



ARGENTA

T R E E S U R V E Y S

TREE HEALTH & SAFETY SURVEY & ARBORICULTURAL REPORT

Sites at:

**Several locations
The Parish of Melbourn
South Cambridgeshire**

Job ref	Report Version	Author	Checked	Date
ATS0451	V1	IL	IL	September 2021





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 industry experience extends to nearly 30 years from craft level in arboriculture and closely related industries to working as an Arboricultural / Trees Officer in five local authorities. I have been practicing arboricultural consultancy for several years.





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Included with this report

Reference map of tree survey / resurvey scope adapted from material of Parish Clerk

Tree location plans x 4 for each part of village covered

Tree survey schedule for Royston Road





1 Limitations

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

i. Trees in Zone 1: One year (red on plans)

ii. Trees in Zone 2: Two years (amber / orange on plans)

iii. Trees in Zone 3: Three years (green on plans)

- 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 22nd April 2021. The tree survey was conducted on 14th June 2021 (all sites except Royston Road) and 31st August 2021 (Royston Road only). I am instructed to undertake a health & safety tree survey at several sites across the Parish 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.
- 2.2 The previous arboricultural report of Argenta Tree Surveys Ltd of August 2019 captured trees numbered from 1 to 61. This current report adds to those numbers in respect of the Royston Road site, which was not surveyed in 2019. Trees in the Royston Road site (surveyed August 2021) are numbered from 62 to 92.



3 Summary of findings and recommendations

3.1 The trees are located at four sites across the Parish and their locations are shown on four separate maps.

3.2 Overall, the health and condition of trees is good and there are no emergency works required. Nine trees have been identified for remedial safety works (to be undertaken within twelve months of receipt of this report).

- Below: Table – Summary of tree surgery recommendations

Tree number	Map number / name	Species	Site	Tree surgery	Priority
9	INSET 2 The Moor play area	Birch	The Moor play area	Shorten over extended limbs on north side of crown (growing towards houses) by approximately 4 metres	2
11	INSET 2 The Moor play area	Birch	The Moor play area	Shorten over extended limbs on north side of crown (growing towards houses) by approximately 4 metres	2
64	Royston Road	Lombardy Poplar	Royston Road	Remove dead wood	2



80	Royston Road	Lombardy Poplar	Royston Road	Fell to ground level	2
81	Royston Road	Lombardy Poplar	Royston Road	Fell to ground level	2
82	Royston Road	Lombardy Poplar	Royston Road	Remove dead wood	2
85	Royston Road	Lombardy Poplar	Royston Road	Fell to ground level	2
86	Royston Road	Lombardy Poplar	Royston Road	Fell to ground level	2
90	Royston Road	Lombardy Poplar	Royston Road	Fell to ground level	2

- 3.3 Recommendations for cyclical expert re-inspection after this initial survey will not require that all the trees be re-inspected unless it is time to look at them again. For example, 12 months after the date of this report it may only be necessary to inspect the 'Zone 1' trees.
- 3.4 Subsequent inspections will require renewal of the Ordnance Survey map Licence.
- 3.5 Photographs are shown below with their tree number which can be cross-referred with the tree survey schedule.



- Below: Tree 9 (Birch) – Over-extended limbs growing towards houses

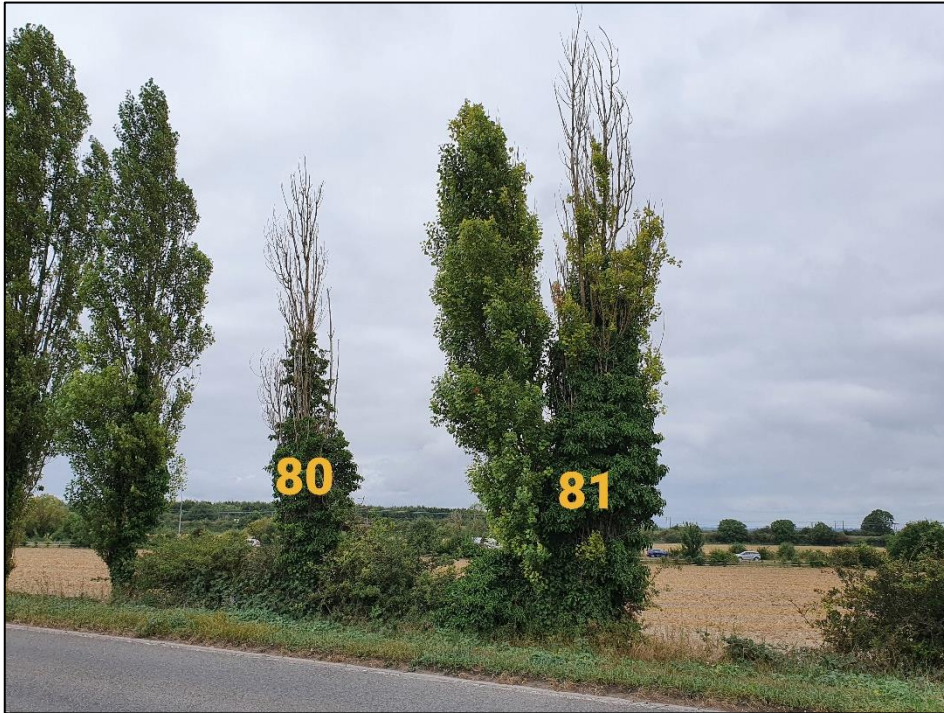


- Below: Tree 11 (Birch) – Over-extended limbs growing towards houses





- Below: Trees 80 & 81 (Poplar) – Tree 80 is dead. Tree 81 is partially dead and has a precarious ‘subsiding’ stem leaning over the road



- Below: Tree 82 (Poplar) – Dieback in upper crown





- Below: Tree 90 (Poplar) – Dying back and large ‘subsiding’ stem leaning over the 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 Site: The Moor play area - Observations

- 5.1 All trees were inspected. They are generally in excellent health and condition.
- 5.2 Side branches of Birch trees numbered 9 and 11 are over-extending to the north, towards the houses. Over-extended branches can begin to subside (droop excessively), which can lead to failure. Remedial tree surgery is recommended at Chapter 3.



6 Site: Recreation Ground - Observations

- 6.1 The map shows the area of trees inspected along the boundary of the Recreation Ground (orange polygon). These are predominantly mature Ash trees. Many are host to dense Ivy. Overall crown health suggests early stages of Ash dieback disease caused by the fungus *Hymenoscyphus fraxineus*. This is a fatal disease of Ash (the genus *Fraxinus*). It is thought that up to 5% of trees will survive. The current advice is to retain and observe infected trees in case they are resistant.
- 6.2 No tree surgery work is currently required.



7 Site: Stockbridge Meadows - Observations

- 7.1 I met Ms Maureen Brierley and other members of The River Mel Restoration Group, who showed me to the area of Stockbridge Meadows of particular concern. It comprises a group of mature Ash trees approximately 30 to 40 years old.
- 7.2 Overall crown health suggests early stages of Ash dieback disease caused by the fungus *Hymenoscyphus fraxineus*. This is a fatal disease of Ash (the genus *Fraxinus*). It is thought that up to 5% of trees will survive. The current advice is to retain and observe infected trees in case they are resistant.
- 7.3 No tree surgery is currently recommended.



8 Site: Royston Road - Observations

- 8.1 A long row of thirty-two Poplar trees is located along the north side of Royston Road, adjacent to the footpath. They appear to be 20 to 30 years old and would likely have been planted concurrently.
- 8.2 Ivy has colonised most of the trees, making it impossible to inspect the lower trunks. In later years, when the trees are larger, and when they are reaching the point they are potentially dangerous, it is recommended that Ivy be removed to facilitate inspection.
- 8.3 Most trees are healthy, but a few are dead, have developed dieback in their tops, or co-dominant stems are beginning to subside away from the vertical quite considerably. Whilst trees with subsided stems can be 'topped' (greatly reduced in height) to make them safe for the time being, this is a short-term solution and would look unsightly, hence why felling is recommended in some cases.



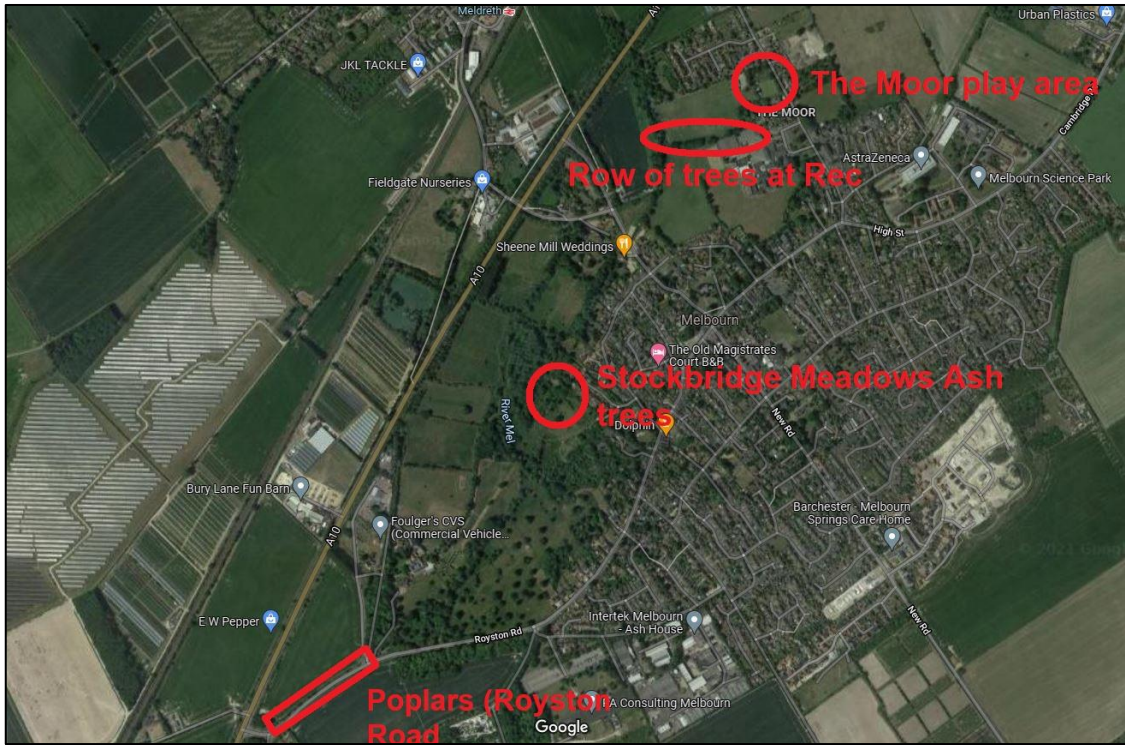
9 Normative references

9.1 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



- Below: Reference map of tree survey / resurvey scope adapted from material of Parish Clerk





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T R E E S U R V E Y S

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Signed:

Ian Lorman

Director

September 2021

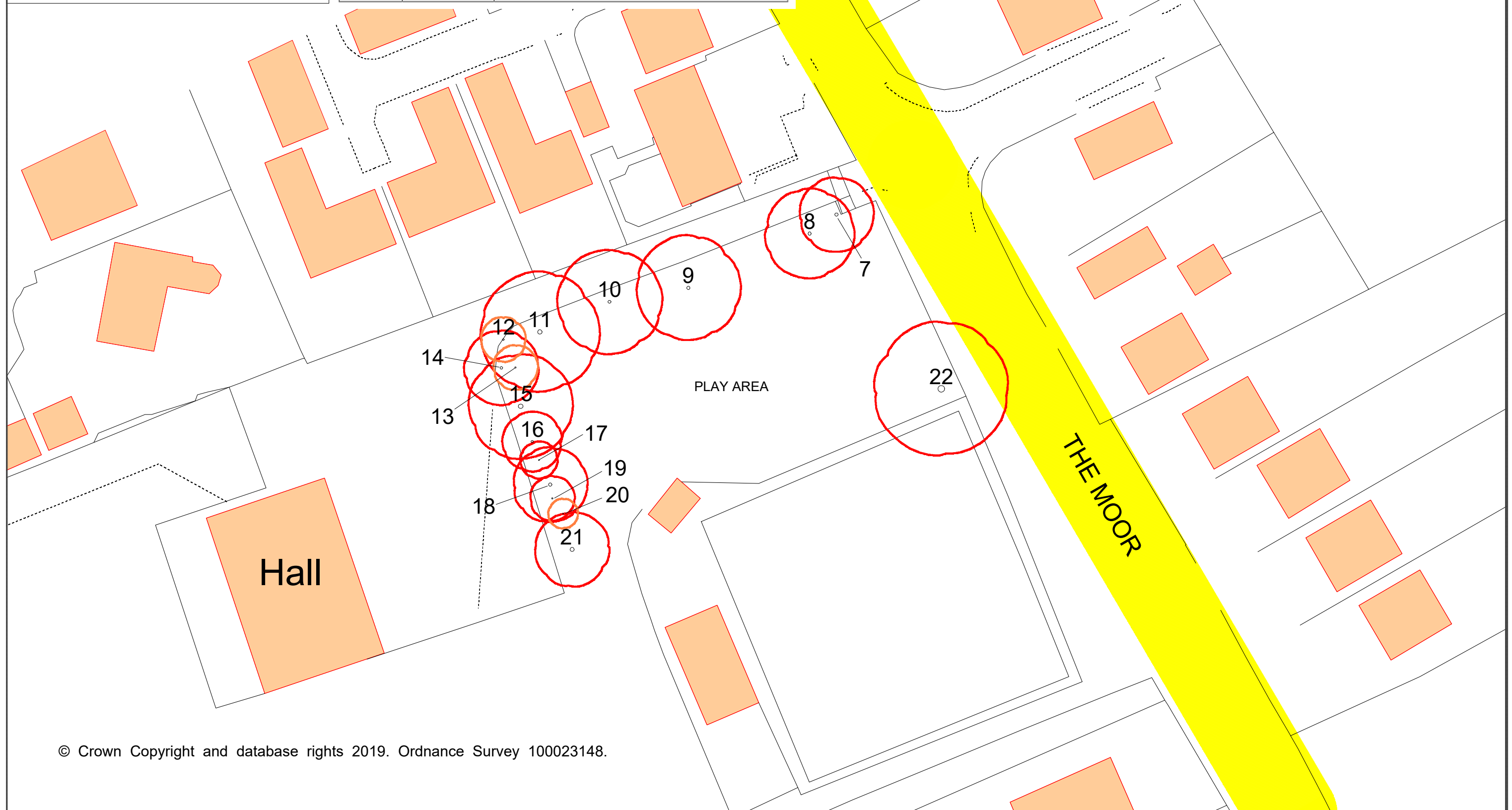




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Monochrome copies cannot be relied upon

INSPECTION FREQUENCY

Name & Tree colour	Minimum recommended frequency	
Zone 1 (Red)	1 Year (annual)	Plus additional 'walkover' survey after storm event
Zone 2 (Amber)	2 Years	Plus additional 'walkover' survey after storm event
Zone 3 (Green)	3 Years	Plus additional 'walkover' survey after storm event



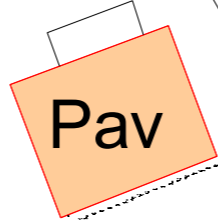
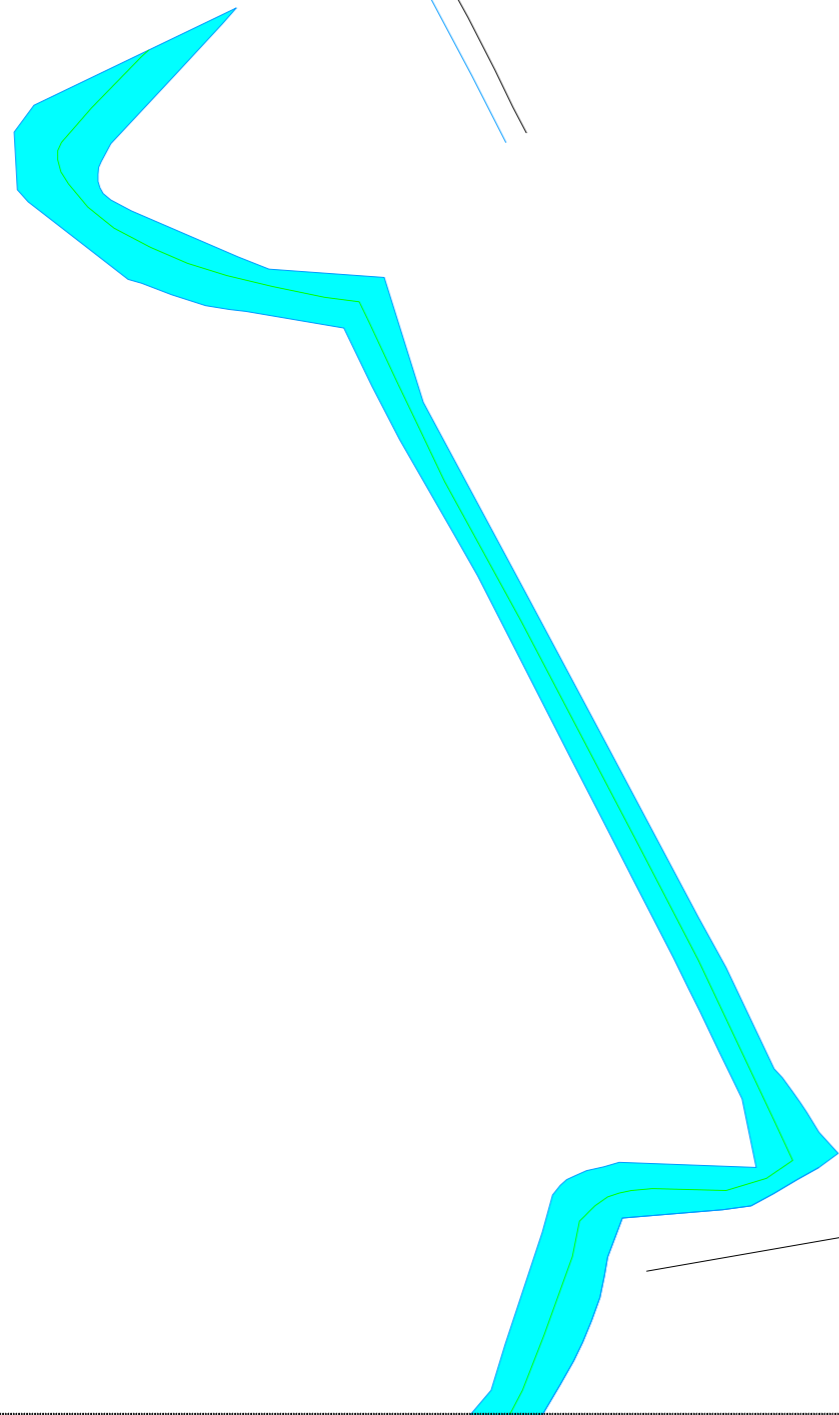
**Melbourn Parish Council
Recreation Ground**

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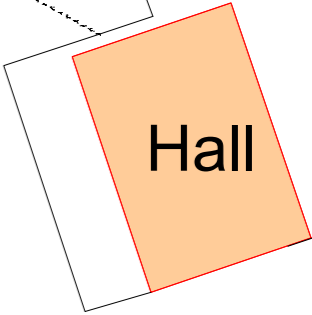
MAP FILENAME :



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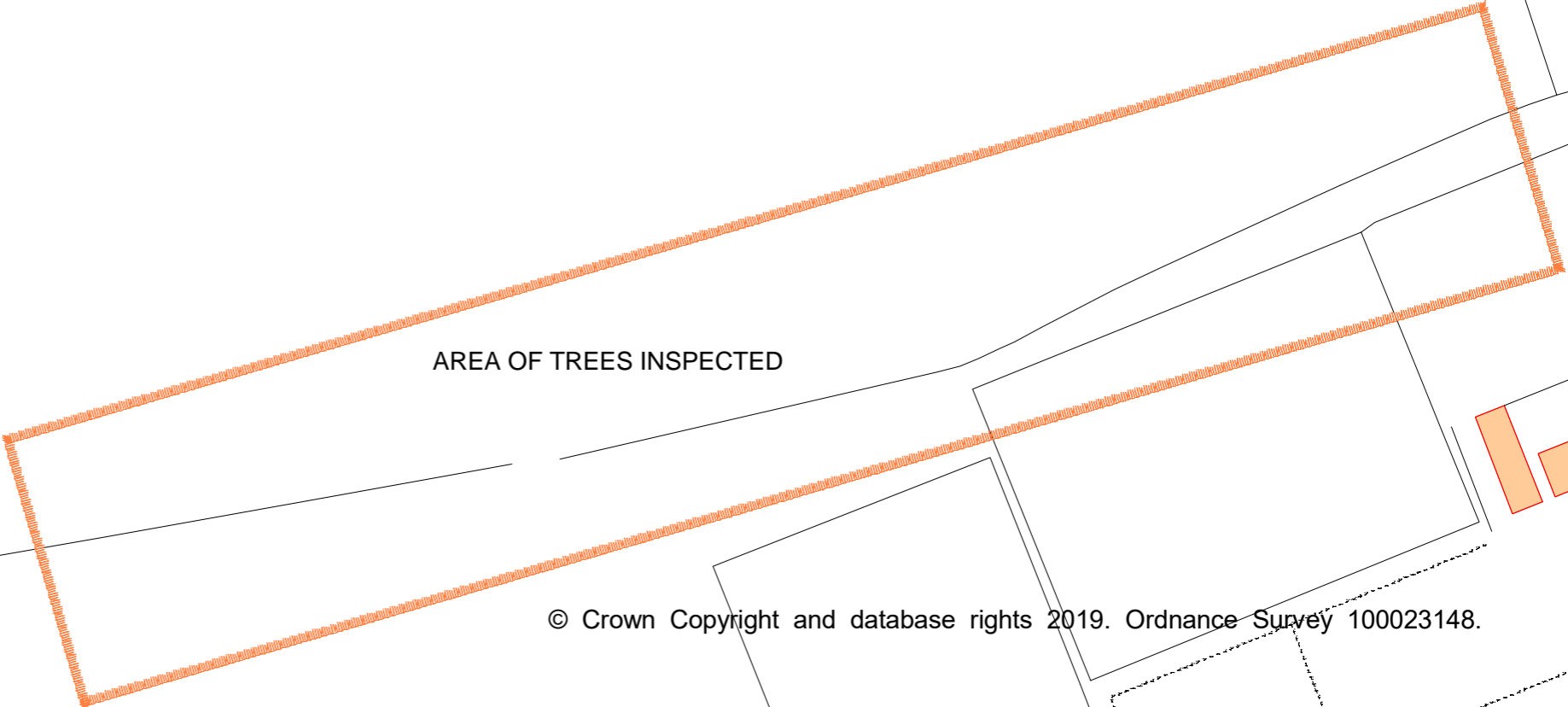


Pav



Hall

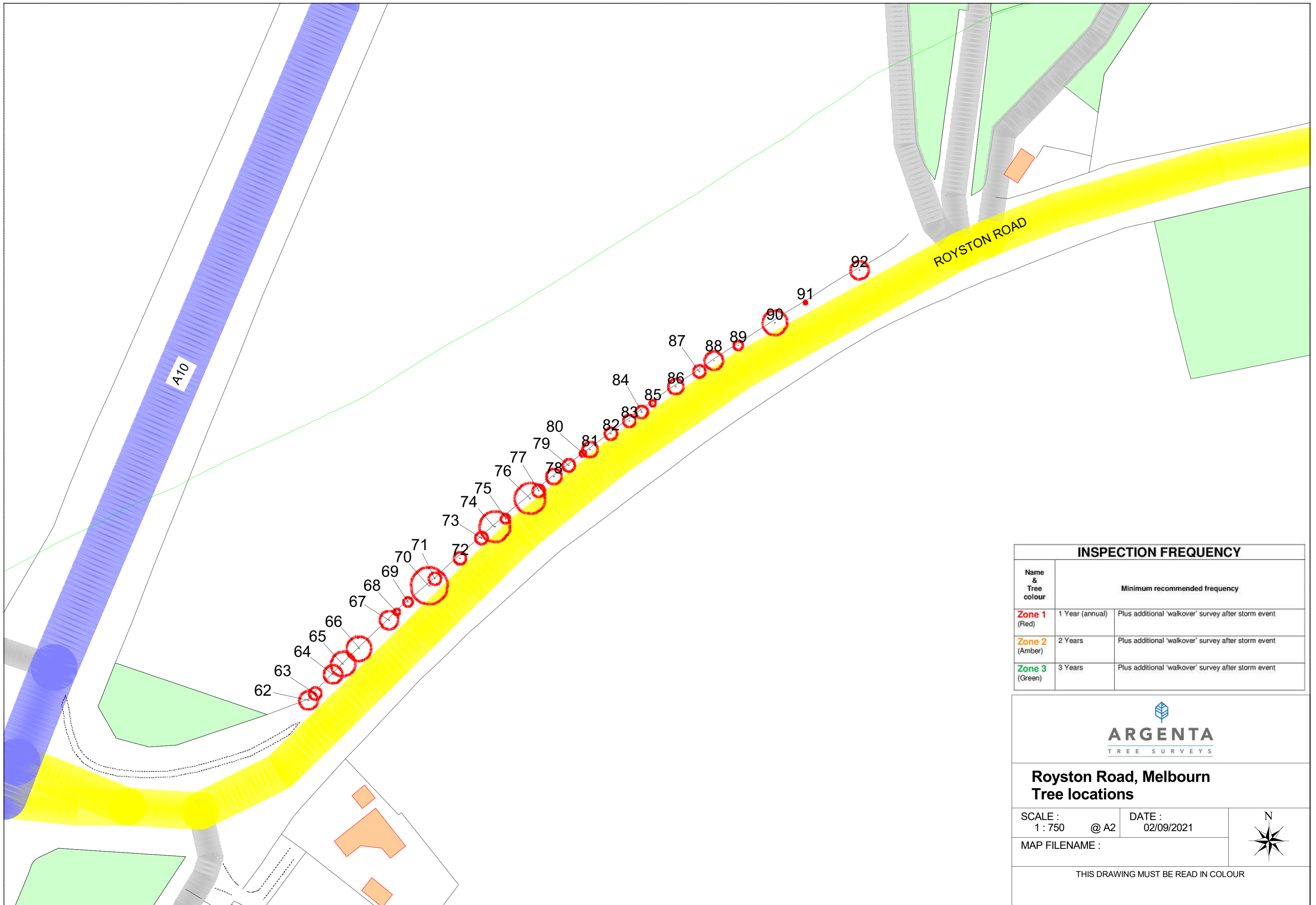
Recreation
Ground



AREA OF TREES INSPECTED

Melbourn Parish Council 2021 – Tree location map – Stockbridge Meadows (Ash trees) NOT TO SCALE





Site name: Royston Road, Melbourn, Cambs Surveyor: Ian Lorman			Date of survey: 31 August 2021 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
62	Lombardy Poplar	14	400	3	Mature	Crown - Fair, Stem - Fair, Basal Area - Fair No action Minor dead wood in lower crown. Dense Ivy on trunk	0	1
63	Lombardy Poplar	12	400	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
64	Lombardy Poplar	12	400	3	Mature	Crown - Poor, Stem - Fair, Basal Area - Fair Remove dead wood Considerable dieback in top. Dense Ivy on trunk	2	1
65	Hybrid Poplar	10	250	4	Early-mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
66	Hybrid Poplar	10	250	4	Early-mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
67	Lombardy Poplar	13	400	3	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
68	Lombardy Poplar	7	200	1	Early-mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Stunted. Dense Ivy on trunk	0	1
69	Lombardy Poplar	12	300	1.5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1

Site name: Royston Road, Melbourn, Cambs Surveyor: Ian Lorman			Date of survey: 31 August 2021 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
70	Hybrid Poplar	13	400	6	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
71	Lombardy Poplar	13	300	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
72	Lombardy Poplar	13	300	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
73	Lombardy Poplar	13	400	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
74	Hybrid Poplar	13	400	5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
75	Lombardy Poplar	13	300	1.5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
76	Hybrid Poplar	13	400	5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
77	Lombardy Poplar	13	300	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1

Site name: Royston Road, Melbourn, Cambs Surveyor: Ian Lorman			Date of survey: 31 August 2021 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
78	Lombardy Poplar	14	400	2.5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
79	Lombardy Poplar	12	300	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
80	Lombardy Poplar	10	300	1	Early-mature	Dead Fell	2	1
81	Lombardy Poplar	10	300	2.5	Mature	Crown - Poor, Stem - Fair, Basal Area - Fair Fell Considerable dieback in top of crown. Subsiding co-dominant leader in southwest leaning towards road with risk of snapping out	2	1
82	Lombardy Poplar	12	300	2	Mature	Crown - Fair, Stem - Fair, Basal Area - Fair Remove dead wood Dieback in upper crown. Dense Ivy on trunk	2	1
83	Lombardy Poplar	13	300	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
84	Lombardy Poplar	14	400	2	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1
85	Lombardy Poplar	3	300	1	Mature	Fell Dead	2	1

Site name: Royston Road, Melbourn, Cambs Surveyor: Ian Lorman			Date of survey: 31 August 2021 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
86	Lombardy Poplar	13	400	2.5	Mature	Crown - Good, Stem - Fair, Basal Area - Fair Fell Subsiding co-dominant leader on east side with risk of snapping out. Dense Ivy on trunk	2	1
87	Lombardy Poplar	13	300	2	Mature	Crown - Good, Stem - Good, Basal Area - Fair No action Dense Ivy on trunk	0	1
88	Hybrid Poplar	10	200	3	Early-mature	Crown - Good, Stem - Good, Basal Area - Good No action Stake still attached. Ivy beginning to establish	0	1
89	Lombardy Poplar	9	150	1.5	Mature	Crown - Good, Stem - Good, Basal Area - Good No action No notable defects	0	1
90	Lombardy Poplar	15	400	4	Mature	Crown - Fair, Stem - Fair, Basal Area - Fair Fell Dieback in top and moderate dead wood throughout. Dense Ivy on trunk. Large subsiding co-dominant leader on south east side leaning towards road with risk of snapping out	2	1
91	Lombardy Poplar	6	125	0.5	Mature	Crown - Poor, Stem - Fair, Basal Area - Fair No action Stunted. Dense Ivy on trunk	0	1
92	Lombardy Poplar	14	400	3	Mature	Crown - Good, Stem - Fair, Basal Area - Fair No action Dense Ivy on trunk	0	1