ARBORICULTURAL SAFETY SURVEY
at:

Kirkwood Hospice
The Kirkwood
21 Albany Road
Huddersfield
West Yorkshire
HD5 9UY

Client:
Kirkwood Hospice

Client Address:
The Kirkwood
21 Albany Road
Huddersfield
West Yorkshire
HD5 9UY

JCA Ref:
21793/DK

JCA Limited
Arboricultural & Ecological Consultants

Contents

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:

Kirkwood Hospice, **The Kirkwood**, **21 Albany Road**, **Huddersfield**.

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 JCA Ltd are instructed by **Jenny Warren** of **Kirkwood Hospice** to visit the site and prepare our findings in a report.

1.2.2 For this purpose, we have drawn a plan of the site showing the trees in relation to their surroundings. The tree locations are indicative however and this plan should not be scaled from.

1.3 Scope of the Report

1.3.1 This report, and any recommendations made are compiled in accordance with current industry standards and best arboricultural practice.

1.3.2 The trees have been inspected in order to assess and, if necessary, reduce their potential risk of harm.

1.4 Survey Details

1.4.1 The survey was conducted during February 2024 by **Dan Kemp** *FdSc (Arboriculture)*.

1.4.2 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.

2.2.7 *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 re-inspected; 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 A check was made on 12th February 2024 with ***Kirklees Metropolitan Council***.

3.2 We are informed that there are Individual and Group Tree Preservation Orders (TPOs) in force on and adjacent to this site, Local Authority references **TPO 11/94** (**Individual TPOs** – **T28** to **T45**) and **TPO 11/94/G4** (**Group TPO**).

3.3 Before any work is organised to protected trees, an application form must be submitted to the Local Authority, outlining all the proposed works along with suitable justification. A waiting period of eight weeks is then required, after which time the council will either give consent to the works, refuse the works or grant a conditional consent.

3.4 ***No work must be done to protected trees until permission has been granted***.

4. Tree Descriptions

4.1 Full details of all individual trees surveyed are recorded in the tables at **Appendix 1**.

4.2 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 & Recommendations

5.1 In total **42** items of vegetation were surveyed (**36** individual trees, **5** groups of trees and **1** stump). The surveyed vegetation was generally found to be in a fair condition.

5.2 Following is an overview of our observations and recommendations:

5.3 **Five** trees and **one** stump (**T15**, **T17**, **T18**, **T26**, **T30** and **St42**) have been recommended for removal for arboricultural reasons, as detailed at **Appendix 1**.

5.4 The removal of **T15**, **T17**, **T18** and **T26 s**hould be undertaken as a matter of **high priority**.

5.5 The removal of **T30** and **St42** are of **moderate** and **low priority** respectively.

5.6 **Eleven** individual trees and **two** tree groups (**T3**, **T6**, **T13**, **T14**, **T20**, **T21**, **G24**, **T25**, **T27**, **G28**, **T29**, **T31**, **T37**) have been recommend for pruning or other remedial works to reduce their potential risk of harm or to improve their growing conditions, as detailed at **Appendix 1**.

5.7 The recommended works to **T3**, **T13** and **T20** should be undertaken as a matter of **high priority**.

5.8 The recommended works to **T6**, **T14**, **T21**, **G24**, **T25**, **T27**, **G28**, **T29**, **T31** and **T37** are of **moderate** or **low priority**.

5.9 Where trees are situated close to services, road signs, 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.

5.10 It is recommended that the all the trees are re-inspected during the Summer/Autumn months.

5.11 **Ash Dieback** is a highly destructive fungal disease affecting Ash trees. Progress of the disease within infected trees can lead to dead or dying branches becoming brittle and falling. It can also leave the trees more susceptible to other diseases or pathogens which can result in major limb or stem failure. Timescales for decline are difficult to define and are dependent on multiple physiological and environmental factors. It is recommended that healthy trees are not felled in anticipation of the disease to allow the opportunity for recovery or the development of resistant strains, but also to protect their ecological value to the surrounding landscape. Regular monitoring and appropriate management strategies can be put in place to facilitate the retention of Ash trees whilst limiting potential hazards. It is therefore recommended that **G31** be re-inspected annually, initially during the Summer months (**July – September 2024**) to assess the condition of the trees more accurately. Those Ash trees requiring removal now are detailed in **Section 5.3** and further details can be found at **Appendix 1**.

5.12 **Crack Willows** on the river bank. A full detailed inspection of all the trees around the river bank was limited due to restricted access. We have recommended some of the most significantly sized (tallest) Crack Willows **G24**, **G25**, **T27**, **G28** and **T29** for coppicing due to their extensive lever arms and as some were noted to have areas of dieback/deadwood/hanging branches and as numerous broken/failed limbs/branches were noted on the ground whilst viewing these trees along the adjacent river bank (as detailed at **Appendix 1**).

5.13 It was noted that areas of soft landscaping on both sides of Albany Road were being damaged and the soil compacted by vehicles parking on the verges and over parts of the main rooting zones of a number of the surveyed trees. It was unclear as to how long and to what extent damage has occurred to individual trees through soil compaction and tree root asphyxiation. We recommend preventing vehicles from parking on these areas altogether through the use of robust bollards and chains or similar and that all those areas affected should be de-compacted, as detailed at **Appendix 1**.

5.14 In the interests of risk management, we recommend that the trees are re-surveyed as per the recommended schedule, in order to ensure their long term-health and safety. Ideally, each new inspection should be undertaken during a different season to observe defects, pests and diseases that are only evident at certain times of the year. We recommend any subsequent surveys are carried out when the trees are in leaf.

5.15 **Horse Chestnuts** infected with **Bacterial Canker**. Infections were noted to be relatively extensive on a number of the trees along the south side of Albany Road. **Three** trees (**T15**, **T17** and **T18**) and a stump (**St42**) have been recommended for removal. A further **two** trees (**T13** and **T20**) have been recommended for various works including annual monitoring. The **four** remaining Horse Chestnuts along the south side of Albany Road (**T14**, **T16**, **T19** and **T21**) were currently considered to be in the best condition of all the Horse Chestnut trees surveyed. None of the Horse Chestnuts along the north side of Albany Road looked to be similarly infected. Please see **Appendix 1** for details and recommendations for all these trees.

5.16 **Tree Planting Advice**. In order to maintain the amenity value of the Horse Chestnut avenue we make the following additional recommendations. We recommend planting species other than Horse Chestnuts in line with **Forest Research** advice, which will grow to at least a moderate size. For example, *Tilia cordata* (Small-Leaved Lime), *Carpinus betulus* (Common Hornbeam) and *Acer campestre* (Field Maple). Whilst not native, we consider *Liquidambar styraciflua* (Sweet Gum) to also be a suitable intermittent species, particularly where two alternate species are being planted, and also as with the other examples, for their form and autumnal colour. Care should be taken to locate any new trees in suitable planting positions, whilst planting each correctly and proving adequate aftercare to ensure all new trees obtain the best chance in getting well established.

5.17 We would be happy to assist should you have any queries regarding the points raised in **Section 5**.

Appendices

Appendix 1: Tree Descriptions and Recommendations

Tree Ref.	Age Species *Botanical Name*	Height (m)	Crown Spread (m)	Diameter (cm)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing	Estimated Age (yrs)
T1	Semi-mature to Early mature Cherry *Prunus species*	6 #	2 to 3 #	To 10 #	Multiple stemmed from around 0.5 metres with some inclusions and two stubs. Graft union at base. No significant defects noted.	FAIR	FAIR	40+	MOD	No action required.	N/A	A	2 years	0 to 20
T2	Semi-mature Common Beech *Fagus sylvatica*	12+ #	6 to 7 #	25 #	Vertical main stem. Fairly upright growth of a relatively young tree. No significant defects noted.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2 years	0 to 20
T3	Mature Lime *Tilia species*	20+ #	12 #	70 + #	Vertical main stem. At least three fairly significant dead stubs in the crown area, potential to fall over highway. Epicormic growth removed to about 2 metres.	FAIR	FAIR	40+	HIGH	Remove deadwood including stubs.	HIGH	B	2 years	40 to 60
T4	Semi-mature Horse Chestnut *Aesculus hippocastanum*	10+ #	7 #	30 #	Vertical main stem and spreading crown. Generally, fairly upright growth of a relatively young tree. No significant defects noted.	GOOD	GOOD	40+	HIGH	No action required.	N/A	A	2 years	0 to 20
T5	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	50 + #	Vertical main stem and spreading crown. Bacterial Canker lesion to the north side which looks to have occluded fairly well. Minor epicormic (responsive) growth on main stem,	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T6	Semi-mature Horse Chestnut *Aesculus hippocastanum*	10 #	5 #	15 #	Vertical main stem and spreading crown. Crown competing for light between adjacent mature trees. A tree stake no longer tied to the tree is being forced out by the tree's natural growth.	GOOD	FAIR	40+	HIGH	Remove tree stake.	LOW	B	2 years	0 to 20
T7	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	60 + #	Vertical main stem and spreading crown. Generally looks to be in full bud. Good wound occlusion. Fairly good buttress roots. No signs of any significant Bacterial Canker.	GOOD	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T8	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	50 #	Vertical main stem and spreading crown. Generally looks to be in full bud. Good wound occlusion. Fairly good buttress roots. No signs of any significant Bacterial Canker. One small pruning wound with a cavity noted to south side at about 3 to 4 metres.	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T9	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	70 #	Vertical main stem and spreading crown. Historically crown lifted, pruning wounds look to be occluding fairly well, one pruning pocket looks to be occluding fairly well, some epicormic responsive growth noted around base of branch collars. Minor signs of Bacterial Canker are considered acceptable.	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	40 to 60

Tree Ref.	Age Species *Botanical Name*	Height (m)	Crown Spread (m)	Diameter (cm)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing	Estimated Age (yrs)
T10	Semi-mature Cherry *Prunus species*	4 to 5 #	6 #	15 #	Vertical main stem divides into two at about 2 metres with a wide union which look acceptable. The tree looks to have been historically crown reduced. Formative pruning should perhaps be considered at some point with a view to improving the tree's form. Growing beneath the canopy of **T9**.	FAIR	FAIR	20+	HIGH	No action required.	N/A	A	2 years	0 to 20
T11	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12 #	50 #	Vertical main stem and spreading crown. Minor epicormic growth at 2 to 3 metres (response to wounding). Two pruning pockets looked acceptable. No signs of any significant Bacterial Canker.	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T12	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	14 #	70 + #	Vertical main stem and spreading crown. Wound occlusion looked fairly good. One fairly small branch stub noted in the crown to the northeast side.	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	40 to 60
T13	Mature Horse Chestnut *Aesculus hippocastanum*	14 #	10+ #	40 #	Vertical main stem and spreading crown. Main stem divides into two at 1 to 2 metres. Branch ends near 4 metre high street lamp. Pruning pocket to south side at 1 to 2 metres. Minor epicormic growth at 2 to 3 metres (response to wounding). Two pruning pockets looked acceptable. No significant signs of any Bacterial Canker. Tree growing in footpath assumed to be Local Authority owned/managed. Tarmac has been placed up to the main stem and looks to be helping to asphyxiate the tree as the tree has top dieback in the centre of the crown, parts which may fail onto the highway. Some minor epicormic response. Considered to have a limited life expectancy whilst growing in an enclosed tarmac area.	POOR	POOR	<10	HIGH	Inform owner of their duty of care. Remove dieback/deadwood including stubs. Remove tarmac from around tree and provide good quality top soil to help with the tree's nutrition and moisture allowances. Maintain branch clearance around lamp column to provide adequate light to footpath area below. Monitor annually.	HIGH	B	1 year	20 to 40
T14	Mature Horse Chestnut *Aesculus hippocastanum*	16 #	8 #	40 #	Vertical main stem and spreading crown. Branch ends near 4 metre high street lamp. Epicormic growth on main stem to 2 to 3 metres, at least some looks to be responsive with respect to pruning pockets on main stem to 2 metres high (minor).	FAIR	GOOD	20+	HIGH	Maintain branch clearance so as to allow lamp to provide adequate light to footpath area below.	LOW	B	2 years	20 to 40

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T15	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	70 #	Vertical main stem divides into two primary limbs at 2 to 3 metres. The northeast primary limb extends to the east over the highway at about 30 degrees and looks weighted with what was considered fairly upright growth at the top of the limb when viewed from the southeast. The tree is growing in a kerb edged area with a gravel surround. Two wounds to the lower main stem on the southwest side may have been done when the area was being created or new gravel applied. These wounds looked to have moderate occluding wood around them. The union between the tree's main fork when viewed from the northeast side did not look acceptable. A possible crack or decay pocket was noted between the bark plates and a large wound immediately below the union. An historically removed third primary limb, has poor occluding wood, particularly around the top, where the decay looked to be propagating into the union leaving the primary limb over the highway at risk of failure. Historical vehicle damage, was also noted to the primary limb over the highway just above the union.	FAIR	POOR	<10	HIGH	Fell; remove and grind out the stump. Plant a replacement tree.	HIGH	R	N/A	40 to 60
T16	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	50 + #	Vertical main stem and spreading crown. Main stem divides into two at 2 to 3 metres. Wound occlusion looked acceptable at present with some minor epicormic responsive growth.	FAIR	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T17	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12 #	60 + #	Vertical main stem and spreading crown. Extensive Bacterial Canker noted particularly when viewed from the southeast side extending well into the crown area. Whilst some occluding wood looked to be present, the lesions were considered so extensive so as to justify the tree's removal and replacement. A primary limb doglegs to the southwest side from low down and soon divides into two secondary limbs, weighted over residential property.	FAIR	POOR	<10	HIGH	Fell; remove and grind out the stump. Plant a replacement tree.	HIGH	R	N/A	20 to 40

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T18	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12+ #	60 #	A single main stem with a slight lean to the north side. Divides into two co-dominant stems at about 7 metres which then soon abut one another (at 8 to 9m). Fair wound occlusion noted. Deadwood including branch stubs in crown. Bark lesions around the union with a secondary limb at about 2 to 3 metres when viewed from the southeast side. Two lesions which look to have *Kretzschmaria deusta* growth. Also, wounding to the lower main stem when viewed from the northwest side, the latter with missing bark has a black and white resupinate fungal growth, which may also be the remnants of *Kretzschmaria deusta. A number* of longitudinal cracks (possibly shear cracks due to the tree's lean) were also noted within the underlying wood.	FAIR	POOR	<10	HIGH	Fell; remove and grind out the stump. Plant a replacement tree.	HIGH	R	N/A	20 to 40
T19	Mature Horse Chestnut *Aesculus hippocastanum*	18+ #	12 #	60 #	Vertical main stem and spreading crown. Fair to good wound occlusion. Tree generally in full bud.	GOOD	GOOD	20+	HIGH	No action required.	N/A	A	2 years	20 to 40
T20	Mature Horse Chestnut *Aesculus hippocastanum*	16+ #	15+ #	70 + #	Vertical main stem and spreading crown. Bacterial Canker, some with good wound occlusion, however it was not possible to assess the higher lesions, some of which extend between a significant branch fork. Pruning wounds/pockets. Minor responsive growth. Deadwood including stubs and a broken branch lying in the crown over the road. Soil compaction was noted around the main stem, a car was parked on the soft landscape immediately beside the tree and some compost/woodchip bays were also noted over the vulnerable rooting zone of the tree. A salt bin was also noted to the northwest side of the tree's main stem.	FAIR	POOR	<20	HIGH	Relocate the compost/woodchip bays and salt bin away from the rooting zone of the tree. De-compact the soil by hand forking. We then recommend applying a layer of up to 75mm of woodchips over the rooting zone. Prevent vehicles parking on the soft landscaped area beneath the tree (use robust bollards and chains or similar if necessary). All these works will help improve the soil nutrition and the condition of the tree. Carry out a climbing inspection to determine the extent of the Bacterial Canker and the condition of the tree's main branching areas. Include removal of deadwood including branch stubs and removal of the broken branch when carrying out a climbing inspection. or Crown reduce the tree's crown by 3 metres. Remove deadwood including branch stubs and the broken branch. Monitor annually regardless of which of the two options is selected.	HIGH	B	1 year	40 to 60

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T21	Mature Horse Chestnut *Aesculus hippocastanum*	16+ #	10+ #	50 #	Vertical main stem and spreading crown. Estimate 6 metre lamp column, lantern within lower crown area. Woodchips over root plate area. Soil compaction, salt bin and compost/woodchip bays - see **T20** for further details and recommendations. The tree's condition was generally considered better than **T20**. Client advised the neighbour and Local Authority have agreed to some tree works to cut back some of the branches from the neighbouring property.	GOOD	GOOD	20+	HIGH	Target prune, prune back the west side of the tree's crown by up to 3 metres whilst crown lifting the same side, to 4 metres. All final pruning cuts should be no more than 5cm diameter in line with current good arboricultural practice. Maintain branch clearance around lamp column to provide adequate light to area below.	LOW	B	2 years	20 to 40
T22	Early mature Japanese Cedar *Cryptomeria japonica*	12+ #	5 #	30 to 35 #	A vertical main stem. The crown is spreading generally to the east, south and west sides due to the vegetation supressing the tree's crown from the north side.	GOOD	FAIR	40+	MOD	No action required.	N/A	A	2 years	20 to 40
G23	Semi-mature to Mature Mixed species *See Observations*	To 18+	See plan	To 80 + #	Deciduous species, including Crack Willow, Sycamore, Common Ash, Hawthorn and Elm. Limited detailed inspection, viewed from inside site boundary - trees growing on riverbank which was muddy and very wet, considered a raised risk, so not accessed. Two significantly sized Sycamores indicated to the north of the site on the plan were not surveyed due to access.	FAIR	FAIR	40+	MOD	See individual trees for recommended tree works.	N/A	A	2 years	40 to 60
G24	Mature Crack Willow *Salix fragilis*	16+ #	10+ #	To 30 #	Located within G23. Multiple stemmed, partially reduce around southwest sides. Significant lever arm, raised risk of failures, historically reduced stem/s.	FAIR	POOR	40+	MOD	Re-coppice near to ground level - target prune to suitable regrowth points where reasonably possible in line with current good practice with a view to preventing limb/branch failure over the rear of the site and allowing the stumps to produce responsive re-growth.	MOD	B	2 years	0 to 20
T25	Mature Crack Willow *Salix fragilis*	18+ #	12+ #	40 + #	Located within G23. Vertical with a fairly widely spreading crown, over roof area to the southwest side. Several failed stems noted adjacent to the tree on the bank. Crown with dieback/dead branch ends. Significant lever arm, raised risk of failures, historically reduced stem/s.	POOR	FAIR	40+	MOD	Re-coppice near to ground level - target prune to suitable regrowth points where reasonably possible in line with current good practice with a view to preventing limb/branch failure over the accessible access route to the rear of the site and the roof area whilst allowing the stumps to produce responsive re-growth.	MOD	B	2 years	20 to 40

Tree Ref.	Age Species *Botanical Name*	Height (m)	Crown Spread (m)	Diameter (cm)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing	Estimated Age (yrs)
T26	Mature Sycamore *Acer pseudoplatanus*	18+ #	12+ #	70 + (x2)	Located within G23. Vertical with a spreading crown. Growing on the river bank but crown overhangs the site over a communal allotment area. *Kretzschmaria deusta* (parasitic decay fungi causes tree failures) noted at base of main stem to southeast side.	POOR	FAIR	40+	MOD	Remove; fell both stems at 7 metres to leave two standing stems for wildlife. Leave any secondary branch stubs with their parental branch collars only.	HIGH	R	N/A	40 to 60
T27	Early mature to Mature Crack Willow *Salix fragilis*	20+ #	10+ #	35 to 40 (x2)	Located within G23. Two stems from near to ground level. A thin crown with dieback. Large hanging branch over water course. Tree generally considered to be in a poor condition. Significant lever arm, raised risk of failures, historically reduced stem/s.	POOR	POOR	40+	MOD	Reduce (coppice) at 1 metre, to just above where main stems fork - target prune to suitable re-growth points where reasonably possible in line with current good practice with a view to preventing limb/branch failure over the rear of the site whilst allowing the stumps to produce responsive re-growth (includes removal of all deadwood and hanging branch).	MOD	B	N/A	20 to 40
G28	Early mature to Mature Crack Willow *Salix fragilis*	20+ #	12+ #	To 60 #	Located within G23. Four stems, three growing together and one to the north side. Look to be in a fair condition, minor deadwood (branch ends). Significant lever arm, raised risk of failures, historically reduced stem/s.	FAIR	FAIR	40+	MOD	Reduce (coppice) to around 0.5 to 1 metre (just above where main stems fork), otiose near to ground level - target prune to suitable re-growth points where reasonably possible in line with current good practice with a view to preventing limb/branch failure over the rear of the site whilst allowing the stumps to produce responsive re-growth..	MOD	B	2 years	20 to 40
T29	Early mature to Mature Crack Willow *Salix fragilis*	20+ #	10+ #	50 #	A third party tree. Single stem. Tree growing on opposite bank (neighbour's tree). Leans over water course, crown looked to be overhanging the site and is significantly within falling distance of the survey site but possibly well rooted. Dieback/deadwood noted in crown. Significant lever arm, raised risk of failures, historically reduced stem/s.	FAIR	FAIR	40+	MOD	Inform owner of their duty of care. Reduce (coppice) to around 0.5 to 1 metres, near to ground level with a view to preventing limb/branch failure over the rear of the site whilst allowing the stump to produce responsive re-growth (includes removal of all deadwood).	MOD	B	2 years	20 to 40
T30	Early mature Elm *Ulmus species*	12 #	10+ #	50 #	Located within G23. Vertical main stem and spreading branches. Dead - Dutch Elm Disease.	DEAD	DEAD	DEAD	MOD	Remove; fell and dispose of at a suitable location.	MOD	R	N/A	20 to 40

Tree Ref.	Age Species *Botanical Name*	Height (m)	Crown Spread (m)	Diameter (cm)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing	Estimated Age (yrs)
G31	Mature Common Ash *Fraxinus excelsior*	To 20+ #	To 15+ #	To 55 #	Six Ash trees. Limited detailed inspection of the two northeast most trees, one growing on the river bank (viewed over the boundary fence/hedge) and the one within the site boundary with debris around the base to the northeast side. Northeast most tree with a slight lean to the southeast, the remainder with vertical main stems and spreading crowns. Deadwood including branch stubs in the crowns of the 1st, 4th and 5th trees when counted from the northeast end (more minor deadwood on the trees within the site than the tree on the bank). The trees generally overall look to be from a poor clonal stock which are vulnerable to Ash Dieback, some have deadwood (generally short branch stubs) in their crowns and a number of pruning wounds, some with decay pockets were noted with moderate occlusion. Their responsive growth/vitality looked fairly poor. Some with relatively minor growth fairly low over the highway.	POOR	FAIR	10+	HIGH	Remove deadwood including branch stubs from the 1st, 4th and 5th trees when counted from the northeast end. Crown lift two trees to 4 metres over the highway (1st and 2nd when counted from the northeast end). Clear around base of tree. Monitor Ash Dieback annually, initially **re-inspect July - September 2024.**	MOD	B	1 year	20 to 40
G32	Semi-mature to Early mature Coast Redwood *Sequoia sempervirens*	To 14 #	6 #	To 30 #	Two trees with two root suckers. Vertical main stems and spreading crowns. Minor leaf browning likely due to environmental conditions (cold/prevailing windy weather).	FAIR	GOOD	40+	MOD	No action required.	N/A	A	2 years	0 to 20
T33	Mature Pillar Apple *Malus tschonoskii*	12+ #	7 to 8 #	30 to 35 #	Vertical main stem. Upright crown form - tight unions looked acceptable at present.	GOOD	FAIR	10+	MOD	No action required.	N/A	A	2 years	20 to 40
T34	Early mature Willow-Leafed Pear *Pyrus salicifolia* 'Pendula'	3 #	5 #	15 #	Vertical main stem and spreading crown. No significant defects noted.	GOOD	GOOD	20+	MOD	No action required.	N/A	A	2 years	0 to 20
T35	Mature Japanese Cherry ('Amanagawa') *Prunus serrulata* 'Amanagawa'	10 #	6 #	15 to 20 (x3) #	Vertical short stem divides low down into secondary upright stems with tight unions around 1 to 2 metres. Looks cankerous around unions at 1 metre.	GOOD	FAIR	10+	MOD	No action required.	N/A	A	2 years	0 to 20
T36	Semi-mature to Early mature Jacquemont's Birch *Betula utilis* 'Jacquemontii'	10 #	6 to 7 #	15 #	Vertical main stem and spreading crown. The branch ends of one of the Ash trees (**G31**) is growing into the tree's crown.	GOOD	GOOD	40+	MOD	No action required.	N/A	A	2 years	0 to 20

Tree Ref.	Age Species *Botanical Name*	Height (m)	Crown Spread (m)	Diameter (cm)	Observations	Physiological Condition	Structural Condition	Life Expectancy (yrs)	Target Value	Recommendations	Priority	Safety Category	Re-Inspection Timing	Estimated Age (yrs)
T37	Mature Norway Maple *Acer platanoides*	12 #	10+ #	50 #	Vertical main stem and spreading crown. There are a significant number of lights attached to the crown of the tree. The feet of the seat surround the tree's main stem is resting hard against the main stem due to secondary growth and the legs are inserted into the rooting area of the tree. Foreign items such as the seat and lights can become embedded within parts of the tree.	GOOD	GOOD	40+	MOD	We are advised that the seat is to be replaced. Care should be taken when removing the seat and replacing it so as to avoid damage to the tree. The feet should rest on the ground rather than within the ground. The seat should be designed in such a way that it may be adjusted to allow for the continued growth of the tree's main stem. Care should be taken to ensure the light system remains loose and does not become tightly embedded within parts of the tree.	LOW	B	2 years	20 to 40
T38	Semi-mature Magnolia *Magnolia species*	6+ #	4 to 5 #	10 to 15 #	Vertical main stem and spreading crown. No significant defects noted.	GOOD	GOOD	20+	LOW	No action required.	N/A	A	2 years	0 to 20
T39	Semi-mature Smoke Bush *Cotinus coggygria*	4 #	3 to 4 #	To 10 #	Vertical main stem and spreading crown. Historically crown reduced with minor responsive regrowth (about 0.5 metres).	GOOD	FAIR	20+	LOW	No action required.	N/A	A	2 years	0 to 20
T40	Semi-mature Irish Yew *Taxus baccata* 'Fastigiata'	4 #	1 #	10 #	Vertical main stem and upright crown form. No significant defects noted.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2 years	0 to 20
T41	Semi-mature Judas Tree *Cercis siliquastrum*	3 #	3 #	To 10 #	Vertical main stem and spreading crown. No significant defects noted.	GOOD	GOOD	40+	LOW	No action required.	N/A	A	2 years	0 to 20
St42	N/A Stump	N/A	N/A	80 + #	Stump.	N/A	N/A	N/A	N/A	Grind stump. Plant a replacement tree.	LOW	R	N/A	N/A

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 Director

Toby Thwaites *BSc (Hons), HND (Arboriculture), MArborA.* 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 is now Technical Director and oversees all office and on-site activities at JCA and is on hand to offer technical support and advice.

Operations Director

Charles Cocking *FdSc (Arboriculture), MArborA.* Charles joined JCA in January 2014 having previously worked for the company on a part time basis during 2013. Charles obtained his Foundation Degree in Arboriculture at Askham Bryan College, York, and is a Professional Member of the Arboricultural Association. Charles now oversees all internal operations for the company.

Consulting Staff: Arboriculture

Andrew Bussey. Andrew started working in consultancy at JCA in 2006 having spent 12 years working as an arborist for various private companies before joining a Local Authority forestry team. He has various NPTC qualifications, is QTRA qualified and is a LANTRA Accredited Professional Tree Inspector.

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.

Mick Eltringham *ND (Forestry).* Mick joined JCA after spending 12 years working in the industry for various private companies in the north and south of England. He has also spent the last five years working as a consultant for two canopy research projects in the Amazon Rainforest, working with Oxford University and the University of Arizona. He has various NPTC Qualifications.

Dan Kemp *FdSc (Arboriculture), BTEC National Diploma(Arboriculture), National Certificate In Horticulture, City & Guilds In Horticulture.* Dan joined JCA in February 2019 with nearly 30 years' experience in arboriculture with extensive Botanical and Mycological expertise. He worked as a London Tree Officer for 12 years and in several arboricultural and horticultural management posts, specialising particularly in tree risk assessments and tree related subsidence.

Luke Wickham *FdSc (Arboriculture and Urban Forestry), TechArborA.* Luke joined JCA in 2021 after obtaining his Foundation Degree in Arboriculture and Urban Forestry at Askham Bryan College. Having previously worked within the industry for the past 4 years, running his own small business and sub-contracting for local firms, Luke brings a sound knowledge and understanding of the practical and academic sides of the industry.

Administrative Staff

Catherine Cocking Accounts Manager.
Kelly Saunders Accounts Assistant.
Lorraine Spink Administrative Assistant.
Adie Gray I.T. Officer.

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.

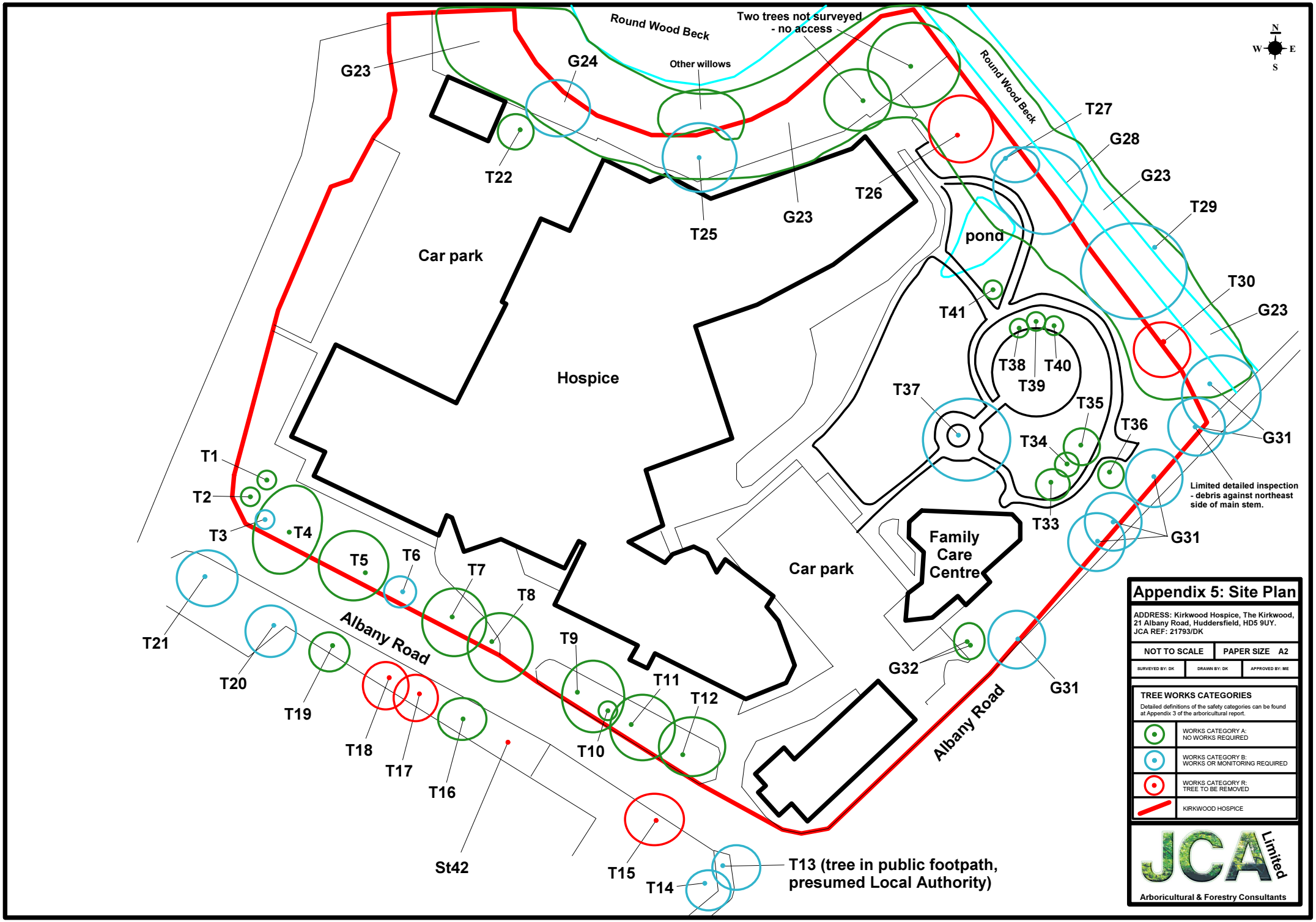
A4.3 This report is based upon a visual inspection. The consultant shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.

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 re-inspection timings at **Appendix 1**.

Appendix 5: Site Plan


Round Wood Beck
Two trees not surveyed - no access
Other willows
Round Wood Beck
G23
G24
T22
T25
G23
T26
T27
G28
G23
T29
T30
G23
G31
pond
T41
T38
T40
T39
T37
T35
T36
T34
T33
G31
Limited detailed inspection - debris against northeast side of main stem.
Car park
Hospice
Car park
Family Care Centre
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
T13 (tree in public footpath, presumed Local Authority)
T14
T15
T16
T17
T18
T19
T20
T21
St42
Albany Road
Albany Road
G32
G31
N
W
E
S
Appendix 5: Site Plan
ADDRESS: Kirkwood Hospice, The Kirkwood, 21 Albany Road, Huddersfield, HD5 9UY.
JCA REF: 21793/DK
NOT TO SCALE
PAPER SIZE A2
SURVEYED BY: DK
DRAWN BY: DK
APPROVED BY: ME
TREE WORKS CATEGORIES
Detailed definitions of the safety categories can be found at Appendix 3 of the arboricultural report.
WORKS CATEGORY A: NO WORKS REQUIRED
WORKS CATEGORY B: WORKS OR MONITORING REQUIRED
WORKS CATEGORY R: TREE TO BE REMOVED
KIRKWOOD HOSPICE
JCA Limited
Arboricultural & Forestry Consultants

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.

Dan Kemp *FdSc (Arboriculture)*

4th March 2024

For and on behalf of ***JCA Ltd***

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JCA Ltd. Arboricultural and Ecological Consultants
Professional Tree and Ecology Advice nationwide

ARBORICULTURAL SERVICES

Guidance for Architects and Developers

- British Standard 5837 Tree Surveys
- Arboricultural Implication Assessments (AIA)
- Arboricultural Method Statements (AMS)

Advice for Engineers, Loss Adjusters and Insurers

- Tree Surveys for Subsidence
- Heave Assessment
- Tree Root Identification

Advice for Local Authorities and Social Housing

- Tree Safety Surveys
- Specialist Decay Detection
- Landscape and Orchard Design

Tree Advice for the Legal Profession

- Subsidence Litigation
- Personal Injury and Accident Investigation
- Expert Witness, Planning Inquiries and Appeals

Veteran Tree Management

- Ancient Woodland Management
- Veteran Tree Management

Tree Health and Pest and Disease Management

- Pest and Disease Surveys
- Tree Health Checks
- Disease Mitigation and Control

ECOLOGICAL SERVICES

Ecological Pre-Planning Services

- Phase 1 Habitat Surveys
- Great Crested Newt eDNA Sampling
- Protected Species: Bat, Wintering and Nesting Bird, Badger, Amphibian, Otter, Water Vole, White-Clawed Crayfish, Dormice and Reptile Surveys.
- Preparation for Environmental Impact Assessment (EIA)
- Invasive Species Surveys
- Code for Sustainable Homes

Ecological Post-Planning Services

- Biodiversity Enhancement Plans
- Protected Species Mitigation
- Ecological Management (Bat and Bird box installation and inspection)

HEAD QUARTERS:

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