

PA/2017/1474



ARBORICULTURAL SURVEY

At:

***Midby Park,
High Street,
Barrow Upon Humber,
DN19 7AA***

Prepared For:

Barrow upon Humber Parish Council

Shalimar, Sluice Road,

South Ferriby,

Barton upon Humber,

N. Lincs., DN18 6JG.

January 2017

Ref: AWA1765

 Institute of
Chartered Foresters
Registered Consultant

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1. Introduction

1.1 Instructions & Purpose of Survey

- 1.1.1 This report details the findings of a formal arboricultural survey of the trees at: **Midby Park, High Street, Barrow Upon Humber, DN19 7AA.**
- 1.1.2 I am instructed by Angela Grounds, of Barrow upon Humber Parish Council, to visit the site and prepare my findings in a report.
- 1.1.3 This report details the relevant arboricultural information which is required to inform the owners of the condition of their trees and provides specific management actions that, once undertaken, demonstrate that a duty of care has been taken with regards to tree management.

1.2 Survey Details

- 1.2.1 The survey took place during January 2017 by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons) MICFor, ACIEEM, (the author's qualifications and experience are included within **Appendix 1**).
- 1.2.2 The trees were given a formal visual inspection from ground level, primarily in order to identify any obvious tree defects posing a present risk of harm and if necessary, manage these tree-related risks to an acceptable level. Management recommendations were also made in relation to good tree management of the site.
- 1.2.3 The trees were surveyed using 'Visual Tree Assessment' techniques and in accordance with the guiding principles of National Tree Safety Group Guidance. Where suitable, individual trees were risk assessed using "Quantified Tree Risk Assessment" methodology (explanatory details regarding the survey methodology are included within **Appendix 2**).
- 1.2.4 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**, which includes recommended works for trees requiring management. For tree locations please refer to the Tree Plan at **Appendix 5**.

2. The Site

2.1 Location and Description

- 2.1.1 The site is situated in Barrow upon Humber, a village and civil parish in North Lincolnshire.
- 2.1.2 The site consists of a park with formal and informal pathways, amenity areas with benches and play areas and open grassed areas.
- 2.1.3 The tree survey was limited to those trees within the park. In addition, a single tree within the nearby market place was inspected.

3. The Trees

3.1 Legal Status

- 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 Survey Results

- 3.2.1 **Overview:** The tree survey revealed 68 trees, comprised of 65 individual trees and 3 groups of trees. Collectively the trees form a key element of the park and they provide a valuable resource for the site and surrounding area. Therefore, in considering the trees and the site's visitors and neighbours, management decisions have been aimed to balance benefits with risks.
- 3.2.2 **Target Evaluation:** Each individual tree is assessed for the likelihood of persons or objects, the latter having variable significance, being within falling distance of the tree or its branches. In general terms, trees adjacent to roads, adjacent residential properties or the main site footpaths and play areas, have a moderate to high target value, and the trees further within the site or in less well used areas have a moderate to low target value.

- 3.2.3 **Tree Removals:** 6 trees were assessed as posing an unacceptable risk to people or property. The trees are highlighted in red on the attached tree plan at Appendix 5 and the work is detailed in Appendix 4. Trees T20, T25, T36, T38, T39, T68 were recommended to be removed. Removal work of moderate or high urgency is required for T20 Ash and T38 Ash. The other recommended removals are of a lower urgency.
- 3.2.4 Standing trunks form valuable wildlife habitat. As such, where suitable those trees recommended for removal should be retained as standing trunks in reduced and stabilised form, usually at 4m to 6m height, as what is known as 'monoliths'. It will be necessary to re-inspect the monoliths to assess and address their stability and the risks posed, as with the other standing trees, as part of the ongoing management of the site.
- 3.2.5 **Tree Pruning and Management:** 12 trees were assessed as offering a sufficiently high risk to people or property and require pruning works to reduce this risk. The trees T5, T7, T12, T13, T14, T17, T18, T22, T26, T33, T34 and T37 are marked in blue on the attached plan at Appendix 5 and detailed in Appendix 4. The work is generally of a low urgency; however, the management of T13, T14, T17, T18, T26, and T37 is a moderate priority.
- 3.2.6 Several trees had deadwood that was overhanging footpaths or adjacent gardens. Where dead wood removal is recommended, it should be restricted to those aspects of the crown where dead wood failure may cause damage or harm. Elsewhere, dead wood may be retained and reduced in extent to stable proportions.
- 3.2.7 Some trees had unbalanced crowns that were overhanging adjacent gardens, or had structural defects. These trees have been recommended for crown reduction work to reduce the risk of failing branches and to retain the trees with less risk. All tree work should be carried out per British Standard 3998: 2010 Tree Work - Recommendations.
- 3.2.8 Where necessary, the surveyed trees were considered in terms of both size (potential impact) and probability of tree or branch failure. The assessment of the three components (target, size and probability of failure) inform the urgency of the recommended work. As such, those trees that have had low urgency management work recommendations made, should be assessed in relation to the costs and benefits of risk control, and should be reviewed as costs allow.

4. Quantified tree risk assessment (QTRA)

4.1 QTRA Details

- 4.1.1 Tree safety management is a matter of limiting the risk of harm from tree failure while maintaining the benefits conferred by trees. Although it may seem counter intuitive, the condition of trees should not be the first consideration. Instead, tree managers should first take account of the usage of the land on which the trees stand, which in turn will inform the process of assessing the trees.
- 4.1.2 The Quantified Tree Risk Assessment (QTRA) system applies established and accepted risk management principles to tree safety management. Firstly, the targets (people and property) upon which trees could fail are assessed and quantified, thus enabling tree managers to determine whether to assess trees and to what degree of rigour a survey or inspection of the trees is required. Where necessary, the tree is then considered in terms of both size (potential impact) and probability of tree or branch failure. Values derived from the assessment of these three components (target, size and probability of failure) are combined to calculate the probability of significant harm occurring.
- 4.1.3 The system moves the management of tree safety away from labelling trees as either 'safe' or 'unsafe' and requiring definitive statements of tree safety from either tree surveyors or tree managers. Instead, QTRA quantifies the risk of harm from tree failure in a way that enables tree managers to balance safety with tree value and operate to predetermined risk thresholds.

4.2 QTRA Advisory Thresholds

- 4.2.1 The QTRA advisory thresholds in Table 1 are proposed as a reasonable approach to balancing safety from falling trees with the costs of risk reduction. While the thresholds can be the foundation of a robust policy for tree risk management, tree managers should make decisions based on their own situation, values and resources.
- 4.2.2 A Risk of Harm that is less than 1/1,000,000 is Broadly Acceptable and is already As Low as Reasonably Practicable (ALARP). A Risk of Harm 1/1,000 or greater is unacceptable and will not ordinarily be tolerated. Between these two values, the Risk of Harm is in the Tolerable Region of the Tolerability of Risk framework (ToR) and will be tolerable if it is ALARP. In the

Tolerable Region, management decisions are informed by consideration of the costs and benefits of risk control, including the nature and extent of those benefits provided by trees, which would be lost to risk control measures.

4.2.3 For the purpose of managing risks from falling trees, the Tolerable Region can be further broken down into two sections. From 1/1,000,000 to less than 1/10,000, the Risk of Harm will usually be tolerable providing that the tree confers 'average benefits' as discussed above. As the Risk of Harm approaches 1/10,000 it will be necessary for the tree manager to consider in more detail the benefits provided by the tree and the overall cost of mitigating the risk. A Risk of Harm in the Tolerable Region but 1/10,000 or greater will not usually be tolerable where it is imposed on others, such as the public, and if retained, will require a more detailed consideration of ALARP.

Thresholds	Description	Action
1/1,000	Unacceptable Risks will not ordinarily be tolerated	<ul style="list-style-type: none"> Control the risk
	Unacceptable (where imposed on others) Risks will not ordinarily be tolerated	<ul style="list-style-type: none"> Control the risk Review the risk
	Tolerable (by agreement) Risks may be tolerated if those exposed to the risk accept it, or the tree has exceptional value	<ul style="list-style-type: none"> Control the risk unless there is broad stakeholder agreement to tolerate it, or the tree has exceptional value Review the risk
1/10 000	Tolerable (where imposed on others) Risks are tolerable if ALARP	<ul style="list-style-type: none"> Assess costs and benefits of risk control Control the risk only where a significant benefit might be achieved at reasonable cost Review the risk
1/1 000 000	Broadly Acceptable Risk is already ALARP	<ul style="list-style-type: none"> No action currently required Review the risk

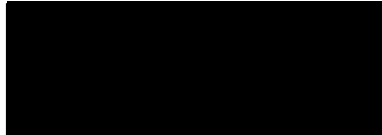
4.3 QTRA Assessment of Site and Trees

- 4.3.1 Full details of all of the sites trees were collected and recorded as part of the survey. Using this tree data, a walkover of the site enabled an assessment of the nature of both the surveyed trees and their relationship with the site in terms of targets.
- 4.3.2 Calculations were made and recorded where the risks were likely to exceed a risk of harm of 1 in 100 000.
- 4.3.3 Of the surveyed trees, T20 Ash, had an unacceptable risk threshold of 1/10,000 and T38 Ash, had an unacceptable risk threshold of 1/4000 (highlighted in orange on the tree data schedule in appendix 4). These trees should be controlled, using the management detailed in appendix 4.
- 4.3.4 16 trees fell within the range of tolerable if ALARP. These trees have had management work recommendations made, yet this should be assessed in relation to the costs and benefits of risk control, and should be reviewed as costs allow (highlighted in yellow on the attached data schedule).
- 4.3.5 To assist with wider tree management at the site, occasional additional trees that fall below the risk of harm of 1 in 100 000, have been recommended for works and included in the tree data in appendix 4.
- 4.3.6 Due to the relatively high target area of much of the site, it is recommended to have the trees inspected annually for signs of decline.

5. Signature

I trust this report provides all the required information.

Signed



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

14th February 2017

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Appendices

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

Appendix 1: Authors Qualifications & Experience

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

Adam is the company Director and Principle Consultant. He has a mix of the highest level academic qualifications and relevant work experience. Having worked within the tree care profession for over 20 years, and being awarded an MSc in Arboriculture and Urban Forestry, with distinction and the ICF top student award. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, 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 and he has appeared as a tree expert in planning appeals, at magistrates' court and Crown Court.

Mr Guy Baxter *FdSc (Arb), ND Arb. TechArborA. Associate (ICF)*

Guy joined AWA Tree Consultants at the start of 2015, after seven years' work experience within the tree care profession. He has a Foundation Degree in Arboriculture and is in the final stages of a BSc (Hons) Degree in Arboriculture and Urban Forestry. He is a Technician Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters, working towards becoming a Chartered Arboriculturist. His work focuses on tree risk assessments and undertaking BS5837:2012 tree surveys for development projects; this involves tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and Tree Protection Schemes to BS 5837:2012.

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

James joined AWA after seven years' work experience, including working in Europe's largest tree nursery and Local Authority tree officer work, while a Horticultural Apprentice for Tameside Metropolitan Borough Council. 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, working towards becoming a Chartered Arboriculturist. His main work consists of tree surveys for development projects and risk assessments, involving tree inspections, the preparation of Tree Reports, Arboricultural Impact Assessments and Tree Protection Schemes to BS 5837:2012.

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with legislation and guidance which has assisted in clarifying the duties of a reasonable and responsible tree owner, in legal cases, best practice and codes of practice. In 2007 the HSE published Management of the risk from falling trees (SIM 01/2007/05) regarding the investigation and its expectations with regarding its expectations as to what is a reasonable and proportionate approach to tree management. Further guidance was issued in 2011 by the National Tree Safety Group, which provides a nationally recognised approach to tree safety management and provides guidance that is proportionate to the actual risks posed by trees. The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and were risk assessed using "Quantified Tree Risk Assessment" methodology. Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape or are estimated.

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.

The Quantified Tree Risk Assessment (QTRA) system applies established and accepted risk management principles to tree safety management. Firstly, the targets (people and property) upon which trees could fail are assessed and quantified, thus enabling tree managers to determine whether to assess trees and to what degree of rigour a survey or inspection of the trees is required. Where necessary, the tree is then considered in terms of both size (potential impact) and probability of tree or branch failure. Values derived from the assessment of these three components (target, size and probability of failure) are combined to calculate the probability of significant harm occurring.

Trees are living organisms, as an arboriculturist it is not possible to give a guarantee 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.

STEM DIAMETER is measured, or estimated, 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 the measurement from the centre of the stem base to the edge of the crown across the four cardinal points.

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

TREE CONDITION This is an assessment of the physiological and structural health of the tree and takes into account vigour, presence of disease and dieback significant wounds, decay and quality of branch junctions. The assessment of each area of the tree: Roots/Base, Stem, Branches, Leaf & Buds is detailed.

TARGET VALUE is classed as high, moderate or low. This is an indication of the likelihood of persons or objects, the latter having variable significance, being within falling distance of a tree or its branches.

WORKS URGENY is an indication of the timescale in which the recommended tree works or management should be implemented.

NEXT SURVEY This is an indication of the timescale in which a tree should be re-inspected; a specific time of year for the inspection may also be detailed in the recommendations.

TREE CATEGORIES

A (marked green on the plan) =No works/management required. These trees are considered to be in an acceptable condition at present and require no action at this time. However, these trees may require future management in order to ensure that they remain safe.

B (marked in blue on the plan) =Pruning works/management required. These trees have been recommended for active management. This may include remedial pruning or target management or more detailed, investigation (such as a climbing inspection or a decay detection analysis) or may require future monitoring.

R (marked in red on the plan) = trees for removal. These trees have been recommended for removal, or very heavy pollarding, usually because they pose an unacceptable risk to people and or property, or have only limited long term value.

Appendix 4: Tree Data

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T1	Beech	<i>Fagus sylvatica</i>	Mature	21	1	1170	10	No visual defects	No visual defect. Tight union at 3m, yet upright form. Minor old pruning wounds	No visual defects. Minor dead wood	Good	Very large tree by entrance to site.	Moderate - High	A	No action required	1 Year	>1/1 000 000	
T2	Yew	<i>Taxus baccata</i>	Semi-mature	9	1	230	4	Soil erosion. Soil compaction	No visual defect. Ivy covered	No visual defects. Growing close to adjacent building	Good		Low	A	No urgent action. Advised to cut back crown from adjacent building	3 Years	<1/1 000 000	
T3	Maple	<i>Acer pseudoplatanus</i>	Early-mature	16.5	1	490	4.5	No visual defects. Soil compaction	Minor damage at base of tree. No sign of significant decay.	Overhanging adjacent land.	Good		Moderate	A	No action required	1 Year	>1/1 000 000	
T4	Holly	<i>Ilex aquifolium</i>	Semi-mature	6.5	1	210	3.5	No visual defects	Tight Union. Epicormics growths. Multi stemmed	No visual defects. Growing close to adjacent building	Good		Low	A	No urgent action. Advised to cut back crown from adjacent building	3 Years	>1/1 000 000	
T5	Lime	<i>Tilia europaea</i>	Mature	19	1	1030	7	No visual defects. Deep fissure at stem base.	Bark wounds. Ivy covered. Tight union. Old pruning wounds. Minor basal cavity	Occasional deadwood and hanging branches Crown overhanging building	Good	Small open cavity at base.	Moderate	B	Remove deadwood	Low	1 Year	1/500 000
T6	Holly	<i>Ilex aquifolium</i>	Semi-mature	4	4	130	3	No visual defects	No visual defect. Multi stemmed	No visual defects	Fair	Shrubby tree with no issues	Low	A	No action required	3 Years	>1/1 000 000	
T7	Lime	<i>Tilia europaea</i>	Mature	21	1	1080	7	No visual defects	Bark wounds. Ivy covered. Stubs. Epicormics growths	Occasional dead wood overhanging footpath	Good	Deadwood.	Moderate / High	B	Remove deadwood overhanging footpath. Raise low canopy to 3m.	Low	1 Year	1/500 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T8	Maple	<i>Acer pseudoplatanus</i>	Early-mature	16	1	490	4	No visual defects	No visual defect. Ivy covered	No visual defects. Minor dead wood	Good		Low	A	No urgent action Advised to sever ivy		1 Year	>1/1 000 000
T9	Ash	<i>Fraxinus excelsior</i>	Early-mature	16	2	240	6	No visual defects	Multiple-stemmed. Ivy covered	Minor deadwood	Good	Deadwood too small to warrant remedial works	Low	A	No urgent action Advised to sever ivy		1 Year	>1/1 000 000
T10	Elm	<i>Ulmus procera</i>	Semi-mature	11.5	1	340	4	No visual defects	Stubs. Multiple-stemmed	Low hanging branches.	Fair		Low	A	No action required		1 Year	>1/1 000 000
T11	Maple	<i>Acer pseudoplatanus</i>	Semi-mature	7.5	1	110	3	No visual defects. May impact footpath in the future.	No visual defect	Low hanging branches. Crossing branches	Fair		Low	A	No action required		3 Years	<1/1 000 000
T12	Lime	<i>Tilia europaea</i>	Mature	21	1	970	9	No visual defects	Tight union. Epicormics growths. Minor cavities. Old pruning wounds. Woodpecker holes.	Minor die back. Deadwood overhanging footpath	Fair	Wood pecker holes. Hanging over adjacent land.	Moderate / High	B	Remove deadwood overhanging footpath	Low	1 Year	1/500 000
T13	Lime	<i>Tilia europaea</i>	Mature	20	1	840	8	Sucker growth from base	Bark wounds. Minor cavities. Stubs. Epicormics growths. Old pruning wounds	Minor die back. Deadwood overhanging footpath	Fair	Tree showing signs of stress /decline	Moderate / High	B	Remove deadwood overhanging footpath Thin crown 10%. Reduce crown to suitable points by 15%.(3m).	Moderate	1 Year	1/100 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T14	Ash	<i>Fraxinus excelsior</i>	Mature	17	1	700	4.5	No visual defects	Slight Lean. Ivy covered. Stubs	Major dead wood. Moderate die back. Stubs. Small / sparse	Fair	Tree showing signs of stress /decline	Moderate / High	B	Sever ivy Reduce overhanging crown to suitable points by 15%.(2m).	Moderate	1 Year	1/40 000
T15	Ash	<i>Fraxinus excelsior</i>	Semi-mature	9	1	240	3.5	No visual defects	Ivy covered	Minor dead wood. Overhanging adjacent garden	Fair	Deadwood too small to warrant remedial works	Moderate	A	No action required		3 Years	<1/1 000 000
T16	Elder	<i>Sambucas nigra</i>	Mature	7	3	180	3	No visual defects	Minor cavities. Stubs. Old pruning wounds	Minor dead wood	Fair	Deadwood too small to warrant remedial works	Low	A	No action required		3 Years	<1/1 000 000
T17	Ash	<i>Fraxinus excelsior</i>	Early-mature	17.5	4	350	8	No visual defects	Multi stemmed. Tight union. Stubs. Ivy covered. Minor cavities	Crossing branches. Weak fork. Minor dead wood. Overhanging adjacent land.	Fair	Branch overhanging garden with cavity located at the branch union.	Moderate / High	B	Reduce overhanging crown by 25% (3.5m), back to suitable points. Sever/ remove ivy	Moderate	1 Year	1/30 000
T18	Ash	<i>Fraxinus excelsior</i>	Early-mature	15.5	2	300	5	No visual defects	Old pruning wounds. Slight Lean. Decay. Ivy covered. Stubs	Major dead wood. Old pruning wounds	Fair	Reduce limb hanging over garden	Moderate / High	B	Reduce overhanging crown by 25% (2.5m), back to suitable points. Sever/ remove ivy	Moderate	1 Year	1/30 000
T19	Ash	<i>Fraxinus excelsior</i>	Early-mature	20	1	580	10	No visual defects	No visual defects	Previously pollard now with established new growth.	Good	Monitor the new growth from previous pruning points. Potential for a weak connection.	Moderate / High	A	No action required		1 Year	>1/1 000 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T20	Ash	<i>Fraxinus excelsior</i>	Early-mature	20	1	610	7	Soil compaction	Major cavities. Decay	Minor die back. Major dead wood. Old pruning wounds	Poor	Very limited long term value	Moderate / High	U	Fell. Retain some standing stem for habitat if acceptable.	Moderate	2 Year	1/10 000
T21	Ash	<i>Fraxinus excelsior</i>	Early-mature	19	1	350	4	No visual defects	No visual defect	Minor dead wood. Small / sparse	Fair		Moderate	A	No action required		1 Year	>1/1 000 000
T22	Ash	<i>Fraxinus excelsior</i>	Early-mature	16	2	250	5	No visual defects. Soil compaction	Twin stemmed at base. One stem with cavities and decay.	Major die back. Major dead wood.	Poor	One of the two stems is heavily damaged, limited future prospects.	Moderate	B	Fell damaged stem	Low	1 Year	1/100 000
T23	Ash	<i>Fraxinus excelsior</i>	Semi-mature	17	1	270	3.5	No visual defects. Soil compaction	No visual defect	No visual defects	Good		Moderate	A	No action required		1 Year	>1/1 000 000
T24	Ash	<i>Fraxinus excelsior</i>	Early-mature	17	1	510	4	No visual defects	No visual defect	No visual defects	Good		Moderate	A	No action required		1 Year	>1/1 000 000
T25	Ash	<i>Fraxinus excelsior</i>	Early-mature	17	1	430	6	No visual defects	Major bark wounds. Major cavities. Decay	Minor cavities. Minor dead wood	Poor	Very limited future prospects.	Moderate	U	Fell. Retain some standing stem for habitat if acceptable	Low	1 Year	1/400 000
T26	Ash	<i>Fraxinus excelsior</i>	Early-mature	18	1	480	6	No visual defects	Bark wounds. Stubs	Minor die back. Minor dead wood. Stubs. Damaged branch in crown.	Fair	Damaged branch overhanging footpath	Moderate	B	Deadwood clear hanging branch	Moderate	1 Year	1/50 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T27	Walnut	<i>Juglans regia</i>	Mature	19.5	1	940	9	No visual defects	No visual defect. Slight lean.	Minor die back. Minor dead wood	Good		Moderate / High	A	No action required		1 Year	>1/1 000 000
T28	Beech	<i>Fagus sylvatica</i>	Mature	20	1	1100	7	No visual defects	Old pruning wounds. Cavities. Decay	Heavily pruned In the past. Minor die back. Minor dead wood	Fair	Situated just beyond boundary in adjacent land - no access.	Moderate / High		No action required		1 Year	1/1 000 000
T29	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	6	1	160	2	No visual defects	No visual defect	No visual defect	Fair		Low	A	No action required		3 Years	>1/1 000 000
T30	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	7.5	3	150	3	No visual defects	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T31	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	6	3	150	3	No visual defects	Multi stemmed. Ivy covered	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T32	Ash	<i>Fraxinus excelsior</i>	Early-mature	18.5	1	490	5	No visual defects	No visual defects. Ivy prevented detailed inspection	Low hanging branches. Minor deadwood	Fair		Moderate / High	A	No action required		1 Year	>1/1 000 000
T33	Ash	<i>Fraxinus excelsior</i>	Early-mature	16.5	1	570	9	No visual defects	Bark wounds. Leaning towards adjacent property. Cavity on stem. Old pruning wounds. Ivy covered	Minor dead wood. Minor die back	Fair		Moderate / High	B	Reduce overhanging crown back to suitable points, by 30% (3m). Sever/ remove ivy	Low	1 Year	1/1 000 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T34	Ash	<i>Fraxinus excelsior</i>	Early-mature	18.5	1	750	8	No visual defects	No visual defect	Minor die back. Occasional dead wood	Fair		Low	B	Deadwood	Low	1 Year	1/500 000
T35	Ash	<i>Fraxinus excelsior</i>	Early-mature	18	1	450	5	No visual defects	No visual defects	No visual defects	Good		Low	A	No action required		1 Year	>1/1 000 000
T36	Ash	<i>Fraxinus excelsior</i>	Early-mature	18	1	450	4	No visual defects	Bark wounds. Cavities. Minor cavities. Decay	Major die back. Major dead wood. Small / sparse	Poor	Limited future prospects.	Moderate	U	Fell. Retain some standing stem for habitat if acceptable	Low	1 Year	1/400 000
T37	Walnut	<i>Juglans regia</i>	Mature	18	2	960	10	No visual defects	Old pruning wounds / Bark wounds. Cavities. Minor cavities. Decay. Stubs	Minor die back. Dead wood. Old snapped branches and pruning wounds. Cavities in crown	Fair	Monitor tree. In considerable decline	Moderate	B	Sever/ remove ivy. Reassess in 18 months	Moderate	1 Year	1/400 000
T38	Ash	<i>Fraxinus excelsior</i>	Over Mature	22	1	1280	11	Decay likely	Fungus at base (Ganoderma sp.) Major cavities with major stem decay.	Major die back. Major dead wood. Snapped out limbs.	Poor	Historic tree yet in significant decline	Moderate / High	U	Fell. Retain some standing stem for habitat if acceptable	Moderate / High	2 Year	1/4 000
T39	Horse Chestnut	<i>Aesculus hippocastanum</i>	Mature	11.5	1	660	5	No visual defects	Bark wounds. Fungus. Cavities. Decay. Major cavities. Stubs	Major die back. Major dead wood	Poor	Fire damage	Moderate	U	Fell. Retain some standing stem for habitat if acceptable	Low	NA	1/400 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T40	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	5	2	150	3	No visual defects	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T41	Ash	<i>Fraxinus excelsior</i>	Young	7	3	140	2	No visual defect	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T42	Elder	<i>Sambucas nigra</i>	Early-mature	3.5	1	270	3	No visual defects	Leaning. Cavities. Ivy covered	Moderate die back. Minor dead wood	Fair	Limited long term value	Low	A	No action required		3 Years	>1/1 000 000
T43	Ash	<i>Fraxinus excelsior</i>	Early-mature	14	2	300	4	No visual defects	No visual defect	No visual defects	Fair		Moderate	A	No urgent action Advised to cut back overhanging crown		1 Year	>1/1 000 000
T44	Elder	<i>Sambucas nigra</i>	Mature	7	6	170	4	No visual defects	Bark wounds. Cracked / included bark. Minor cavities	Moderate die back. Minor dead wood	Fair		Low	A	No urgent action Advised to cut back overhanging crown		3 Years	>1/1 000 000
T45	Elder	<i>Sambucas nigra</i>	Early-mature	5	8	110	4	No visual defects	Cracked / included bark. Bark wounds. Minor cavities. Decay	Major dead wood	Poor	Limited long term value	Moderate	A	No urgent action Advised to cut back overhanging crown		3 Years	>1/1 000 000
T46	Elder	<i>Sambucas nigra</i>	Semi-mature	4	4	190	2	No visual defects	Bark wounds. Old pruning wounds. Minor cavities	Major die back. Major dead wood	Poor	Pushing against the fence.	Low	A	No urgent action Advised to cut back overhanging crown		3 Years	>1/1 000 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T47	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	3.5	1	120	2	No visual defects	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
G48	Hawthorn, Ash, Holly	<i>Crataegus sp.</i> <i>Fraxinus sp. Ilex sp.</i>	Early-mature	15	1	200	3	Linear group. Was likely historically managed as a hedge. Occasional deadwood yet no major visible defects.			Good		Low	A	No action required		1 Year	>1/1 000 000
T49	Ash	<i>Fraxinus excelsior</i>	Early-mature	17	3	310	6	No visual defects	Multi stemmed. Tight union. Stubs. Bark wounds	Minor deadwood	Good		Low	A	No action required		1 Year	>1/1 000 000
T50	Ash	<i>Fraxinus excelsior</i>	Early-mature	17	5	260	5	No visual defects	Multi stemmed. Tight union. Slight Lean	Minor dead wood	Fair		Low	A	No action required		1 Year	>1/1 000 000
T51	Elm	<i>Ulmus procera</i>	Semi-mature	13	1	300	3	No visual defects	No visual defect	No visual defects	Fair	Situated within group. Limited long term value	Low	A	No action required		1 Year	>1/1 000 000
G52	Hawthorn, Ash	<i>Crataegus sp.</i> <i>Fraxinus sp.</i>	Early-mature	20	1	250	3	Linear group. Was likely historically managed as a hedge. Occasional deadwood yet no major visible defects.			Good		Low	A	No action required		1 Year	>1/1 000 000
T53	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	6	3	110	2	No visual defects	Multi stemmed	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000

Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T54	Yew	<i>Taxus baccata</i>	Semi-mature	13	1	530	5	No visual defects	No visual defect	No visual defects	Good		Low	A	No action required		1 Year	>1/1 000 000
T55	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	6	3	130	3	No visual defects	Ivy covered	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T56	Ash	<i>Fraxinus excelsior</i>	Semi-mature	15	2	280	5	No visual defects	No visual defect	No visual defects	Good		Low	A	No action required		1 Year	>1/1 000 000
T57	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	4	1	350	4	Heave / decay	Fallen	Fallen crown	Poor	Fallen boundary tree	Low	A	No urgent action Advised to cut back to safe height.		1 Year	>1/1 000 000
T58	Holly	<i>Ilex aquifolium</i>	Early-mature	11	2	350	3	No visual defects	Slight Lean. Ivy covered	No visual defects	Fair	Ivy prevented detailed inspection	Low	A	No action required		3 Years	>1/1 000 000
T59	Elder	<i>Sambucus nigra</i>	Early-mature	5	4	150	3	No visual defects	Tight union. Multi stemmed. Minor cavities. Cavities	Minor dead wood. Major dead wood	Fair		Low	A	No action required		3 Years	>1/1 000 000
T60	Oak	<i>Quercus robur</i>	Early-mature	17	2	360	7	No visual defects	No visual defect. Bark wounds	No visual defects	Good		Moderate	A	No action required		1 Year	>1/1 000 000





Tree ID	Tree Species		Measurements					Tree Condition					Management				QTRA Risk of harm	
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
G61	Yew, Pine	<i>Taxus sp, Pinus sp.</i>	Early-mature	7	2	200	3.5	No visual defects	No visual defect	No visual defects	Good	Situated in adjacent land - no access	Low	A	No action required		3 Years	>1/1 000 000
T62	Sorbus	<i>Sorbus aucuparia</i>	Semi-mature	9	1	160	2.5	No visual defects	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T63	Maple	<i>Acer pseudoplatanus</i>	Semi-mature	11	1	240	3	No visual defects	No visual defect	No visual defects	Fair		Low	A	No action required		3 Years	>1/1 000 000
T64	Apple	<i>Malus sp.</i>	Early-mature	9	1	360	3.5	No visual defects	Cracked / included bark. Bark wounds. Slight Lean. Old pruning wounds	Minor dead wood. Minor die back	Fair		Low	A	No action required		3 Years	>1/1 000 000
T65	Apple	<i>Malus sp.</i>	Early-mature	5	1	320	3.5	No visual defects	Bark wounds. Cracked / included bark. Slight Lean. Old pruning wounds	Major dead wood. Major die back	Poor	Limited future prospects	Low	A	No urgent action Advised to crown lift overhanging the footpath		1 Year	<1/1 000 000
T66	Elder	<i>Sambucas nigra</i>	Early-mature	5	4	150	3	No visual defects	Tight union. Multi stemmed. Minor cavities. Cavities	Minor dead wood. Major dead wood	Fair		Low	A	No action required		3 Years	>1/1 000 000
T67	Oak	<i>Quercus robur</i>	Early-mature	13	1	260	4	No visual defects	No visual defect	No visual defects	Good	Situated in adjacent land	Moderate	A	No action required		1 Year	>1/1 000 000

Tree Species		Measurements						Tree Condition					Management				QTRA Risk of harm	
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Spread Radius (m)	Roots	Stem	Crown	Overall	Additional Comments	Target	Category	Works	Urgency		Next Survey
T68	Robinia	<i>Robinia pseudoacacia</i>	Early-mature	17	1	55	7	Ground compaction. Recent trenching works within rooting zone.	Tight union with partially included bark. (Elder sapling growing from union)	Significant dieback throughout outer crown. Moderate deadwood throughout crown.	Poor	In separate grassed area. In decline with limited long term value	Moderate / High	U	Removal and replacement advised (low urgency <1/1 000 000) Crown thin and deadwood as moderate urgency 1/50 000	Moderate	1 Year	1/50 000

Tree Plan

Midby Park, Barrow
Upon Humber, DN19 7AA
Ref: AWA1765 2017

SCALE : 1:500 PAPER: A3

	CATEGORY A: NO WORKS
	CATEGORY B: WORKS NEEDED
	CATEGORY U: FOR REMOVAL
	TREE STEM

