to correct defects or weaknesses that may affect structure in later life.

Fungi/Fruiting bodies

A member of the plant kingdom that may colonise living or dead tissues of a tree or form beneficial relationships with the roots. The fruiting body is the spore bearing, reproductive structure of that fungus. Removal of the fruiting body will not prevent further colonisation and will make diagnosis and prognosis harder to determine. Each colonisation must be considered in detail by a competent person to determine the long-term implications of tree health and structure when considered alongside the tree species, site usage etc.

Lopping and Topping

Generally regarded as outdated terminology but still included as part of Planning legislation. Lopping refers to the removal of large side branches (the making of vertical cuts) and topping refers to the removal of large portions of the crown of the tree (the making of horizontal cuts, generally through the main stems). Often used to describe crude, heavy-handed or inappropriate pruning.

Painting or Sealing

Covering pruning cuts or other wounds with a paint, often bitumen based. Research has demonstrated that this is not beneficial and may in fact be harmful. On no account should timber treatments be used as these are harmful to living cells.

Pollard

The initial removal of the top of a young tree at a prescribed height to encourage multistem branching from that point, traditionally for fodder, firewood or poles. Once started, it should be repeated on a cyclical basis always retaining the initial pollard point, or bolling as it becomes known.

Retrenchment pruning

A form of reduction intended to encourage development of lower shoots and emulate the natural process of tree aging.

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Root pruning

The pruning back of roots (similar to the pruning back of branches). This has the ability to affect tree stability, so it is advisable to seek professional advice prior to attempting root pruning.

Topping

See Lopping and Topping.

Vitality

The degree of physiological and biochemical processes (life functions) within an individual, group or population of trees.

Ivy Banding

The severing and removing of a band of lvy round the entire circumference of a stem. The lvy is to be cut in two places, at ground level and at a hight of one meter (minimum). The severed section is to be removed from the stem thus revealing a cleared band of the stem. When cutting and removing the lvy, grate care should be taken not to damage the Tree bark.

Desire lines

An informal route or path (such as one worn into a grassed area by repeated foot traffic) that is used by pedestrians in preference to or in the absence of a designated alternative (such as a paved pathway).

Topics:

Adaptive growth, bracing, callus, cavity, coppicing, crown, crown lifting, crown raising, crown reduction, crown thinning, deadwood, definitions, dieback, glossary, lopping, terminology, topping.



List of Botanical Tree Names

Alder	Alnus cordata	Liquidambar	Liquidambar styraciflua	
Acacia	Robinia pseudoacacia	Lime	Tilia platyphyllos	
Amelanchier	Amelanchier lamarkii	Lombardy poplar	Populus nigra 'Italica'	
Apple	Malus sp	Maple	Acer sp	
Ash	Fraxinus excelsior	Magnolia	Magnolia grandiflora	
Aspen	Populus tremula	Maritime pine	Pinus pinaster	
Atlas cedar	Cedrus libani atlantica	Mimosa	Acacia dealbata	
Bay	Laurus nobilis	Monkey puzzle	Araucaria araucana	
Beech	Fagus sylvatica	Monterey cypress	Cupressus macrocarpa	
Birch	Betula pendula	Monterey pine	Pinus radiata	
Blackthorn	Prunus spinosa	Mountain redwood	Sequoiadendron giganteum	
Black poplar	Populus nigra	Mulberry	Morus sp	
Blue atlas cedar	Cedrus libani atlantica Glauca Group	is libani atlantica Glauca Norway Manle		
Box Elder	Acer negundo	Norway spruce	Picea abies	
Catalpa	Catalpa bignonioides	Oak	Quercus robur	
Cherry	Prunus sp	Pear	Pyrus sp	
Coast redwood	Sequoia sempervirens	Pittosporum	Pittosporum sp	
Colorado blue spruce	Picea pungens 'glauca'	Plane	Platanus sp	
Corsican pine	Pinus nigra var. calabrica	Plum	Prunus sp	
Cotoneaster	Cotoneaster sp	Poplar	Populus sp	
Crab	Malus sp	Portuguese laurel	Prunus Iusitanica	
Cryptomeria	Cryptomeria japonica	Purple plum	Prunus cerasifera 'Nigra'/'Pissardii'	
Cypress	Cupressus sp	Red horse Chestnut	Aesculus carnea	
Dawn redwood	Metasequoia glyptostroboides	Red oak	Quercus rubra	
Deodar cedar	Cedrus deodara	Rowan	Sorbus aucuparia	
Douglas fir	Pseudotsuga menziesii	Scots pine	Pinus sylvestris	
Elaeagnus	Elaeagnus sp	Sitka spruce	Picea sitchensis	
Elder	Sambucus nigra	Amelanchier	Amelanchier lamarkii	
Elm	Ulmus sp	Strawberry tree	Arbutus unedo	
English oak	Quercus robur	Swedish whitebeam	Sorbus intermedia	
Eucalyptus	Eucalyptus sp	Sweet Chestnut	Castanea sativa	
Field maple	Acer campestre	Sycamore	Acer pseudoplatanus	
Fig	Ficus sp	Thorn	Crataegus monogyna	
Goat willow	Salix caprea	Thuja	Thuja plicata	
Hazel	Corylus avellana	Tulip	Liriodendron tulipifera	
Hemlock	Tsuga heterophylla	Turkey oak	Q. cerris	
Holm oak	Quercus ilex	Walnut	Juglans regia	
Holly	llex aquifolium	Western red cedar	Thuja plicata	
Hornbeam	Carpinus betulus	Whitebeam	Sorbus aria	
Horse Chestnut	Aesculus hippocastanum	Wild cherry	Prunus avium	
Irish yew	Taxus baccata 'Fastigiata'	Weeping willow	Salix x chrysocoma	
Judas tree	Cercis siliquastrum	Wellingtonia	Sequoiadendron giganteum	
Laburnum	Laburnum sp	White poplar	Populus alba	
Larch	Larix sp	White willow	Salix alba	
Laurel	Prunus laurocerasus	Willow	Salix caprea	
Lawson cypress	Chamaecyparis lawsonia	Yew	Taxus baccata	
Leyland cypress	x Cupressocyparis leylandii			

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Acts of Parliament

Health and Safety at Work etc Act (1974)

Chapter 37: Section 2

'It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees.

'c ····· the matters to which that duty extends include in particular

.... so far as is reasonably practicable as regards any place of work under the employer's control, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of means of access to and egress from it that are safe and without such risks.'

Management of Health and Safety at Work Regulations (1999)

Regulation 3: Risk Assessment

'Every employer shall make a suitable and sufficient assessment of

a) the risks to the health and safety of his employees to which they are exposed whilst they are at work,' and the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking.

Occupiers' Liability Act (1957)

Chapter 31: Section 2: Extent of Occupier's Ordinary Duty

'An occupier of premises owes the same duty, the common duty of care, to all his visitors

The common **duty of care** is a duty to take such care as in all the circumstances of the case is reasonable to see that the visitor will be reasonably safe in using the premises for the purposes for which he is invited or permitted by the occupier to be there.'



Occupiers' Liability Act (1984)

Chapter 3: Section 1

'An occupier of premises owes a duty to another (not being his visitor) in respect of any such risk if

- a) He is aware of the danger or has reasonable grounds to believe that it exists;
- b) he knows or has reasonable grounds to believe that the other is in the vicinity danger concerned or that he may come into the vicinity of the danger (in either whether the other has lawful authority for being in that vicinity or not); and the risk is one against which, in all the circumstances of the case, he may reasonably be expected to offer the other some protection.'

Highways Act (1980)

Part V: Improvement of Highways

Section 96(6)

'No tree, shrub allowed to remain in such a situation as to hinder the reasonable use of the highway

by any person entitled to use it, or so as to be a nuisance or injurious to owner or occupier of premises adjacent to the highway.

Part IX: Lawful and Unlawful Interference with Highways and Streets Section 154(1)

Where a hedge, tree or shrub overhangs a highway or any other road or footpath to the public has access so as to endanger or obstruct the passage of vehicles or pedestrians or obstructs or interferes with the view of drivers or vehicles or the light from a pub I, a competent authority may, by notice either to the owner of the hedge, tree or shrub coccupier of the land on which it is growing, require him within 14 days from the date service of the notice so to lop or cut it as to remove the cause of the danger, obstruct, interference.

For the purposes of this section the following are competent authorities in relation to a road or footpath that is not a highway, the local authority whose area the road or footpath is situated.'



Section 154(2)

'Where it appears to a competent authority for any highway, or for any other road OJ footpath to which the public has access-

- a) That any hedge, tree or shrub is dead, diseased, damaged or insecurely rooted and
- b) That by reason of its condition it, or part of it, is likely to cause danger by fall to the highway, road or footpath, the authority may, by notice either to the owner of the hedge, tree or shrub or to the occupier of the land on which it is situated, require him within 14 days from the date of service of the notice so to cut or fell it as to remove the likelihood of danger