TREE CONSULTANTS

ARBORICULTURAL REPORT

To BS 5837:2012 at:

Land at

Roman Road
Moulton Chapel
Spalding
Lincolnshire
PE12 0XQ

Prepared for:
Larkfleet Homes
Larkfleet House
Falcon Way
Bourne
Lincolnshire
PE10 0FF

Date: *October 2018*

Reference: *AWA2421*

Institute of Chartered Foresters
Registered Consultant

Office: 0114 272 1124 Mobile: 0776 631 0880 Email: info@awatrees.com Website: awatrees.com
Union Forge, 27 Mowbray Street, Sheffield, S3 8EN. AWA Tree Consultants Limited. Company No. 8520123. Registered in England & Wales.

Contents

1. Introduction 3
1.1 Instructions and Brief 3
1.2 Survey Details 3
2. The Site 4
2.1 Location & Description 4
3. The Trees 5
3.1 Legal 5
3.2 Tree Survey Results 5
3.3 Arboricultural Development Advice 7
3.4 Protection of the Retained Trees 8
4. Signature 9
Appendix 1: Authors Qualifications & Experience 11
Appendix 2: Survey Methodology and Limitations of Report 12
Appendix 3: Explanation of Tree Descriptions 13
Appendix 4: Tree Data 14
Appendix 5: Tree Constraints Plan 15

1. Introduction

1.1 Instructions and Brief

1.1.1 We were instructed by Hannah Guy of Larkfleet Homes to visit the site and prepare our findings in a report.

1.1.2 The report is required in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations,* to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 Survey Details

1.2.1 The survey took place during October 2018.

1.2.2 The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and in accordance with the guiding principles of British Standard 5837:2012.

1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.

1.2.4 The tree positions were plotted on Ordinance Survey map base-layer using enhanced GPS technology (1-2m accuracy) and laser distance measurer.

1.2.5 This report has been prepared by Mr Adam Winson Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principle and Director of AWA Tree Consultants Ltd.

1.2.6 The tree survey data collection was carried out by Mr Dave Farmer FdSc (Arb), MArborA, PTI (Lantra). Arboriculturist at AWA Tree Consultants.

1.2.7 Full qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5.**

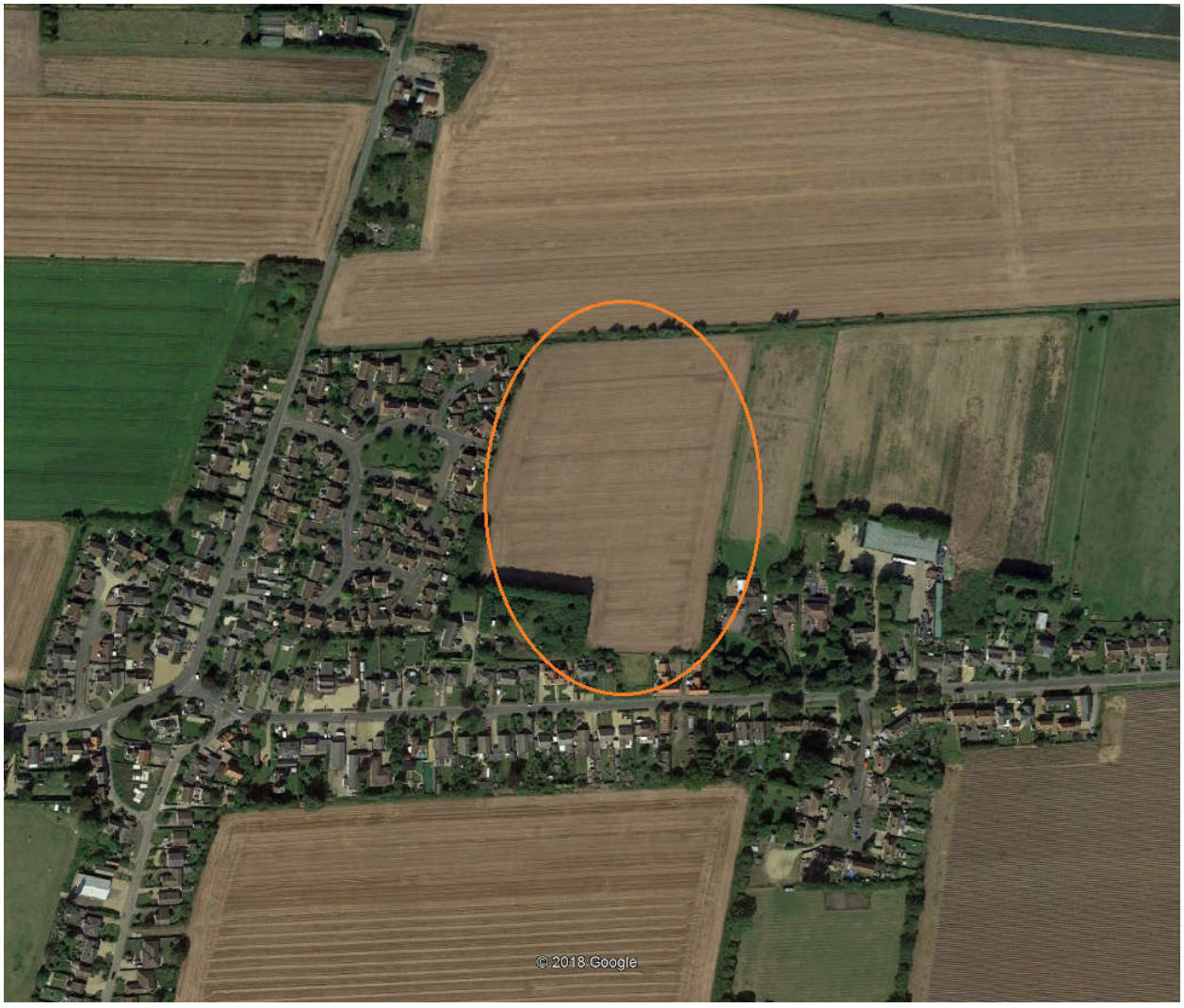
2. The Site

2.1 Location & Description

2.1.1 The site is located in Moulton Chapel, a village in the South Holland district of Lincolnshire, four miles south-east of the town of Spalding.

2.1.2 The site currently consists of a managed field surrounded by residential properties and field boundaries.

2.1.3 The approximate survey area has been highlighted in the (2016) image below:



3. The Trees

3.1 Legal

3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area. If either applies, then statutory permission is required before any works can take place.

3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998:2010 *Tree Work - Recommendations*.

3.2 Tree Survey Results

3.2.1 The tree survey revealed 48 items of woody vegetation, comprised of 35 individual trees and 13 groups of trees or shrub/hedge groups.

3.2.2 Of the surveyed trees: 7 trees are retention category 'B'; and the remaining 28 trees and 13 groups are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).

3.2.3 There is very limited significant tree cover within the site, consisting only of the occasional tree close to the boundary lines. The remaining trees and groups are located in adjacent land close to the site boundaries.

3.2.4 The central area of the site contains nothing of arboricultural significance, consisting of recently harvested arable land.

3.2.5 Species diversity at the site is relatively good. Species include Apple, Beech, Birch, Cherry, Elder, Laurel, Leyland Cypress, Sycamore and Willow. Most of the trees are semi-mature with only occasional early-mature to mature trees.

3.2.6 The most significant tree within the site is the mature Sycamore tree, T14 situated along the western boundary. This tree is visually prominent throughout the site and provides a good level of amenity value. Although there are some minor defects, the tree has good long term prospects and

would be suitable for retention within any future development.

3.2.7 A large group of Leyland Cypress trees forms a prominent feature at the south western corner of the site (G6). These trees provide comprehensive screening between the site and the land beyond, however due to the short-lived nature of the species they have only limited prospects in the longer term.

3.2.8 Beyond the site boundaries are several trees of moderate value and of species that are in keeping with the surrounding landscape character (T9, T10, T26, T29, T30 and T41). These trees are visually prominent due to their relatively large size and have good future prospects.

3.2.9 The remaining trees generally consist of smaller shrubs, planted garden trees, and areas of natural regeneration along the drainage channel to the north. Although of low individual value these diverse trees collectively provide some amenity value to the site and screen areas of the site from the land beyond.

3.2.10 Some trees were covered in dense Ivy or were inaccessible (as detailed in Appendix 4) in such cases measurements were estimated and the condition values are indicative only.

3.2.11 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.

3.2.12 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of the low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

3.2.13 The RPA for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots' actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

3.3 Arboricultural Development Advice

3.3.1 The site's central area has no significant trees and so is free of any significant arboricultural impacts for any new development.

3.3.2 The higher value retention category 'B' trees should be retained, where possible, and incorporated into any new development design.

3.3.3 Where suitable, those category 'C' trees and groups with reasonable future prospects (as detailed in Appendix 4) should be retained as part of any new development. However, care should be taken to avoid misplaced tree retention; attempts to retain unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal.

3.3.4 If required by the development proposals, occasional lower value, retention category 'C' trees and groups could be removed, and replacement planting would largely mitigate their losses.

3.3.5 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, should be used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.

3.3.6 If construction of new buildings is required within the trees' RPA it may be possible to employ special foundation design such as mini/micro pile and suspended beam or a cantilevered foundation.

3.3.7 Construction of hard surfaces, for drives and paths, within the RPA, can have negative impacts on tree roots. However, the potential negative impacts can often be overcome or minimised by employing a 'no-dig' type construction method with a porous final surface.

3.3.8 The design of the new development should consider the trees' crown position in relation to any new dwellings. The dappled shade of a tree is more pleasant than the deep shadow of a building, and some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. Whilst either shade or sunlight might be desirable, depending on the potential use of the area affected, the design should avoid unreasonable obstruction of light and should give adequate provision for future tree growth.

3.4 Protection of the Retained Trees

3.4.1 The retained trees may require protection by fencing in accordance with BS 5837:2012, during the development phase.

3.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be provided.

4. Signature

I trust this report provides all the required information.

Signed

.....

Adam Winson, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.*

19th October 2018

AWA Tree Consultants Limited
Union Forge
27 Mowbray Street
Sheffield
S3 8EN

www.awatrees.com

Appendices

Appendix 1: Authors Qualifications and Experience
Appendix 2: Survey Methodology and Limitations
Appendix 3: Explanation of Tree Descriptions
Appendix 4: Tree Data
Appendix 5: Tree Constraints Plan

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered.*

Adam is the company Director and Principle Consultant. He has a mix of the highest level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years, and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the Crown Court.

Mr James Brown *BSc (Hons) Arboriculture, MArborA.*

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. James previously worked in Europe's largest tree nursery and has experience of Local Authority tree officer work. His main work consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

Mr Dave Farmer *FdSc (Arb), MArborA, PTI (Lantra).*

Dave has a Foundation Degree in Arboriculture (with Distinction) and is qualified in Professional Tree Inspection. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. Dave has many years of experience within the tree care profession, including lecturing in arboriculture. His work focuses on diagnosing potential tree risk problems, and recommending appropriate treatments and work programmes.

Dr Felicity Stout *Ph.D, MA, BA (Hons), Cert Ed (Forestry), TechArborA.*

Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced Social Forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and has published in The Arboricultural Journal on this subject.

Mr Ricky Nos BSc *(Hons),* FdSc *(Arboriculture), TechArborA.*

Ricky is a trained arborist with 10 years of experience in the private and local authority sectors, taking in all aspects of arboricultural work. He has a Foundation Degree in Arboriculture and a BSc (Honours) in Outdoor Management, and is a technician Member of the Arboricultural Association. His main work consists of tree surveys for development projects, involving tree inspections and the preparation of Tree Reports to BS 5837:2012.

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations.* The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - '*Tree Work: Recommendations*'.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.

Appendix 4: Tree Data

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G1	Holly	*Ilex aquifolium*	Semi-mature	7	2	200, 110	Yes	0.5	2.5	2	2	2	No visual defects, Limited access around base	Twin stemmed at base, Vertical	Normal	Full of brambles.	Good	Fair	20 to 40 yrs	Low	C	No works required in current site context
G2	Leyland Cypress	*X Cuprocyparis leylandii*	Semi-mature	2.5	10+	80 avg	No	0.5	See Plan				No visual defects	Multiple stemmed at base, Vertical	Old pruning wounds, Minor deadwood	Managed boundary hedge. Southernmost section is 1.5m tall.	Fair	Good	20 to 40 yrs	Low	C	No works required in current site context
T3	Stag's Horn Sumac	*Rhus typhina*	Early-mature	4	6	100 avg	No	1.5	2	2	2	3	No visual defects	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Epicormic growths, Tight union	Normal, Minor deadwood	Previously topped at 2.5m.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context
G4	Elder	*Sambucus nigra*	Semi-mature	5	10+	70 avg	No	1	See Plan				No visual defects	Multiple stemmed at base, Vertical, Stubs, Tight union, Bark damage	Minor dieback, Minor deadwood	Full of brambles.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context
G5	Elder	*Sambucus nigra*	Semi-mature	5	10+	70 avg	No	1	See Plan				No visual defects	Multiple stemmed at base, Vertical, Stubs, Tight union, Bark damage	Minor dieback, Minor deadwood	Full of brambles.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context

AWA TREE CONSULTANTS

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G6	Leyland Cypress	*X Cuprocyparis leylandii*	Mature	15	10+	300 avg	No	0.5	See Plan				No visual defects, Increase in soil level, Adjacent ground works	Single & Multiple stemmed at base, Vertical, Stubs, Tight union	Normal, Minor deadwood	Dense linear group growing at edge of plowed field. Occasional Elder & Sycamore saplings within the group.	Good	Fair	20 to 40 yrs	Moderate	**C**	No works required in current site context
T7	Beech	*Fagus sylvatica*	Semi-mature	12	2	250, 200	Yes	2	5	4	4	2	No visual defects	Twin stemmed at 1m, Vertical, Old pruning wounds, Ivy covered	Small / sparse, Minor deadwood	Situated in adjacent land.	Fair	Fair	>40 yrs	Moderate	**C**	No works required in current site context
T8	Apple	*Malus domestica*	Early-mature	7	1	280	Yes	2	5	2.5	4.5	3	No visual defects	Multiple stemmed at 1.5m, Vertical, Old pruning wounds, Stubs, Ivy covered	Normal, Minor deadwood	Situated in adjacent land.	Fair	Fair	>40 yrs	Moderate	**C**	No works required in current site context
T9	Poplar	*Populus sp.*	Early-mature	14	3	260, 250, 250	Yes	3	5	3	4	2	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs, Tight union	Normal, Minor deadwood	Situated in adjacent land. Limited visibility of stem and lower crown.	Good	Fair	>40 yrs	Moderate	**B**	No works required in current site context
T10	Sycamore	*Acer pseudoplatanus*	Early-mature	13	1	350	Yes	2.5	4	3	4	4	No visual defects, Limited access around base	Multiple stemmed at 2m, Vertical, Old pruning wounds, Stubs, Ivy covered	Normal, Minor deadwood	Situated in adjacent land. Limited visibility of stem and lower crown.	Good	Fair	>40 yrs	Moderate	**B**	No works required in current site context

AWA TREE CONSULTANTS

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G11	Laurel	*Prunus laurocerasus*	Semi-mature	3	10+	80 avg	Yes	0.5	See Plan				No visual defects, Limited access around base	Multiple stemmed at base, Stubs	Normal	Boundary hedge growing behind fence. Previously topped at 2m.	Fair	Fair	20 to 40 yrs	Low	**C**	No works required in current site context
T12	Eucalyptus	*Eucalyptus sp.*	Semi-mature	7.5	1	500	Yes	1.5	4	1.5	2	4	No visual defects, Limited access around base	Multiple stemmed at 2m, Vertical, Epicormic growths, Old pruning wounds, Stubs, Bark damage	Small / sparse	Situated in adjacent land. All crown is regrowth from a 2m stump.	Poor	Fair	20 to 40 yrs	Low	**C**	No works required in current site context
T13	Birch	*Betula utilis*	Early-mature	6	2	210, 100	No	1	2.5	2	2	2	No visual defects	Multiple stemmed at 1.5m, Vertical, Stubs, Old pruning wounds	Normal, Minor deadwood		Fair	Fair	20 to 40 yrs	Low	**C**	No works required in current site context
T14	Sycamore	*Acer pseudoplatanus*	Mature	15	2	590, 420	No	3	6	5	5.5	6	No visual defects, Ground level changes	Twin stemmed at base, Vertical, Epicormic growths, Old pruning wounds, Stubs, Bark damage, Tight union, Minor cavities	Normal, Minor deadwood	Dense epicormic growth at base. Several minor cavities from previous pruning and snapped branches.	Fair	Fair	>40 yrs	High	**B**	No works required in current site context
T15	Sycamore	*Acer pseudoplatanus*	Semi-mature	6	1	100	No	1.5	1	1	1.5	1.5	No visual defects	Single stemmed, Vertical, Old pruning wounds	Normal	Situated in adjacent land. Green waste piled and base.	Good	Good	>40 yrs	Low	**C**	No works required in current site context

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T16	Laurel	*Prunus lusitanica*	Early-mature	4	3	220, 140, 120	Yes	1.5	1.5	1.5	1.5	1.5	No visual defects, Limited access around base	Multiple stemmed at 1.5m, Vertical, Old pruning wounds	Normal, Old pruning wounds	Situated in adjacent land. Managed as a shrub.	Good	Good	20 to 40 yrs	Low	C	No works required in current site context
T17	Birch	*Betula pubescens*	Semi-mature	6.5	1	130	Yes	2	1.5	1.5	1.5	1.5	No visual defects, Limited access around base	Single stemmed, Vertical	Normal	Situated in adjacent land.	Good	Good	20 to 40 yrs	Moderate	C	No works required in current site context
G18	Cotoneaster, Cypress, Hazel, Pine, Rhododendron, Spruce	*Cotoneaster sp. Cupressus sp. Corylus sp. Pinus sp. Rhododendron sp. Picea sp.*	Semi-mature	2	10+	50 avg	Yes	1	See Plan				No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs	Normal	Situated in adjacent land. Mixed line of managed shrubs along boundary.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context
T19	Cherry	*Prunus sp.*	Semi-mature	3.5	6	60 avg	Yes	1.5	1	1	1	1	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs	Normal	Situated in adjacent land.	Good	Fair	>40yrs	Low	C	No works required in current site context
T20	Spruce	*Picea sp.*	Semi-mature	3.5	6	60 avg	Yes	1.5	1	1	1	1	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs	Normal	Situated in adjacent land.	Good	Fair	>40yrs	Low	C	No works required in current site context
T21	Lawson Cypress	*Chamaecyparis lawsoniana*	Semi-mature	3.5	6	60 avg	Yes	1.5	1	1	1	1	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Old pruning wounds, Stubs	Normal	Situated in adjacent land.	Good	Fair	>40yrs	Low	C	No works required in current site context

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T22	Lawson Cypress	*Chamaecyparis lawsoniana*	Semi-mature	5	1	180	Yes	1	1.5	1.5	1.5	1.5	No visual defects, Limited access around base	Single stemmed, Vertical	Normal, Minor deadwood	Situated in adjacent land.	Fair	Good	20 to 40 yrs	Low	**C**	No works required in current site context
T23	Rowan	*Sorbus aucuparia*	Semi-mature	5.5	1	200	Yes	2	2	2	1.5	2	No visual defects	Twin stemmed at 1.5m, Vertical, Old pruning wounds, Stubs, Tight union	Normal	Situated in adjacent land.	Good	Fair	>40 yrs	Moderate	**C**	No works required in current site context
T24	Crab Apple	*Malus sp.*	Semi-mature	6	1	170	Yes	2.5	2	2	2	2	No visual defects	Single stemmed, Vertical, Old pruning wounds	Normal, Minor deadwood	Situated in adjacent land.	Good	Good	>40 yrs	Moderate	**C**	No works required in current site context
T25	Crab Apple	*Malus sp.*	Semi-mature	6	1	170	Yes	2.5	2	2	2	2	No visual defects	Single stemmed, Vertical, Old pruning wounds	Normal, Minor deadwood	Situated in adjacent land.	Good	Good	>40 yrs	Moderate	**C**	No works required in current site context
T26	Birch	*Betula pendula*	Early-mature	12	1	310	No	1.5	3.5	4	3.5	3.5	No visual defects	Twin stemmed at 2m, Vertical, Old pruning wounds, Stubs	Normal, Minor deadwood	Situated in adjacent land.	Good	Good	20 to 40 yrs	Moderate	**B**	No works required in current site context
T27	Cherry	*Prunus sp.*	Early-mature	7.5	1	230	No	2	2.5	3	2	2.5	No visual defects	Multiple stemmed at 1.5m, Vertical, Old pruning wounds, Tight union	Normal, Minor deadwood	Situated in adjacent land.	Good	Fair	>40 yrs	Moderate	**C**	No works required in current site context

AWA TREE CONSULTANTS

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G28	Hawthorn	*Crataegus monogyna*	Semi-mature	5	2	190, 120	No	1.5	See Plan				No visual defects	Single stemmed, Slight lean, Stubs, Old pruning wounds	Minor dieback, Minor deadwood	Situated in adjacent land. 2 trees forming a single crown. Pressing against boundary fence.	Fair	Fair	>40 yrs	Moderate	**C**	No works required in current site context
T29	Ash	*Fraxinus excelsior*	Early-mature	8.5	1	330	No	1	4	3.5	3.5	3.5	No visual defects	Single stemmed, Vertical, Old pruning wounds	Normal, Minor deadwood	Situated in adjacent land.	Good	Good	>40 yrs	Moderate	**B**	No works required in current site context
T30	Willow	*Salix chrysocoma*	Mature	14	1	510	No	1	5.5	6	5.5	6	No visual defects	Single stemmed, Vertical, Epicormic growths, Old pruning wounds, Tight union	Normal, Minor deadwood	Situated in adjacent land.	Good	Fair	20 to 40 yrs	Moderate	**B**	No works required in current site context
T31	Willow	*Salix caprea*	Semi-mature	5	10+	60 avg	No	1	2.5	2.5	2.5	2.5	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Tight union	Normal	Situated within drainage channel.	Good	Fair	20 to 40 yrs	Low	**C**	No works required in current site context
T32	Willow	*Salix alba*	Semi-mature	5	10+	60 avg	No	1	3.5	4.5	3.5	4	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Epicormic growths, Tight union	Normal	Dense group, situated within drainage channel.	Good	Fair	20 to 40 yrs	Low	**C**	No works required in current site context

AWA TREE CONSULTANTS

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T33	Willow	*Salix alba*	Semi-mature	6	6	140 avg	No	1.5	3	2.5	3	3.5	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Bark damage, Tight union	Normal, Minor deadwood	Situated within drainage channel. Many limbs have partially split and likely to fail. Limited long term value, may be unsuitable close to future development.	Fair	Poor	<10 yrs	Low	C	No works required in current site context
T34	Willow	*Salix alba*	Semi-mature	7	6	100 avg	No	1	3.5	3.5	3.5	2.5	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Tight union	Normal	Situated within drainage channel.	Good	Fair	20 to 40 yrs	Low	C	No works required in current site context
G35	Willow	*Salix caprea*	Semi-mature	4.5	10+	70 avg	No	0.5	See Plan				No visual defects, Limited access around base	Multiple stemmed at base, Stubs, Tight union	Normal, Minor deadwood	Dense group growing within drainage channel.	Good	Fair	20 to 40 yrs	Low	C	No works required in current site context
G36	Willow	*Salix caprea, Salix alba*	Semi-mature	7	10+	150 avg	No	0.5	See Plan				No visual defects, Limited access around base	Multiple stemmed at base, Stubs, Tight union	Normal, Minor deadwood	Dense group growing within drainage channel.	Good	Fair	20 to 40 yrs	Moderate	C	No works required in current site context
G37	Willow	*Salix caprea, Salix alba*	Semi-mature	5	10+	150 avg	No	0.5	See Plan				No visual defects, Limited access around base	Multiple stemmed at base, Stubs, Tight union	Normal, Minor deadwood	Dense group growing within drainage channel.	Good	Fair	20 to 40 yrs	Moderate	C	No works required in current site context

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T38	Willow	*Salix fragilis*	Semi-mature	5	8	80 avg	No	1	2.5	2.5	2.5	2.5	No visual defects, Limited access around base	Multiple stemmed at base, Vertical, Stubs, Tight union	Normal, Minor deadwood	Situated in drainage channel.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context
T39	Willow	*Salix caprea*	Semi-mature	5	6	80 avg	No	0.5	3	3	3	2.5	No visual defects	Multiple stemmed at base, Vertical, Old pruning wounds, Epicormic growths, Bark damage	Normal	Growing around boundary fence.	Fair	Fair	10 to 20 yrs	Low	C	No works required in current site context
G40	Beech	*Fagus sylvatica*	Semi-mature	6	10+	140 avg	No	0	See Plan				No visual defects, Limited access around base	Single & Multiple stemmed at base, Vertical, Old pruning wounds	Normal	Previously managed as a hedge, now overgrown. Occasional Elder & Hawthorn. 4m tall at northern extent.	Good	Fair	>40 yrs	Moderate	C	No works required in current site context
T41	Robinia	*Robinia pseudoacacia*	Mature	13	2	350, 300	Yes	4	5	5	6	4.5	No visual defects, Limited access around base	Twin stemmed at 1m, Vertical, Old pruning wounds, Stubs	Normal, Minor deadwood	Situated in adjacent land. Limited visibility of stem and lower crown.	Good	Good	>40 yrs	High	B	No works required in current site context
G42	Birch, Buddleia, Dogwood, Elder, Fig, Fir, Lime, Wild Service	*Betula sp. Buddleia sp. Cornus sp. Sambucus sp. Ficus sp. Abies sp. Tilia sp. Sorbus sp.*	Semi-mature	4	10+	50 avg	No	0.5	See Plan				No visual defects	Multiple stemmed at base, Vertical	Normal, Minor deadwood	Linear group of shrubs and saplings growing along the boundary line.	Fair	Fair	20 to 40 yrs	Low	C	No works required in current site context

AWA TREE CONSULTANTS

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T43	Pine	*Pinus sylvestris*	Semi-mature	6	1	170	No	1.5	2	2	2	2	No visual defects	Single stemmed, Vertical	Normal	Situated in adjacent land.	Good	Good	>40 yrs	Low	C	No works required in current site context
T44	Birch	*Betula pendula*	Semi-mature	4.5	2	110, 60	No	2	2	1.5	2	1.5	No visual defects	Twin stemmed at base, Vertical, Old pruning wounds, Stubs	25% absent	Situated in adjacent land, against boundary fence. Previously topped at 4m.	Fair	Good	20 to 40 yrs	Low	C	No works required in current site context
T45	Birch	*Betula pendula*	Semi-mature	4.5	1	80	No	2	2	1.5	2	1.5	No visual defects	Single stemmed, Vertical, Old pruning wounds, Stubs	25% absent	Situated in adjacent land, against boundary fence. Previously topped at 4m.	Fair	Good	20 to 40 yrs	Low	C	No works required in current site context
T46	Birch	*Betula pendula*	Semi-mature	4.5	2	80, 80	No	2	2	1.5	2	1.5	No visual defects	Twin stemmed at base, Vertical, Old pruning wounds, Stubs	25% absent	Situated in adjacent land, against boundary fence. Previously topped at 4m.	Fair	Good	20 to 40 yrs	Low	C	No works required in current site context
T47	Birch	*Betula pendula*	Semi-mature	4.5	1	160	No	2	2	1.5	2	1.5	No visual defects	Single stemmed, Slight lean, Old pruning wounds, Stubs	25% absent	Situated in adjacent land, against boundary fence. Previously topped at 4m.	Fair	Good	20 to 40 yrs	Low	C	No works required in current site context
T48	Laburnum	*Laburnum anagyroides*	Semi-mature	3.5	1	140	No	2	1.5	1.5	1.5	1.5	No visual defects	Multiple stemmed at 1.5m, Vertical, Tight union, Minor cavity	Normal, Minor deadwood	Situated in adjacent land. Minor cavity at primary union.	Fair	Fair	10 to 20 yrs	Low	C	No works required in current site context

T38
T31
T32
T33
T34
G35
G36
G37
T30
T29
T39
G28
T27
T26
T25
T24
T23
Dead tree, 3m
T22
T21
T20
T19
G18
Small Hawthorn, 2.5m
T17
T16
T15
T14
T13
T12
G11
T10
T9
T8
T7
G6
T41
G40
G6
G4
T3
T48
T46
T44
G42
T47
T45
T43
G5
G2
G1
NORTH

AWA TREE CONSULTANTS

Appendix 5: Tree Constraints Plan

Land at Moulton Chapel, PE12 0XQ
Ref: AWA2421

BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these catagories can be found in Appendix 2 of the report.

SCALE: 1:1000 PAPER: A3

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM