

# **Contents**

1. Introduction	3
1.1 Purpose of the Report	
1.2 Terms of Reference	
1.3 Scope of the Report	3
1.4 Survey Details	3
2. Explanation of Tree Descriptions	4
2.1 Measurements	4
2.2 Evaluations	4
2.3 Safety Categories	5
3. Status of the Trees	6
4. Tree Descriptions and Recommendations	6
5. Discussion	7
6. Conclusion	8
Appendix 1: Tree Descriptions and Recommendations	10
Appendix 2: Explanation of Terms & Recommended Clearances	11
Appendix 3: Author Qualifications	12
Appendix 4: General Guidelines	13
Annendix 5: Site Plan	14

## 1. Introduction

## 1.1 Purpose of the Report

1.1.1 This report details the findings of an expert arboricultural safety survey and risk assessment of the trees at:

## St John's Church, Church Lane, Kirkheaton.

1.1.2 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 Terms of Reference

- 1.2.1 I am instructed by **Kirkburton Parish Council**, to visit the site and prepare my findings in a report.
- 1.2.2 For this purpose I have been drawn a plan of the site. It should be noted that this plan is not to scale, additionally, tree locations must be treated as indicative only.

## 1.3 Scope of the Report

- 1.3.1 The trees have been inspected in order to assess and, if necessary, reduce their potential risk of harm.
- 1.3.2 All trees within the site boundary with a stem diameter above 75mm are included.

## 1.4 Survey Details

- 1.4.1 The survey was conducted during the month of March 2016 by Andrew Bussey.
- 1.4.2 The inspection was made visually from ground level, in order to assess the trees condition and potential to cause harm. Where necessary, management recommendations have been made. This may include tree removal, pruning, future monitoring or the need for a further detailed inspection, such as climbed inspections or decay detection surveys.
- 1.4.3 Measurements were obtained using clinometers, specialist tapes or electronic distometers. Where this was not possible measurements were estimated.

# 2. Explanation of Tree Descriptions

#### 2.1 Measurements

- 2.1.1 *HEIGHT* of the tree is measured from the stem base to the top of the canopy.
- 2.1.2 *CROWN HEIGHT* is an indication of the height at which the main crown begins above ground level.
- 2.1.3 *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, just above the root buttress.
- 2.1.4 *CROWN SPREAD* is a measurement of the overall width of the crown, at its widest point.

## 2.2 Evaluations

- 2.2.1 *AGE CLASS* of the tree is described as young, semi-mature, early-mature, mature, or over-mature.
- 2.2.2 *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.
- 2.2.3 *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.
- 2.2.4 *LIFE EXPECTANCY* is classed as; less than 10 years (<10), 10-20 years, 20-40 years, or more than 40 years (40+). This is an indication of the number of years before removal of the tree is likely to be required.
- 2.2.5 *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.
- 2.2.6 *PRIORITY*. A priority rating is given concerning the time periods in which the recommended works should be undertaken. LOW priority works should be undertaken within 12 months of the survey, MOD (moderate) priority works should be undertaken within 6 months and HIGH priority works should be completed as soon as practically possible. If no works are recommended, N/A (not applicable) will be used.

*RE-INSPECTION TIMING* is classed as; 6 months (0.5), 1 year (1), 2 years (2), or within 5 years (5). This is an indication of the timescale in which a tree should be reinspected; a specific time of year for the inspection may also be detailed in the recommendations.

## 2.3 Safety Categories

- 2.3.1 SAFETY CATEGORY values for the trees are as follows:
- 2.3.2 A (marked in green on the plan) = posing no immediate risk: no action 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.
- 2.3.3 **B** (marked in light blue on the plan) = posing a potential risk: action required. These trees pose a potential risk and therefore require active management. This may include remedial pruning (crown cleaning) or target management.

Such trees may also require a further, more detailed, investigation (such as a climbing inspection or a decay detection analysis) or may require future monitoring (re-surveying and re-assessing) at a timescale specified within this report.

## 2.3.4 R (marked in red on the plan) = trees to be removed.

These trees require removal usually because they are dead, dying or dangerous and are therefore potentially hazardous. Such trees shall usually require removal as a matter of high priority.

Trees may also require removal in order to prevent damage occurring to existing structures or buildings (where trees are growing within close proximity or are in actual contact) or in order to benefit adjacent trees (where trees are growing in direct competition, the poorer of the two trees may be removed). Such work is usually of a lower priority.

# 3. Status of the Trees

- 3.1 An online check was made on the 16<sup>th</sup> of March 2016 on the **Kirklees Metropolitan** Council website.
- 3.2 We are informed that there are Tree Preservation Orders in force on this site.
- 3.3 Before any work is organised, all the necessary steps to get the permission of the Local Planning Authority must be taken.
- 3.4 No work must be done to any trees until permission has been granted.

# 4. Tree Descriptions and Recommendations

4.1 Full details of all individual trees surveyed are recorded in the tables at **Appendix 1**. Please refer also to the site plan at **Appendix 5** for tree locations and **Section 2** for a full explanation of the tables.

## 5. Discussion

- 5.1 In total, **88** items of vegetation were surveyed (**85** individual trees and **3** groups of trees). The surveyed vegetation was generally found to be in a good condition.
- 5.2 Following is an overview of our observations and recommendations; please refer to **Appendix 1** for specific details on the condition of individual trees:
- 5.3 **T30, T35, T36, T38, T50, T63, T66, T67, T68, T76** and **T81** have been recommended for removal for arboricultural reasons, as detailed at **Appendix 1** and prioritised below:
  - 5.3.1 The removal of **T50**, **T63**, **T67**, **T68**, **T76** and **T81** should be undertaken as a matter of **moderate priority**.
  - 5.3.2 The removal of **T30**, **T35**, **T36**, **T38** and **T66** is of a matter of **low priority**.
- 5.4 **T9, T10, T20, T48, T56, T58, T59, T61, T64, T65, T70** and **T82** require pruning works in order to make them safe, as detailed at **Appendix 1**. Of these, all the works listed are of a **low priority** with the exception of **T65**, the action recommended for this tree is of a **moderate priority**.
- 5.5 **G2, T4, T5, T6, T7, T13, T16, T19, T22, T29, T33, T40, T41, T43, T44, T45, T56, T58, T59, T64, T65, T71, T72** and **T85** were noted to have structural or physiological defects. Although these trees were considered to be in an acceptable condition at the time of the inspection, the defects observed may lead to their early demise or render them unsafe in the future. As such, it is recommended that these trees be monitored on an regular basis to assess if their condition is still acceptable, as per the timescales advised at **Appendix 1**.
- 5.6 A full detailed inspection of **T25**, **T49**, **T51**, **T52**, **T53**, **T54**, **T55**, **T59**, **T60**, **T61**, **T62**, **T65**, **T69**, **T70**, **T77**, **T80**, **T82**, **T87** and **T88** was inhibited by the presence of Ivy or epicormic shoots (as detailed at **Appendix 1**). These trees should be re-inspected for defects once the Ivy or epicormic shoots have been removed.
- 5.7 Please note that is recommended that the removal of the Ivy must be in its entirety, and, once removed, it should be poisoned in order to prevent re-growth. Following this, the trees should be re-inspected by JCA in order that a full assessment of tree health can be made.
- 5.8 Where trees are situated close street lights, or where they overhang roads, paths or boundaries, they will require monitoring and occasional maintenance (as detailed at **Appendix 1**). This should maintain visibility and safe public access. Such work is ongoing and should be conducted on a regular basis.

# 6. Conclusion

- 6.1 If the above recommendations are undertaken, the trees surveyed can be considered to be in adequate condition in terms of public health and safety. We recommend that the trees are re-surveyed as per the recommended schedule, in order to ensure the long term health and safety of the trees.
- We would be happy to assist should you have any queries regarding the points raised in **Section 5**.

# Appendices

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
Т 1	Mature Sycamore Acer pseudoplatanus	15	4	68	11	Twin-stemmed at 5.5m with a balanced crown. Occasional pruning wounds.  No major visible defects.		GOOD	40+	LOW	No action required.	N/A	A	2
G 2	Mature Sycamore and Oak sp. Acer pseudoplatanus and Quercus sp.	To 13	2.5	80	12	Two trees with stems which have grown and fused around each other and canopies which form one homogeneous crown. Decay cavities present on the lower stems.	GOOD	FAIR	20-40	LOW	Monitor.	LOW	В	2
Т 3	Semi-mature  Elm sp.  Ulmus sp.	6.5	2.8	30	10	The crown overhangs the road. Twin- stemmed at 0.5m with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	20-40	MOD	No action required.	N/A	A	2
Т 4	Mature Sycamore  Acer pseudoplatanus	17	6	78	14	The crown overhangs the road. Twin- stemmed at 4m with a balanced crown. Occasional pruning wounds, some with the onset of decay.	GOOD	FAIR	20-40	MOD	Monitor.	MOD	В	1
Т 5	Early-mature  Sycamore  Acer pseudoplatanus	14	8	40	8	The crown overhangs the road. Single- stemmed and vertical with a slightly unbalanced crown with a poor form and possible dieback. Multiple pruning wounds due to crown lifting, some with decay present.		FAIR	10-20	MOD	Monitor.	MOD	В	1
Т 6	Early-mature  Sycamore  Acer pseudoplatanus	14	8	46	8	The crown overhangs the road and footpath. Single-stemmed and vertical with a slightly unbalanced crown with a poor form and possible dieback.  Multiple pruning wounds due to crown lifting, some with decay present.	FAIR	FAIR	10-20	MOD	Monitor.	MOD	В	1
Т7	Early-mature  Sycamore  Acer pseudoplatanus	14	6	43	7	The crown overhangs the streetlight, road and footpath. Single-stemmed and vertical with a slightly unbalanced crown and a poor form. Multiple pruning wounds due to crown lifting, some with decay present.	FAIR	FAIR	10-20	MOD	Monitor.	MOD	В	1
Т 8	Early-mature  Sycamore  Acer pseudoplatanus	15	7	49	8	Single-stemmed and slightly leaning with a slightly unbalanced crown containing minor deadwood. Occasional pruning wounds. No major visible defects.	GOOD	GOOD	20-40	LOW	No action required.	N/A	A	2
Т 9	Mature Turkey Oak Quercus cerris	18	9	52	12	Single-stemmed and leaning with an unbalanced crown containing moderate deadwood. No evidence of significant pruning. No major visible defects. Minor bark wound at base.		GOOD	40+	LOW	Remove deadwood.	LOW	В	2
Т 10	Mature Turkey Oak  Quercus cerris	15	3	72	16	Multi-stemmed at 3m with an unbalanced crown. No evidence of significant pruning. No major visible defects. Minor deadwood.	GOOD	GOOD	40+	LOW	Remove deadwood.	LOW	В	2

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
Т 11	Mature Turkey Oak Quercus cerris	14	3	49	10	Single-stemmed and slight leaning with a slightly unbalanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
T 12	Early-mature  Turkey Oak  Quercus cerris	13	5	46	10	Single-stemmed and leaning with an unbalanced crown with a poor form.  No evidence of significant pruning. No major visible defects.	GOOD	FAIR	20-40	LOW	No action required.	N/A	A	2
T 13	Mature Turkey Oak Quercus cerris	13	2.5	95	15	Growing against gravestones. Twin- stemmed at 1.5m with a balanced crown. Occasional pruning wounds. Potentially weak union present at the stem junction.	GOOD	FAIR	20-40	LOW	Monitor.	LOW	В	1
T 14	Early-mature Yew Taxus baccata	11	2	58	10	Multi-stemmed at 1m with a balanced crown. Occasional pruning wounds due to crown lifting. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 15	Early-mature  Sycamore  Acer pseudoplatanus	18	6	54	9	Growing against graves. Twin- stemmed at 5m with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
T 16	Mature Sycamore Acer pseudoplatanus	17	6	75	13	Growing against grave. Multi-stemmed at 7m with a balanced crown.  Occasional pruning wounds. Decay cavitiy present at 4.5m.	GOOD	GOOD	20-40	LOW	Monitor.	LOW	В	2
Т 17	Semi-mature  Sycamore  Acer pseudoplatanus	11	3	28	8	Growing against grave. Single- stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 18	Semi-mature  Norway Maple  Acer platanoides	9	3	26	7	The crown overhangs the footpath and road. Twin-stemmed at 2m with a balanced crown. No evidence of significant pruning. No major visible defects. Minor bark wound present in upper crown.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2
Т 19	Early-mature  Sycamore  Acer pseudoplatanus	11	5.5	48	8	The crown overhangs the footpath and road. Single-stemmed and vertical with a balanced crown. Multiple pruning wounds due to crown lifting. Moderate decay cavities to stem.	GOOD	FAIR	10-20	MOD	Monitor.	MOD	В	1
Т 20	Mature  Beech  Fagus sylvatica	18	5	105	24	The crown overhangs the footpath and road. Single-stemmed and vertical with a balanced crown with moderate deadwood and minor decay cavities. Occasional pruning wounds. No major visible defects. The well structured crown has crossing/fused branches present, as is typical of this species.	GOOD	GOOD	40+	MOD	Remove deadwood.	LOW	В	2

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
T 21	Semi-mature Sycamore Acer	7	2	29	5	Twin-stemmed at 1.5m with an unbalanced crown and a suppressed form. Occasional pruning wounds.	GOOD	FAIR	20-40	LOW	No action required.	N/A	A	2
T 22	Mature  Turkey Oak  Quercus cerris	13	2	60	11	The crown overhangs the footpath. Significant lean and unbalanced, suppressed crown. Occasional pruning wounds. A slight rise in ground level is present at the opposite side of the stem to the lean, possibly indicating past root heave.	GOOD	FAIR	20-40	MOD	Monitor.	MOD	В	1
T 23	Semi-mature  Plum sp.  Prunus sp.	4	2	18	4	Multi-stemmed at 1m with a balanced crown. Occasional pruning wounds.  No major visible defects.	GOOD	GOOD	20-40	LOW	No action required.	N/A	A	2
T 24	Early-mature  Cherry sp  Prunus sp.	7	2	47	10	The crown overhangs the footpath.  Multi-stemmed at 1m with a slight unbalanced crown. Occasional pruning wounds. No major visible defects.  Surface rooting noted, as is typical of this species.	GOOD	GOOD	20-40	LOW	No action required.	N/A	A	2
T 25	Mature  Common Lime  Tilia x europaea	21	8	100	18	The crown overhangs the adjacent garden. Single-stemmed and leaning with a balanced crown. No major visible defects. Ivy prevented a detailed inspection. This tree has been overly crown lifted and is considered to require no further pruning to allow light penetration to the adjacent property.	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and reinspect for defects.	MOD	В	2
T 26	Semi-mature  Elm sp.  Ulmus sp.	8	3	37	8	Growing against grave. Twin-stemmed at 2m with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	10-20	LOW	No action required.	N/A	A	2
Т 27	Early-mature  Apple sp.  Malus sp.	6.5	2.5	To 30	9	The crown overhangs the footpath.  Multi-stemmed at ground level with a balanced crown. Multiple pruning wounds due to crown lifting. No major visible defects.	GOOD	GOOD	20-40	LOW	No action required.	N/A	A	2
Т 28	Mature Yew Taxus baccata	9	2	63	9	The crown overhangs the footpath. Twin-stemmed at 1.5m with a balanced crown. Occasional pruning wounds. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 29	Mature  Common Lime  Tilia x europaea	19	8	69	16	The crown overhangs the garden. Single-stemmed and leaning with a balanced crown. Multiple pruning wounds due to crown lifting. Minor decay cavities throughout. Previously topped with sound re-growth above this point.	GOOD	FAIR	20-40	MOD	Monitor.	LOW	В	2
Т 30	Semi-mature  Elm sp.  Ulmus sp.	8	3	42	9	Twin-stemmed at ground level with a balanced crown and a very poor form.  Growing against and causing damage to an adjacent grave.	GOOD	POOR	<10	LOW	Remove and poison the stump to prevent re-growth.	LOW	R	N/A

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
Т 31	Early-mature  Plum Sp.  Prunus sp.	5	2	24	6	Multi-stemmed at 1m with a balanced crown. Occasional pruning wounds.  No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 32	Semi-mature  Norway Maple  Acer platanoides	8	3	30	6	The crown overhangs the garden. Twin- stemmed at 2m with a balanced crown. Occasional pruning wounds. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 33	Early-mature Silver Maple Acer saccharinum	9	2	50	16	The crown overhangs the garden. Multi stemmed at 1m with a balanced crown. Occasional pruning wounds. Possible weak unions at stem junctions.	GOOD	FAIR	10-20	LOW	Monitor.	LOW	В	2
G 34	Semi-mature Cypress sp.  Cupressus sp.	То 8	1+	To 25	See plan	3 trees of vertical and balanced form planted in a triangular formation.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 35	Semi-mature  Elm sp.  Ulmus sp.	6	1.5	43	7	Multi-stemmed at 0.5m with a balanced crown. Growing against and causing damage to an adjacent grave.	GOOD	FAIR	<10	LOW	Remove and poison the stump to prevent re-growth.	LOW	R	N/A
Т 36	Semi-mature  Elm sp.  Ulmus sp.	8	2	42	8	Multi-stemmed at 0.5m with a balanced crown. Growing against and causing damage to an adjacent grave.	GOOD	FAIR	<10	LOW	Remove and poison the stump to prevent re-growth.	LOW	R	N/A
Т 37	Semi-mature  Common Oak  Quercus robur	7	1	22	5.5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	5
Т 38	Early-mature  Elm sp.  Ulmus sp.	9	3	48	9	Twin-stemmed at 1m with a balanced crown. Growing against and causing damage to an adjacent grave. Limited long term future.	GOOD	FAIR	<10	LOW	Remove and poison the stump to prevent re-growth.	LOW	R	N/A
Т 39	Early-mature  Holly  Ilex aquifolium	4	1	26	5	The crown overhangs the footpath.  Multi-stemmed at 0.5m with a balanced crown. Occasional pruning wounds. No major visible defects. Well maintained tree.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 40	Early-mature  Norway Maple  Acer platanoides	13	3	44	8	The crown overhangs the footpath. Single-stemmed and leaning with a slight unbalanced crown. Occasional pruning wounds. Tight unions within the crown structure.	GOOD	FAIR	20-40	LOW	Monitor.	LOW	В	2

	Age						uo							(yrs)
Tree Ref.	Species	(	ight (m)	(cm)	read (m)	Observations	Physiological Condition		ctancy	lue	Recommendations		egory	Re-Inspection Timing (yrs)
	Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)		Physiolog	Structural Condition	Life Expectancy (yrs)	Target Value		Priority	Safety Category	Re-Inspec
	Early-mature					The crown overhangs the footpath and								
T 41	Norway Maple	13	3	64	11	road. Multi-stemmed at 2.5m with a balanced crown. Occasional pruning wounds. Tight unions within the crown structure.	GOOD	FAIR	20-40	MOD	Monitor.	LOW	В	2
	Acer platanoides					situcture.								
	Early-mature					Single-stemmed and vertical with a								
T 42	Black Poplar  Populus nigra  betulifolia	12	5	51	11	balanced crown. Occasional pruning wounds. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
	Mature					The crown overhangs the footpath and								
T 43	Silver Maple	13	5	58	11	road. Multi-stemmed at 3.5m with a balanced crown. Occasional pruning wounds. Tight unions at the stem	GOOD	FAIR	20-40	MOD	Monitor.	LOW	В	2
	Acer saccharinum					junction.								
	Mature					The crown overhangs the footpath and road. Multi-stemmed at 3.5m with a								
T 44	Norway Maple	14	5	59	12	balanced crown. Occasional pruning wounds. Tight unions at the stem	GOOD	FAIR	20-40	MOD	Monitor.	LOW	В	2
	Acer platanoides					junction.								
	Early-mature					Single-stemmed and leaning with a								
T 45	Holly	6	1.8	30	5	slightly balanced crown with moderate dieback. Occasional pruning wounds. Bark wound present on the stem.	FAIR	GOOD	10-20	LOW	Monitor.	LOW	В	2
	Ilex aquifolium					Bark would present on the stem.								
	Mature					The crown overhangs the footpath. Single-stemmed and vertical with a								
T 46	Yew	11	2.8	49	10	balanced crown. Occasional pruning wounds due to crown lifting. No major	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
	Taxus baccata					visible defects.								
	Mature					The crown overhangs the footpath, road and street light. Twin-stemmed at								
T 47	Common Lime	21	3	90	19	3m with a balanced crown. Occasional pruning wounds due to crown lifting.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2
	Tilia x europaea					No major visible defects.								
	Early-mature					The crown overhangs the footpath and road. Twin-stemmed at 0.5m with a								
T 48	Common Lime	19	4	68 at base	11	slight unbalanced crown containing minor deadwood. Occasional pruning	GOOD	GOOD	20-40	MOD	Remove deadwood.	LOW	В	2
	Tilia x europaea					wounds. No major visible defects.								
	Mature					The crown overhangs the footpath and road. Twin-stemmed at 7m with a					Remove the Ivy in its entirety and re-			
T 49	Common Lime	19	5	78	11	balanced crown containg minor deadwood. Occasional pruning	GOOD	GOOD	40+	MOD	-	MOD	В	2
	Tilia x europaea					wounds. No major visible defects. Ivy prevented a detailed inspection.					(low priority).			
	Early-mature					The crown overhangs the footpath and								
T 50	Common Lime	13	3	52	6	road. Single-stemmed and leaning with an unbalanced crown and a poor form.	POOR	POOR	<10	MOD	Remove.	MOD	R	N/A
	Tilia x europaea					Significant decay to upper stem.								

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	ity	Safety Category	Re-Inspection Timing (yrs)
	2000 rume	Heig	Cro	Diar	Cro		Phys	Stru	Life I (yrs)	Targ		Priority	Safe	Re-I
T 51	Mature Common Lime	19	5	75	12	The crown overhangs the footpath and road. Twin-stemmed at 6m with a slight unbalanced crown. Occasional	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and re-	MOD	В	2
	Tilia x europaea	1)	3	75	12	pruning wounds. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	401	MOD	inspect for defects.	MOD	b	
	Mature					The crown overhangs the footpath and								
T 52	Common Lime	19	10	82	12	road. Twin-stemmed at 8m with a balanced crown. Multiple pruning wounds due to crown lifting. No major visible defects. Ivy prevented a	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and reinspect for defects.	MOD	В	2
	Tilia x europaea					detailed inspection.								
T 53	Mature Sycamore  Acer	18	6	90	14	The crown overhangs the footpath and road. Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and reinspect for defects.	MOD	В	2
	pseudoplatanus					inspection.								
T 54	Mature Sycamore	17	6	69	13	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible	GOOD	GOOD	40+	LOW	Remove the Ivy in its entirety and basal	LOW	В	2
	Acer pseudoplatanus					defects. Ivy to the stem and basal vegetation prevented a detailed inspection.					vegetation then re- inspect for defects.			
	Mature					Single-stemmed and leaning with a slight unbalanced crown. No evidence					Remove the Ivy in			
T 55	Sycamore  Acer	17	6	70	12	of significant pruning. No major visible defects. Ivy prevented a detailed inspection	GOOD	GOOD	40+	LOW	its entirety and re- inspect for defects.	LOW	В	2
	pseudoplatanus													
T 56	Mature Sycamore	18	6	115	15	Twin-stemmed at 1.5m with a balanced crown containing moderate deadwood.  No evidence of significant pruning.	GOOD	FAIR	20-40	LOW	Monitor. Remove deadwood (low priority).	MOD	В	1
	Acer pseudoplatanus					Included bark at stem junction.					priority).			
	Mature					Single-stemmed and vertical with a								
Т 57	Sycamore	17	6	58	11	balanced crown. No evidence of significant pruning. No major visible	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
	Acer pseudoplatanus					defects.								
	Mature					Twin-stemmed at 1.8m with a balanced crown containing minor deadwood. No								
T 58	Sycamore	16	5	82	12	evidence of significant pruning. Included bark at stem junction. Crossing and fused branch present at	GOOD	FAIR	20-40	LOW	Remove deadwood. Monitor.	LOW	В	2
	Acer pseudoplatanus					4m.								
	Mature			100		Multi-stemmed at ground level with a slight unbalanced crown containing					Remove the Ivy in			
T 59	Sycamore	18	9	at base	10	moderate deadwood. Long sparse and spindly stems. Included bark at stem	FAIR	FAIR	10-20	LOW	its entirety and re- inspect for defects. Remove deadwood.	LOW	В	2
	Acer pseudoplatanus			Jase		junction. Ivy prevented a detailed inspection.					Monitor.			
	Mature					Twin-stemmed at 6m with a balanced					Remove the Ivy in			
T 60	Sycamore  Acer	17	5	62	10	crown. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	LOW	its entirety and basal vegetation then re- inspect for defects.	LOW	В	2
	pseudoplatanus													

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
T 61	Mature Sycamore  Acer pseudoplatanus	17	4	65	11	Single-stemmed and vertical with a balanced crown. containing minor deadwood. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	LOW	Remove the Ivy then re-inspect. Remove deadwood.		В	2
T 62	Semi-mature  Common Ash  Fraxinus excelsior	11	3	30	9	The crown overhangs the footpath. Single-stemmed and leaning with a slight unbalanced crown. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	20-40	LOW	Remove the Ivy in its entirety and basal vegetation then re- inspect for defects.	LOW	В	2
Т 63	Semi-mature  Common Ash  Fraxinus excelsior	13	3	40	16	Twin-stemmed at 2m with an unbalanced crown and of a very poor form. Significantly leaning over the footpath.	GOOD	POOR	<10	LOW	Remove.	MOD	R	N/A
T 64	Early-mature  Common Ash  Fraxinus excelsior	18	8	49	13	Single-stemmed and vertical with a balanced sparse crown containing moderate deadwood, possible dieback and branch tear stubs.	FAIR	FAIR	10-20	LOW	Remove deadwood and branch tear stubs. Monitor.	LOW	В	1
T 65	Mature  Common Ash  Fraxinus excelsior	19	5	92	18	Twin-stemmed at 8m with a balanced crown containing moderate deadwood and minor decay cavities. No evidence of significant pruning. Co-dominant stem at base is leaning heavily over the footpath. A fracture beam is present in the high crown. Ivy prevented a detailed inspection.	GOOD	FAIR	20-40	MOD	Remove the Ivy in its entirety and basal vegetation then reinspect for defects. Remove the deadwood. Remove the co-dominant stem leaving a 1m high stub. Monitor.	MOD	В	1
T 66	Young Elm sp.  Ulmus sp.	7	1	20	5	Single-stemmed and leaning with an unbalanced crown. Poor form. Limited long term future.	GOOD	POOR	<10	LOW	Remove.	LOW	R	N/A
Т 67	Early-mature  Common Ash  Fraxinus excelsior	13	3	45	10	Severely leaning and unbalanced over footpath. This Ivy clad tree is considered to be structurally unsound.	GOOD	POOR	<10	LOW	Remove.	MOD	R	N/A
Т 68	Early-mature  Common Ash  Fraxinus excelsior	14	3	50	12	The crown overhangs the footpath.  Multi-stemmed at ground level with an unbalanced crown, poor form and a limited long term future. Ivy prevented a detailed inspection.	GOOD	POOR	<10	LOW	Remove.	MOD	R	N/A
T 69	Mature Turkey Oak  Quercus cerris	14	3	80	11	The crown overhangs the footpath and garden. Multi-stemmed at 5m with a balanced crown. No evidence of significant pruning. No major visible defects. Ivy prevented detailed inspection.	GOOD	GOOD	40+	LOW	Remove the Ivy in its entirety and reinspect for defects.	LOW	В	2
Т 70	Mature  Common Lime  Tilia x europaea	22	7	100	14	The crown overhangs the building. Twin-stemmed at 3.5m with a balanced crown containg moderate deadwood. Occasional pruning wounds due to crown lifting. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and re- inspect for defects. Remove deadwood.	MOD	В	1

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
Т 71	Mature  Beech  Fagus sylvatica	15	2	49	19	The crown overhangs the building. Twin-stemmed at 3m with a slight unbalanced crown. Stubs due to poor pruning. Crossing and fused main stems at 3.5m.	GOOD	FAIR	20-40	MOD	Monitor.	LOW	В	2
Т 72	Early-mature Turkey Oak Quercus cerris	16	7	46	9	The crown overhangs the building.  Twin-stemmed at 1.5m with an unbalanced crown. Occasional pruning wounds. Deadwood stub present at 5m.	GOOD	FAIR	10-20	MOD	Monitor.	LOW	В	2
Т 73	Mature  Common Lime  Tilia x europaea	18	9	59	11	The crown overhangs the building. Single-stemmed and vertical with a balanced crown. Multiple pruning wounds due to crown lifting. No major visible defects.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2
T 74	Early-mature Yew Taxus baccata	9	0	37	6.5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 75	Early-mature Yew Taxus baccata	8	0	23	6	Twin-stemmed at ground level with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 76	Early-mature  Common Lime  Tilia x europaea	11	9	58	5	The crown overhangs the building. Twin-stemmed at 5m with an unbalanced crown, very poor form and significant dieback.	POOR	POOR	<10	MOD	Remove.	MOD	R	N/A
Т 77	Mature Sycamore  Acer pseudoplatanus	17	5	95	14	The crown overhangs the building. Twin-stemmed at 3m with a balanced crown. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and re-inspect for defects.	LOW	В	2
Т 78	Early-mature  Beech  Fagus sylvatica	15	7	60	14	The crown overhangs the building. Single-stemmed and vertical with a balanced crown. Occasional pruning wounds due to crown lifting. No major visible defects.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2
Т 79	Early-mature Yew Taxus baccata	9	0	31	7.5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
Т 80	Mature Beech Fagus sylvatica	17	7	75	13	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	LOW	Remove the Ivy in its entirety and re-inspect for defects.	LOW	В	2

Tree Ref.	Age Species  Latin Name	Height (m)	Crown Height (m)	Diameter (cm)	Crown Spread (m)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing (yrs)
T 81	Early-mature  Beech  Fagus sylvatica	18	9	60	11	Single-stemmed and vertical with a balanced crown. A significant decay cavity at the base leads to a severely hollowed stem.	GOOD	POOR	<10	LOW	Remove.	MOD	R	N/A
Т 82	Mature Sycamore Acer pseudoplatanus	17	6	85	15	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. Moderate deadwood. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	LOW	Remove the Ivy in its entirety and re- inspect for defects. Remove deadwood.	LOW	В	2
G 83	Semi-mature  Cherry sp. and Elm sp.  Prunus sp. and Ulmus sp.	To 15	0+	To 30	See plan	Approximately six self-seeded trees of reasonable form. No major visible defects.	GOOD	GOOD	20-40	LOW	No action required.	N/A	A	2
T 84	Early-mature  Beech  Fagus sylvatica	14	3	42	9	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2
T 85	Early-mature  Sycamore  Acer pseudoplatanus	15	8	50	10	Single-stemmed and vertical with a balanced crown. Multiple pruning wounds due to crown lifting. Minor decay cavities on stem.	GOOD	FAIR	20-40	LOW	Monitor.	LOW	В	2
Т 86	Semi-mature  Elm sp.  Ulmus sp.	9	2	20	5	Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects.	GOOD	GOOD	10-20	LOW	No action required.	N/A	A	2
Т 87	Mature Turkey Oak Quercus cerris	16	4	67	12	The crown overhangs the footpath and road. Single-stemmed and vertical with a balanced crown. Ivy prevented a detailed inspection.	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and reinspect for defects.	MOD	В	1
Т 88	Mature  Common Lime  Tilia x europaea	17	5	70	14	The crown overhangs the footpath and road. Single-stemmed and vertical with a balanced crown. No evidence of significant pruning. No major visible defects. Dense Ivy and basal epicormic growth prevented a detailed inspection.	GOOD	GOOD	40+	MOD	Remove the Ivy in its entirety and the basal epicormic growth then re- inspect for defects.	MOD	В	1

# **Appendix 2: Explanation of Terms & Recommended Clearances**

**Canker** Disease damaged area of a tree, usually caused by fungus or bacteria.

**Co-dominant Stem** A stem which has grown in direct competition to the main stem and which

has formed a substantial size influencing the appearance of the tree.

**Crown lift** The removal of the lowest branches, usually to a given height. It allows

more residual light and greater clearance underneath for vehicles etc.

**Crown reduce** The reduction of a tree's height or spread while preserving its natural

shape.

**Crown thin** The removal of some of the density of a tree's crown, usually 5-25%

allowing more light through its canopy and reducing wind resistance.

**Deadwood** The removal of all dead, dying and diseased branches from a tree.

**Dieback** Where branches are beginning to show signs of death usually at the tips in

the crown.

**Epicormic shoots** Small branches that grow in uncharacteristic clusters around the base or

the stem of a tree, usually as a result of bad pruning or some other stress

factor.

**Included bark** Where the bark on two adjoining branches or stems is growing tight

together, forming a joint with limited physical strength.

**Pollarding** A method of tree management in which the main trunk of the tree is cut at

about 4m, and the resulting branches are then cropped on a regular basis.

**Remedial pruning** The removal of old stubs, deadwood, epicormic growth, rubbing or

crossing branches and other unwanted items from the tree's crown.

Sometimes referred to as crown cleaning.

## **Recommended Clearances**

JCA recommend the following distances are maintained:

Height for pedestrian access: No less than 2.5m

Height for vehicular access:

No less then 4m for a minor road

No less than 6m for major roads or where buses will pass.

Distance from overhead cables: No less than 2m Distance from building or other structure: No less than 2m

Distance from lamppost or sign Sufficient to not impede visibility for 2 years.

# **Appendix 3: Author Qualifications**

#### **Principal Consultant and Managing Director**

**Jonathan Cocking** *F.R.E.S.*, *Tech. Cert.* (*Arbor.A*), *PDipArb* (*RFS*) *FArborA CBiol MSB. MICFor*. Jonathan is a Registered Consultant and Fellow of the Arboricultural Association and sits on its Professional Committee. He has 31 years experience in the Arboricultural profession and served for eight years as Senior Arboriculturist with a large local authority before establishing JCA in 1997. Jonathan has since developed JCA's portfolio of services and its extensive client base. He is a Chartered Biologist, a Chartered Arboriculturalist and an Expert Witness with much experience of litigation work.

#### **Technical Coordinator**

**Toby Thwaites** *BSc (Hons), HND (Arboriculture)*. Toby joined JCA in 1998 after graduating in Ecology at the University of Huddersfield and has since graduated in Arboriculture at the University of Central Lancashire. A former JCA team leader and Consulting Arboriculturist, Toby was promoted to Technical Coordinator and now oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

#### **Consulting Staff: Arboriculture**

**Toby Parsons** *Cert. Arb. (RFS), Tech. Cert. (Arbor.A).* Toby joined JCA after spending 6 years working as a senior climber for various Arboricultural contractors in the East Midlands and the South-West. He has gained the Level 2 Certificate in Arboriculture (RFS) and an Arboricultural Technicians Certificate. Toby is LANTRA certified in Professional Tree Inspection.

**Scott Reid** *ND* (*Arboriculture and Forestry*). Scott joined JCA after working with other consultancy companies in the south of England. He specialises in trees in relation to development and holds a National Diploma, various NPTC qualifications and is currently studying for his Level 4 Diploma in Arboriculture.

**Andrew Bussey.** Andrew joined JCA having spent 12 years working as a tree surgeon for various private companies and a Local Authority. He has various NPTC qualifications, is QTRA qualified and is currently studying for his Arboricultural Technicians Certificate.

**Phil Humeniuk** *FdSc* (*Arboriculture*). Phil joined JCA having spent 3 years working for various tree surgery companies and as a Tree Officer for a Local Authority. He also has several years experience working as a consultant both for JCA and for another consultancy. Phil obtained his foundation degree in Arboriculture at the University of Central Lancashire and has various NPTC's and is LANTRA certified in Professional Tree Inspection.

**Emily Wilde** *FdSc* (*Arboriculture*). Emily joined JCA having previously worked for various private tree surgery and consultancy companies over the past 8 years. She initially obtained a ND in Forestry & Arboriculture, followed by a FdSc in Arboriculture at Askham Bryan College, York. Emily has various NPTC certificates and is QTRA qualified.

**Charles Cocking.** Charles joined JCA in January 2014 as an Apprentice having previously worked for the company on a part time basis during 2013. In between his roles at JCA, Charles will be studying at Askham Bryan College, York, undertaking a two year course in order to obtain a Foundation Degree in Arboriculture (*FdSc Arboriculture*).

#### **Consulting Staff: Ecology**

**David Ryder**. David joined JCA as our in-house ecologist. He brings with him over 8 years experience in the field of ecological consultancy. David holds a Natural England Licence to disturb and handle bats and is currently undergoing assessment for Chartered Institute of Ecology & Environmental Management (CIEEM) membership.

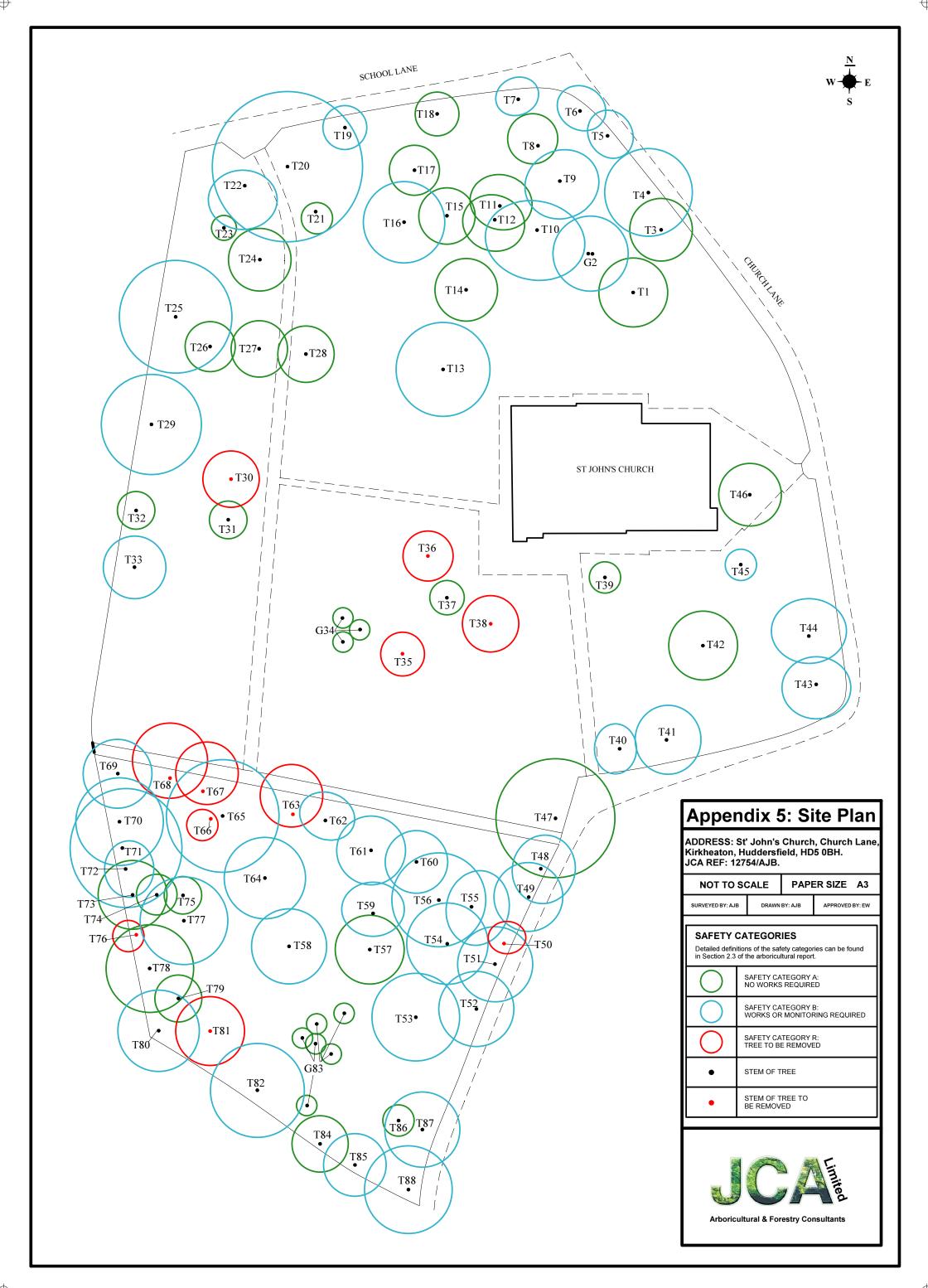
**Josie Collier:** *BSc (Hons) Ecology.* Josie joined JCA as part of our expanding ecology department. She brings with her a degree in Ecology and Environmental Biology from the University of Leeds. Josie has gained experience from working with a local authority and is seeking to become a member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

#### **Administrative Staff**

Sue Guest Administrative Team Leader. Simeon Haigh BSc (Hons). IT Officer. Lorraine Spink Administrative Assistant. Yasmin Shahzad Administrative Assistant. Catherine Cocking Accounts Manager.

# **Appendix 4: General Guidelines**

- A4.1 All work must be to BS 3998: 2010 'Recommendations for tree work'.
- A4.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and should be covered by adequate public liability insurance.
- A4.3 This report is based upon a visual inspection. The consultant 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 the guidelines and the terms listed in this report.
- A4.4 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.
- A4.5 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this report are carried out under his supervision and within his timescale.
- A4.6 It is advisable to have trees inspected by an arboricultural consultant regularly. In this instance it is recommended that these inspections are made as per the recommended reinspection timings at **Appendix 1**.



I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

Andrew Bussey.

30<sup>th</sup> of March 2016

For and on behalf of JCA Ltd

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