ARGENTA

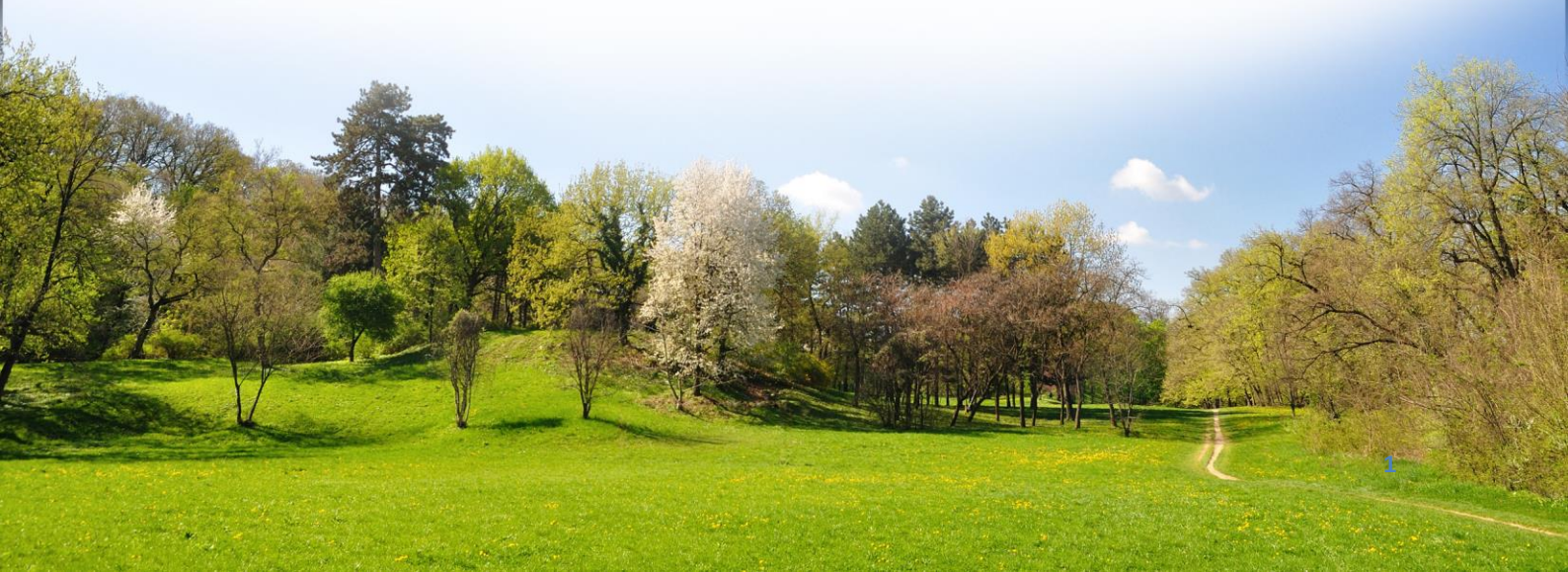
TREE SURVEYS

TREE HEALTH & SAFETY SURVEY
&
ARBORICULTURAL REPORT

Site at:

Orchard Road Cemetery
Melbourn
South Cambridgeshire

Job ref	Report Version	Author	Checked	Date
ATS0510	V1	IL	IL	September 2022



Orchard Road Cemetery
Melbourn
South Cambridgeshire
ATS0510

Ian Lorman

Relevant Qualifications

Professional Diploma in Arboriculture (Royal Forestry Society)

National Diploma in Arboriculture

National Certificate in Horticulture (Arboriculture Module)

Professional Membership

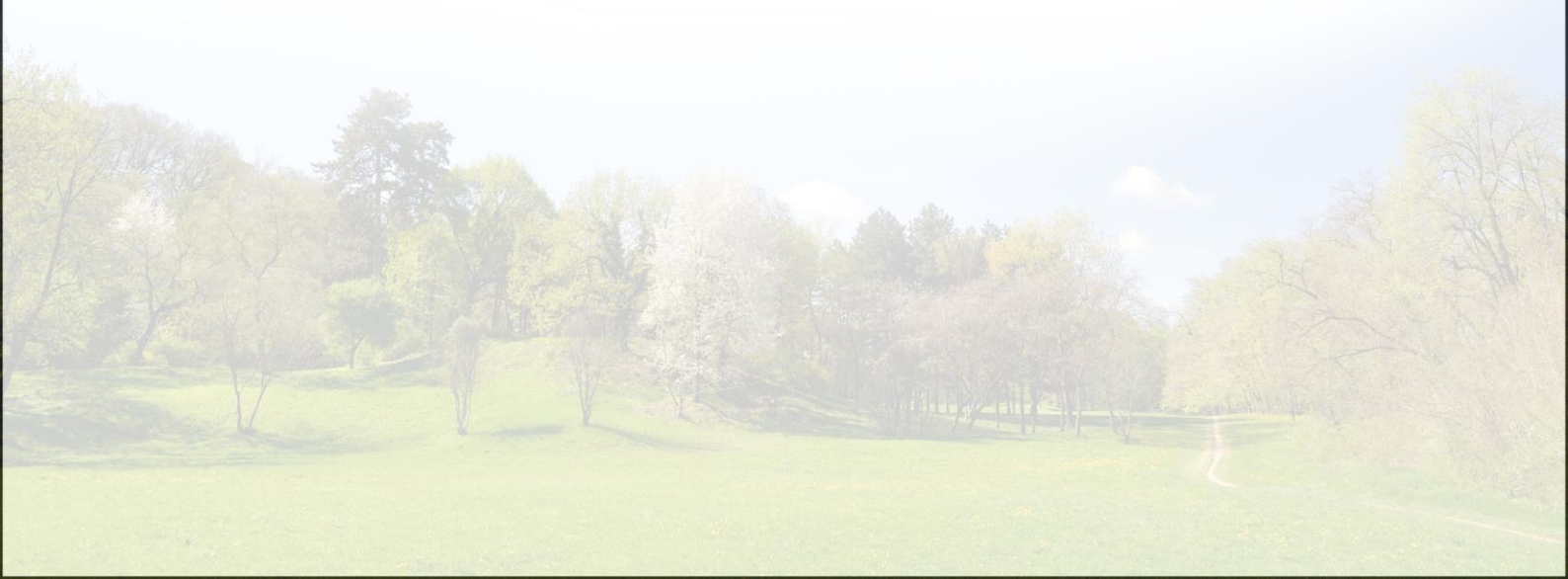
I have been a Fellow Member of the Arboricultural Association since 2013

Membership number FE1030

Arboricultural ASSOCIATION
Fellow Member

Experience

My career started in 1991 from craft level in arboriculture, to student, and then working in closely related industries to working as an Arboricultural / Trees Officer in five different local authorities. I have been practicing arboricultural consultancy for several years.



CONTENTS

Included with this report

Tree survey schedule

Tree location plan

1 Limitations

1.1 The content of this report is valid for a period of between two and four years from the date shown on the title page.

i. Trees in Zone 1: Two years (red on plan)

ii. Trees in Zone 2: Four years (amber / orange on plan)

- Note: Trees are living organisms whose health and condition can change rapidly. Condition and health and safety should be checked on a regular basis and after an extreme weather event.

1.2 Trees

1.2.1 The tree survey has been undertaken from ground level using non-invasive methods. The presence of obstructions, Ivy, hedges, epicormic shoots or other climbing plants on tree trunks and branches obscures any defects that might be present that could otherwise be identified. In the presence of climbing plants and hedges etc assumptions are made based upon the general health and appearance of trees, which may differ fundamentally if ivy etc were not present. For example, a tree that has the overall appearance of good health and vigour may have a serious structural defect hidden by climbing plants or a hedge. Where Ivy severance / removal is recommended, this is usually to facilitate a tree inspection at a later date.

1.3 Tree Law

1.3.1 This report does not consider the presence of, or implications of statutory controls upon trees, such as Tree Preservation Orders (TPO) or Conservation Areas. It shall be the responsibility of the landowner or their agent, to ensure that statutory requirements are met. At the time of writing, South Cambridgeshire District Council's online mapping service provides details of TPOs and Conservation Areas.

1.4 Wildlife

1.4.1 Before carrying out tree works, it is necessary to observe laws in respect of protected species and habitats. Various habitats and species of animal in the UK are protected by the following Statutory Instruments:

- Wildlife and Countryside Act 1981(as amended)

- Natural Environment and Rural Communities Act 2006 (NERC Act)
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Protection of Badgers Act 1992
- The Hedgerows Regulations 1997
- Countryside and Rights of Way Act 2000

All tree work operations must comply with The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000, which provide statutory protection to birds, bats, and other species, all of which could inhabit trees. Where works may constitute an offence, advice will be acquired from a suitably qualified person before works are able to proceed. For example, it may be necessary to programme tree work outside of the bird nesting period, typically March through to August inclusive.

1.5 Non-disclosure Notice

1.5.1 The content and layout of this report are owned by the author. This report may not be copied or used without the author's agreement for any purpose other than the purpose indicated in this report.

1.6 Third Party Disclaimer

1.6.1 The report was prepared by the author at the instruction of and for the use by Melbourn Parish Council. The author provides this advice without prejudice and bases his opinions on knowledge, experience, qualifications, and published research and cannot be held responsible for the consequences of a difference of opinion held by third parties, for example the Local Planning Authority or Planning Inspector. The author does not accept liability for any loss or damage arising from reliance on the content of this report.

1.7 Status

1.7.1 This is a tree safety report. It has been prepared in compliance with a landowner’s duty of care obligations in regard to the health and safety of the public and property such that may be presented by the partial or whole structural FAILURE of a tree or

trees. The report makes recommendations for tree surgery works to address defects identified during the tree survey. The tree surgery works are given a priority weighting.

1.7.2 This document does not;

i. address the matter of the current or future potential for damage to buildings or other structures and surfaces from tree roots, directly or indirectly,

ii. address any hazards presented by low-hanging tree branches that have the potential to cause injury to pedestrians (e.g. eye injury) or damage to vehicles.

2 Brief

2.1 This report was requested by Melbourn Parish Council on 18th August 2022. The tree survey was conducted on 14th September 2022. I am instructed to undertake a health & safety tree survey at the cemetery to identify structural defects in trees and to make recommendations for tree surgery operations to eliminate a risk, or mitigate a risk to an acceptable level, proportionate to the nature and the location of the trees. Trees have been plotted on an Ordnance Survey base map using Geographical Positioning System (GPS) to a level of accuracy that is sufficient to identify the location of the trees, typically +/- 2 metres.

3 Summary of findings and recommendations

3.1 For a cemetery the site is densely treed, especially in the north-eastern corner. Species and age range are not diverse, which would typically be a concern in respect of resilience to disease and long-term cover. However, the species present are very robust and most have a lengthy life-expectancy, especially the Yews and Hollies.

3.2 Six trees have been identified for remedial works.

- Below: Table – Summary of tree surgery recommendations

Tree number	Species	Tree surgery	Priority
13	Cypress	Sever Ivy	3
16	Birch	Sever Ivy	3
18	Plum	Fell	2
38	Cherry	Shorten branches overhanging road by 3 metres	2
40	Sycamore	Crown reduce back to previous points at 12 metres height	3
41	Sycamore	Crown reduce back to previous points at 12 metres height	3

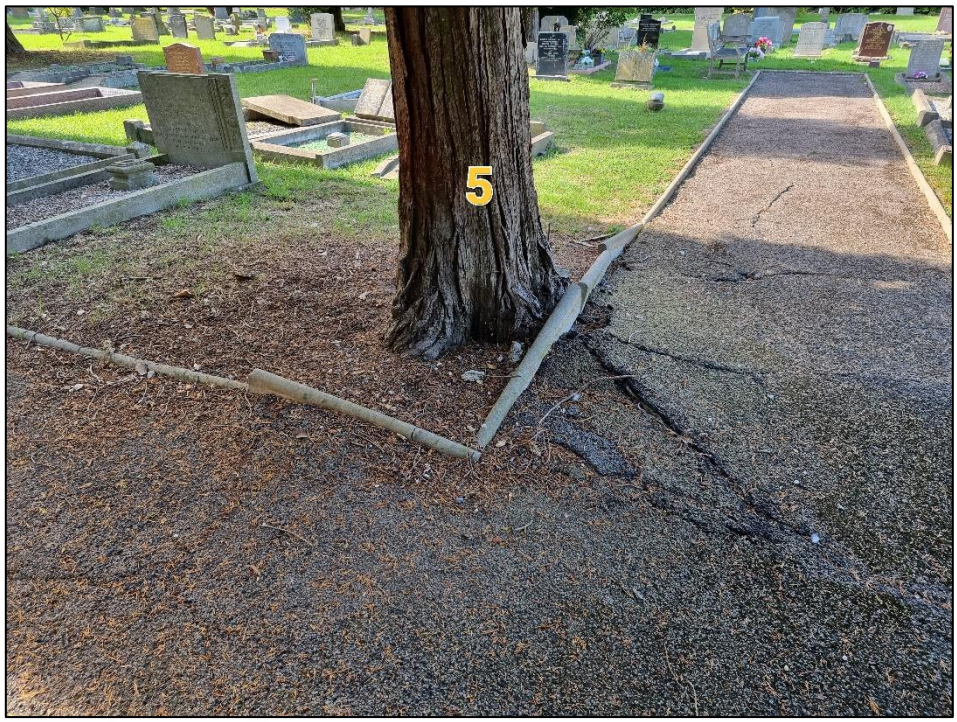
3.3 Sycamore trees numbered 40 and 41 located to the rear of 7 and 9 Medcalfe Way have previously been managed by reduction (or high pollard) at around a height of 12 metres. They have since grown out considerably. This new growth emerging from old wounds can be predisposed to splitting out, with the consequential risk of harm to person and property. The recommendation is to restore and maintain the trees in a cycle of crown reduction.

3.4 Recommendations for cyclical expert re-inspection after this initial survey will not necessarily require that all the trees be re-inspected unless it is time to look at them again. For example, 2 years after the date of this report it may only be necessary to inspect the 'Zone 1' trees. However, given that the site is compact with a relatively small number of Zone 1 trees, it would be more economical to have all the trees (Zones 1 & 2) inspected every 2 years.

3.5 Subsequent inspections will require renewal of the Ordnance Survey map Licence.

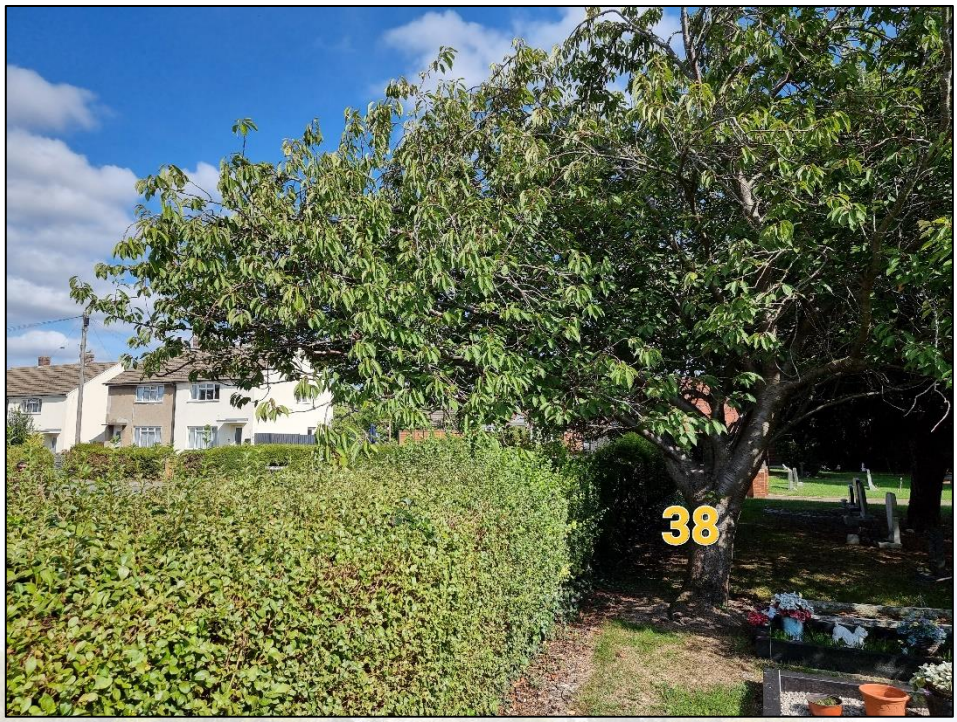
3.6 Photographs are shown below with their tree number which can be cross-referred with the tree survey schedule.

- Below: Tree 5 (Cypress) – Root damage to footpath



- Below: Tree 18 (Myrobalan Plum) – Decay at base

- Below: Tree 38 (Cherry) – Branches over-extended over road



4 Tree survey methodology

4.1 The trees have been assessed at ground level, using no ancillary equipment in accordance with the principles of Visual Tree Assessment (VTA) *C. Mattheck, K, Bethge, K, Weber (1994)*. The trees are numbered in sequence starting at '1' and are identified on the tree location plans.

4.2 Trees with a stem diameter less than, or equal to 75 millimetres diameter at 1.5 metres above ground level may not have been recorded. Trees that, at the time of writing and due to their size and location that could not conceivably present a health and safety risk have not been recorded. Such trees may be recorded in later years once they have attained greater size.

4.3 Common tree names are given.

4.4 Tree height is estimated in metres.

4.5 Stem diameter is estimated in millimetres at 1.5 metres above ground level (or nearest practical height). Where multiple dimensions are given, this reflects the multi-stemmed nature of the tree. Where the number of stems exceeds six, the software used records only a single figure which represents the estimated average trunk diameter across the stem range.

4.6 Crown spread is estimated in metres as a radius from the trunk. This is not intended to give the impression that the tree crowns are symmetrical.

4.7 A priority rating has been provided where remedial tree surgery operations have been recommended. This provides a guide to assist with scheduling work and states the maximum period that should elapse from inspection date to the tree surgery operations. The following scale is used:

- 0 – No tree surgery work
- 1 – Urgent works that should be undertaken within six weeks of the tree inspection (if the urgency is deemed higher than this, the entire survey entry

row will be highlighted in **RED** in the tree survey schedule, in which case it should be undertaken as soon as practicable – ie. straight away).

- 2 – Works that should be undertaken within 12 months of the tree inspection.
- 3 – Works that should be undertaken within 18 months of the tree inspection, or prior to the next scheduled tree inspection, whichever is sooner.

4.8 Life stage is estimated in accordance with the typical lifespan of the particular species.

Young: Young trees

Early-mature: Early-mature, trees less than 1/3 life expectancy.

Mature: Mature trees up to 2/3 life expectancy.

Over mature: Over-mature, declining or moribund trees of low vigour.

Veteran: Veteran trees

4.9 The condition of the tree has been referred in respect of three parts on each tree; crown, stem and basal area. To each area, a rating is given; good, fair, poor or dead.

4.10 Observations are expanded where necessary. The assessment for tree condition includes inspection of the following defects:

- The presence of fungal fruiting bodies around the base of the tree or on the stem, as they could possibly indicate the presence of possible internal decay.
- Soil cracks and any heaving of the soil around the base indicating possible root plate movement.
- Any abrupt bends in branches and limbs resulting from past pruning, as it may be an indication of internal weakness and decay.
- Tight or weak ‘V’ shaped forks and co-dominant stems
- Hazard beam formations and other such biomechanical related defects (as described by Claus Mattheck, Body Language of Trees HMSO Research for Amenity Trees No. 4 1994).
- Cavities as a result of limb losses or past pruning.

- Broken branches
- Storm damage
- Canker formations
- Loose bark
- Damage to roots
- Basal, stem or branch / limb cavities
- Die-back in the crown
- Abnormal foliage size and colour
- Any changes to the timing of normal leaf flush and leaf fall patterns
- Other pathological diseases affecting any part of the tree

4.11 Each tree is given a 'Zone value' for inspection frequency which refers to a combination of factors including tree height and location and frequency and value of 'targets'. Targets can be defined as person and property or other asset to which a tree presents a risk. It is important to consider risks posed by trees in respect of their location because it allows common sense decisions to be made regarding the frequency of tree inspection regime and remedial tree surgery works. This has environmental and economic benefits. The Zone value given to the tree informs the priority rating for remedial tree surgery operations. The following scale is used for the sites within this tree survey:

- 1 – High frequency of high value targets / large tree / medium tree (red trees on the tree locations plans) – One-year (annual) inspection frequency.
- 2 – Low frequency of high value targets / large tree / medium tree (amber trees on the tree location plans) – Two-year inspection frequency.
- 3 – Very low frequency of high value targets / large tree (green trees on the tree location plans) – Three-year inspection frequency.

4.12 The above inspection frequencies are recommended in the absence of extreme weather events. It is strongly recommended that a ‘walkover’ inspection be undertaken following an extreme weather event where it is likely that trees will have been subjected to damaging forces and where branches can be expected to have been shed. A walkover survey is a basic visual assessment that may be carried out by a person with basic knowledge of tree safety and keen eyesight. The walkover survey should record any items that require immediate attention to ensure safety. Works identified should be undertaken as soon as practicable and the area affected should be cordoned off where possible, until the works have been undertaken. Zone 1 trees should be inspected as a priority.

5 Normative references

5.1 The following documents are indispensable in the application of the recommendations in this report:

- R.G. Strouts, T.G. Winter (1994). Diagnosis of Ill-Health in Trees. DoE
- D. Lonsdale (1999). Principles of Tree Hazard Assessment and Management. ODPM
- C. Mattheck, K. Bethge, K. Weber (1994). The Body Language of Trees. DoE
- C. Mattheck (2007). Updated Field Guide for Visual Tree Assessment. Forschungszentrum Karlsruhe GmBH
- F.W.M.R. Schwarze, J. Engels, C. Mattheck (1999). Fungal Strategies of Wood Decay in Trees. Springer
- Common Sense Risk Management of Trees (2011). National Tree Safety Group / Forestry Commission
- Tree Surveys: A Guide to Good Practice – Guidance Note 7 (2015). The Arboricultural Association
- British Standard BS3998: 2010 Tree Work – Recommendations. BSI
- https://www.tandfonline.com/doi/full/10.1080/03071375.2020.1854996

ARGENTA
TREE SURVEYS

www.argentatreesurveys.co.uk

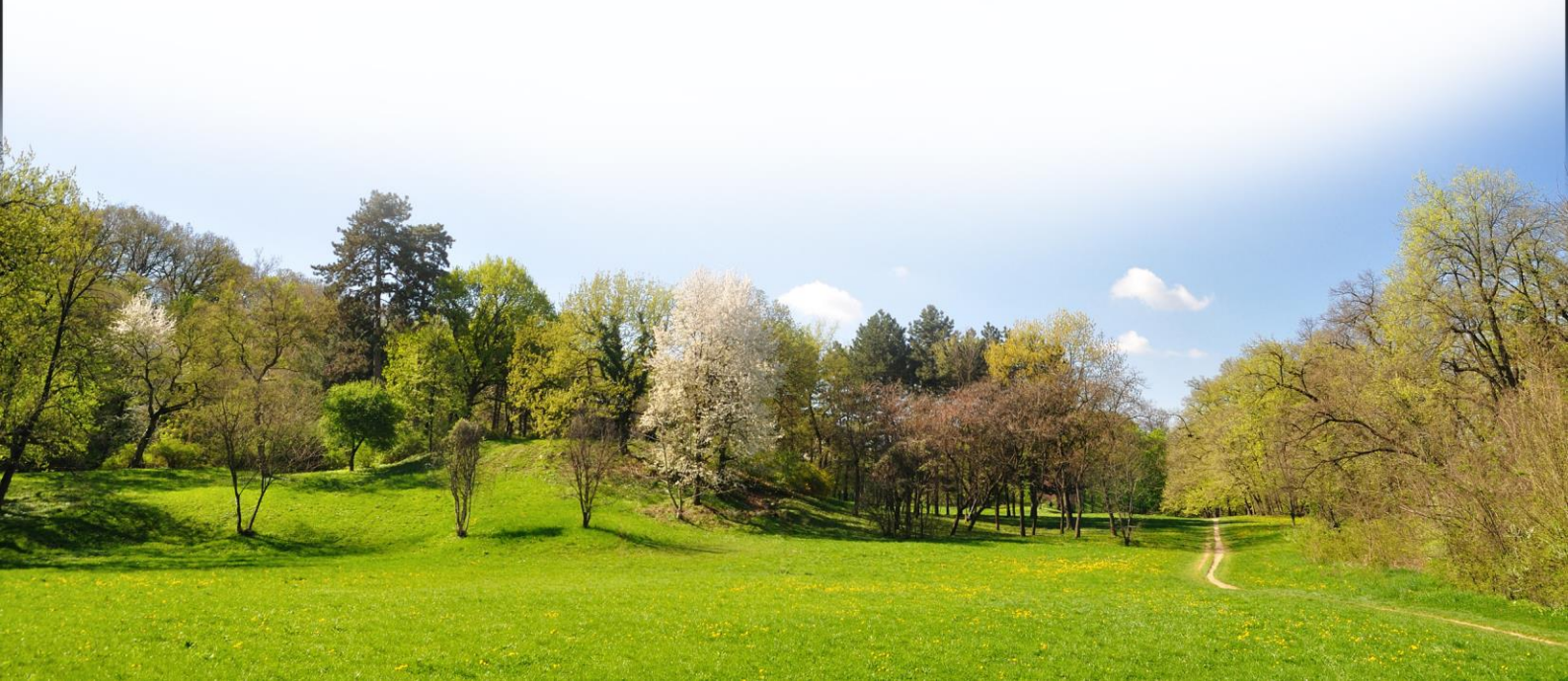
Tel: 01638 781422
Mobile: 07766 379251

Company no: 10697882
VAT no: 335731700
Registered Company address
11 East Road
Isleham
Ely
Cambridgeshire
CB7 5SN

Signed:

Ian Lorman
Director

September 2022



Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
1	Irish Yew	7.5	300	2.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
2	Common Holly	6	200 175	5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Twin stem from base	0	2
3	Lawson's Cypress	11	500	5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
4	Lawson's Cypress	12	550	6	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
5	Lawson's Cypress	11	500	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Causing significant damage to footpath	0	2
6	Irish Yew	8	300	3	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
7	Lawson's Cypress	13	600	5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
8	Common Yew	7.5	300 300	9	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2

Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
9	Irish Yew	9	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action 9-metres-tall Holly tree growing through crown. Treat as one tree	0	2
10	Lawson's Cypress	12	500	5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
11	Irish Yew	9	300	3.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
12	Irish Yew	8	300	3	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
13	Lawson's Cypress	11	550	4.5	Mature	Crown - Good, Stem - Good, Basal Area - Good Sever Ivy Ivy becoming well established	3	2
14	Common Hornbeam	12	400	6.5	Early-mat	Crown - Good, Stem - Good, Basal Area - Good No action Overhanging bench	0	1
15	Crab Apple	5	125	4	Mature	Crown - Good, Stem - Fair, Basal Area - Good No action Patch of necrotic bark on trunk at 0.5m nw side	0	2
16	Silver Birch	10	450	7	Mature	Crown - Good, Stem - Good, Basal Area - Good Sever Ivy Ivy becoming well established	3	2

Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
17	Sycamore	12	500	8	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Old bark wound north side at 1.5 metres above ground level with exposed sapwood. No cause for concern	0	1
18	Myrobalan Plum	9	400	6	Mature	Crown - Good, Stem - Fair, Basal Area - Poor Fell Dense Ivy throughout. Significant decay at base of trunk on northwest side. Tree leaning south	2	1
19	Irish Yew	8	300	3.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
20	Common Holly	9	300	6.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Divides into seven stems from 1 metre above ground level	0	2
21	Common Yew	5	650	4.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Has been topped at 5 metres height	0	2
22	Common Yew	10	300	9	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Divides into nine stems from 0.5 metres	0	2
23	Irish Yew	7.5	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2

Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
24	Irish Yew	7.5	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
25	Irish Yew	3	300	2	Mature	Crown - Poor, Stem - Good, Basal Area - Good No action Heavily topped and suppressed. Dieback on southwest side. Dense Ivy	0	2
26	Common Yew	11	800	8	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
27	Irish Yew	3	150	2	Mature	Crown - Fair, Stem - Good, Basal Area - Good No action Heavily suppressed by adjacent trees. Shrub-like form	0	2
28	Irish Yew	6	200	3.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Suppressed by adjacent trees	0	2
29	Common Holly	9	250 250	4	Mature	Crown - Fair, Stem - Good, Basal Area - Good No action Twin stem from base. Sparse foliage. Suppressed by adjacent trees	0	2
30	Irish Yew	6.5	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
31	Irish Yew	6.5	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Overhanging bench	0	1

Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
32	Irish Yew	7	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Overhanging bench	0	1
33	Irish Yew	6	200	2.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
34	Irish Yew	7	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
35	Irish Yew	7.5	300	3	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
36	Common Holly	7.5	275 150 125	5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Divides into three stems from base	0	2
37	Lawson's Cypress	10	600	7	Mature	Crown - Good, Stem - Good, Basal Area - Good No action Divides into multiple stems at 1.5 metres above ground level	0	2
38	Wild Cherry	7.5	450	9	Mature	Crown - Good, Stem - Good, Basal Area - Good Shorten branches overhanging road by 3 metres Excessively extended horizontal branches on northwest side projecting over highway	2	1

Site name: Orchard Road Cemetery, Melbourn Surveyor: Ian Lorman			Date of survey: 14th September 2022 Conditions: Clear / dry / still					
Tree number	**Species**	**Height estim (m)**	**Stem Diam (s) estim (mm) No. of**	**Crown spread Ave rad estim (m)**	**Life stage**	**Observations; structural / physiological condition and any tree work recommendations**	**Priority / urgency of work**	**Zone value**
39	Common Holly	5	300	4	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	2
40	Sycamore	17	800	8	Mature	Crown - Good, Stem - Fair, Basal Area - Fair Crown reduce back to previous points at 12 metres height Sever Ivy Dense Ivy on trunk and into mid-crown. Previously managed as high pollard at 12 metres height	3	1
41	Sycamore	17	700	8	Mature	Crown - Good, Stem - Good, Basal Area - Good Crown reduce back to previous points at 12 metres height Previously managed as a high pollard at 12 metres height	3	1

ARGENTA
TREE SURVEYS

Orchard Road Cemetery, Melbourn, Royston
Tree locations

SCALE :	DATE :	N
1 : 350 @ A2	19/09/2022	
MAP FILENAME :		

THIS DRAWING MUST BE READ IN COLOUR

INSPECTION FREQUENCY

Name & Tree colour	Minimum recommended frequency	
Zone 1 (Red)	2 Years (biennial)	Plus additional 'walkover' survey after storm event
Zone 2 (amber)	4 years	Plus additional 'walkover' survey after storm event
Zone 3 (green)	6 years	Plus additional 'walkover' survey after storm event