AVArboriculture

Arboricultural Survey

Client: Limetrees Gardens Residents' Association
Location: Limetrees Gardens, Townhead, TH1 4NP

Date of Survey: 29th April 2019

Survey Location:

Limetrees Gardens
Townhead
TH1 4NP

Survey commissioned by:

Carol Treeswing
on behalf of
Limetrees Gardens Residents' Association

Prepared by:

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Signed:  Date: 1st May 2019

Michael J Charkow

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1 Client Brief and Overview

1.1 Mike Charkow of Arbor Vitae Arboriculture Ltd was instructed by Limetrees Gardens Residents' Association to undertake a tree condition inspection of the trees in Limetrees Gardens.

1.2 The site is not within a conservation area, however the trees are covered by Tree Protection Order S123.

1.3 64 trees were inspected and recorded. Only trees with recommended works or trees of concern were recorded.

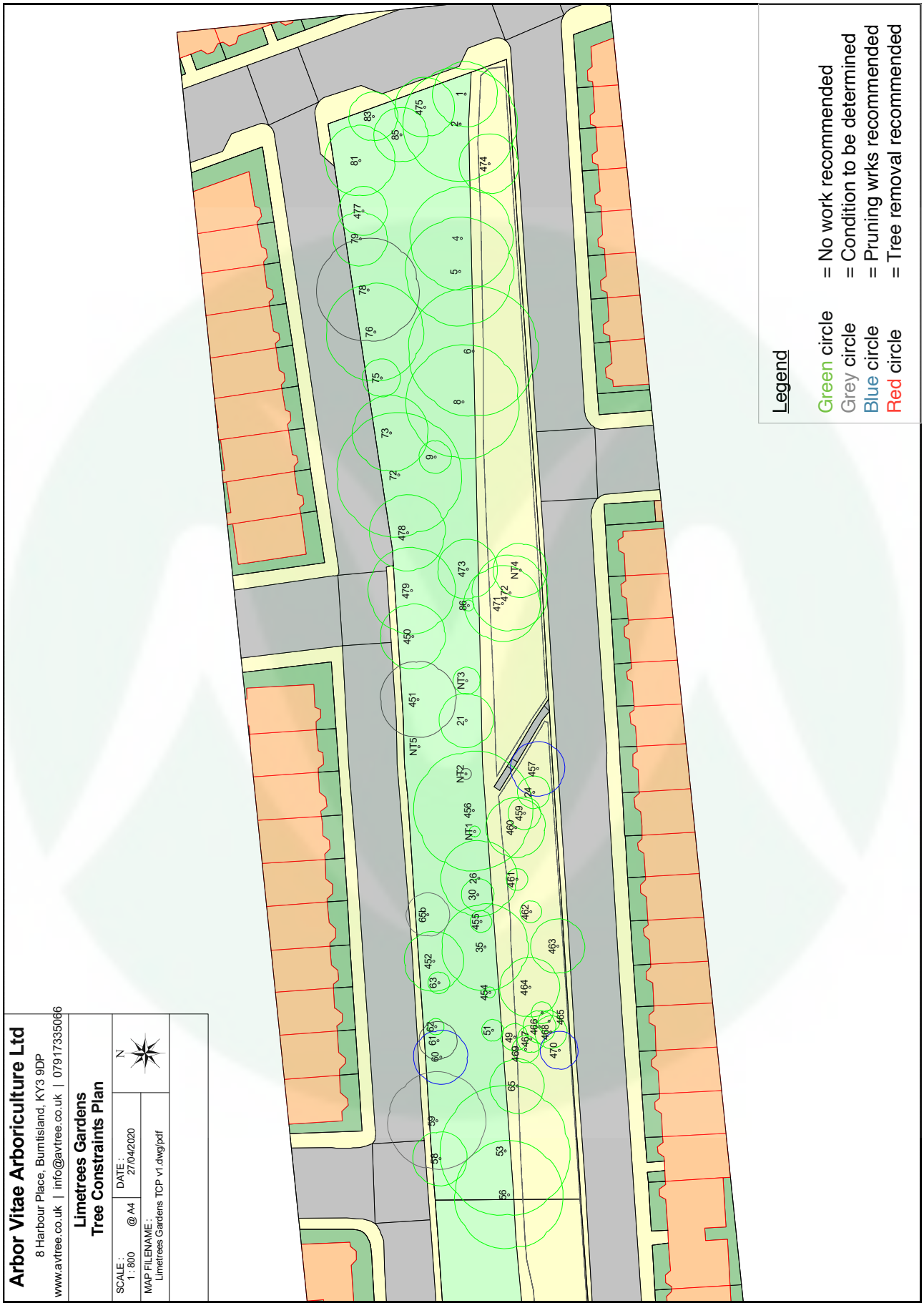
1.4 Conditions were dry and bright with a light breeze.

1.5 Tree inspections are risk assessments. The risk rating is the likelihood of harm combined with the hazard. For instance, a large piece of deadwood above a road would have be high risk, whereas the same piece of deadwood above a little-used field would be low risk.

The work recommendations take into account the benefits of any hazard (the cost:benefit ratio). For instance, deadwood can be very useful habitat for insects, birds, fungi and bats. If the deadwood is low or moderate risk, or the hazard is small, then it may be that the benefits of retention outweigh the risk.

Work recommendations have been made according to the surveyors's perceived risk. The tree owners should assess the work recommendations according to their own knowledge and perception of the site usage and so as to be within their own sphere of comfort.

2 Tree Location Plan



3 Survey Findings

3.1 64 trees were inspected and 10 were recorded; 9 of these have work recommendations.

3.2 Three trees (60, 61 & NT2) have exposed roots. Trees 60 and 61 have suffered mechanical damage, most likely from grass cutting machinery. It is recommended that organic mulch is spread around the trees to protect the roots. This should be spread in a 2 metre radius for trees 60 and 61 and a 1 metre radius for tree NT2.

3.3 Trees 78 and 451 have some deadwood that could fall into the gardens. I have considered this to be low risk, however the owners may wish to remove the deadwood if they perceive risk to be excessive. Locations of the deadwood are given in the tree schedule.

3.4 Two trees (457 & 470) have low branches over the pavement of Limetrees Walk and one (tree 60) over car parking spaces of Limetrees Gardens. The branches should be cleared to give around a 2 metre canopy height (for trees 457 & 470) and a 3 metre height (for tree 60). This could be achieved either by crown raising or branch reduction, whichever has the least impact on the trees.

3.5 A mature Lime (tree 59) previously had a dynamic brace installed in case of branch failure due to weak (included bark) unions. The northern branch was also reduced in height to reduce the wind- and gravity-loading. The lower weak union at 4 metres now has some good fusion on the north side. It is recommended that the included bark unions are aerially inspected and that the brace is inspected and tightened if necessary. The brace may need to be replaced, or if the unions are now robust enough then it can be removed.

3.6 A White Willow has some lower stem sapwood decay; no causal agent was found. The extent of decay could not be determined by a visual inspection. It is a vigorous tree and it may be able to counter the decay by forming reaction wood. The tree has a large crown bias to the north (i.e. towards Limetrees Gardens); it is likely it would fall on to the road if it were to fail. A number of options are available:

1. Further investigation of the decay extent; a sonic tomograph inspection is recommended.
2. Reduce the northern extent of the long upper-crown branch in order to reduce the gravitational load on the tree.
3. Remove the tree.

3.7 A mature Wych Elm has a cavity from an old branch removal at around 3 metres south. This cavity is water-filled and overflow is evident on the stem below the cavity. A water-filled cavity is not usually a cause for concern as the water creates unfavourable conditions for fungi. The cavity has robust wound wood and longitudinal reaction wood is evident at both sides. I do not consider this cavity to be a hazard at present.

3.8 Specific recommendations and timescales are given in the **tree schedule**.

Appendix 8: **Tree Schedule**

TN	TAG	Species	V	Condition	Recommendations	U	RC	RI
1	59	Common Lime (Tilia europaea)	N	GOOD Included bark unions at 4 & 6m. The unions appears to be stable and there is good fusion on the west side at 4 metres. A subordinate and sheltered northern stem.	FURTHER INVESTIGATION Aerial inspection to check and tighten the brace and the stem unions.	6	T	36
2	60	Silver Birch (Betula pendula)	N	GOOD Above ground root damage from machinery. Low crown over the road.	PRUNE Raise northern crown to around 3m height. Avoid damaging the roots. Apply a 2 metre radius of organic mulch (wood or bark chippings) around the tree.	6	B	60
3	61	Silver Birch (Betula pendula)	N	GOOD Above ground root damage from machinery.	OTHER Avoid damaging the roots. Apply a 2 metre radius of organic mulch (wood or bark chippings) around the tree.	6	C	60
4	65b	White Willow (Salix alba)	N	POOR Sapwood decay in lower NE and SE stem. A vigorous tree with a full and healthy crown. Large branch growing to the north.	FURTHER INVESTIGATION; PRUNE; FELL Option 1: Further investigation of the extent of basal decay. Option 2: Reduce the northern extent of the large upper branch by around 2-3 metres. Option 3: Remove the tree.	3	T	T
5	72	Wych Elm (Ulmus glabra)	N	MODERATE Decay cavity in old branch wound with robust reaction wood.	NWR No work required.	-	A	36
6	78	Common Lime (Tilia europaea)	N	GOOD Two moderate hanging dead branches at 7 metres north; low target.	OTHER Optional: Remove the deadwood.	3	C	36
7	451	Sycamore (Acer pseudoplatanus)	N	GOOD Three small deadwood at around 8m in western central and northern crown; low risk.	OTHER Optional: Remove the deadwood.	3	C	36
8	457	Broad-leaved Lime (Tilia platyphyllos)	N	GOOD Low branches over the pavement.	PRUNE Raise the southern crown to around 2m or reduce lower crown to the hedge line.	6	B	60
9	470	Scots Pine (Pinus sylvestris)	N	GOOD Low branches over the pavement.	PRUNE Raise southern crown to around 2m or reduce lower southern crown to the hedge line.	6	B	60
10	NT2	Rowan species (Sorbus sp.)	N	GOOD Exposed roots.	OTHER Apply a 1 metre radius of organic mulch (wood or bark chippings) around the tree.	6	C	60

Appendix 9: **Prioritised Work Recommendations**

TN	Tag	Species	Condition	Recommendations
Within 3 Months				
4	65b	White Willow (Salix alba)	POOR Sapwood decay in lower NE and SE stem. A vigorous tree with a full and healthy crown. Large branch growing to the north.	FURTHER INVESTIGATION; PRUNE; FELL Option 1: Further investigation of the extent of basal decay. Option 2: Reduce the northern extent of the large upper branch by around 2-3 metres. Option 3: Remove the tree.
6	78	Common Lime (Tilia europaea)	GOOD Two moderate hanging dead branches at 7 metres north; low target.	OTHER Optional: Remove the deadwood.
7	451	Sycamore (Acer pseudoplatanus)	GOOD Three small deadwood at around 8m in western central and northern crown; low risk.	OTHER Optional: Remove the deadwood.
Within 6 Months				
1	59	Common Lime (Tilia europaea)	GOOD Included bark unions at 4 & 6m. The unions appears to be stable and there is good fusion on the west side at 4 metres. A subordinate and sheltered northern stem.	FURTHER INVESTIGATION Aerial inspection to check and tighten the brace and the stem unions.
2	60	Silver Birch (Betula pendula)	GOOD Above ground root damage from machinery. Low crown over the road.	PRUNE Raise northern crown to around 3m height. Avoid damaging the roots. Apply a 2 metre radius of organic mulch (wood or bark chippings) around the tree.
3	61	Silver Birch (Betula pendula)	GOOD Above ground root damage from machinery.	OTHER Avoid damaging the roots. Apply a 2 metre radius of organic mulch (wood or bark chippings) around the tree.
8	457	Broad-leaved Lime (Tilia platyphyllos)	GOOD Low branches over the pavement.	PRUNE Raise the southern crown to around 2m or reduce lower crown to the hedge line.
9	470	Scots Pine (Pinus sylvestris)	GOOD Low branches over the pavement.	PRUNE Raise southern crown to around 2m or reduce lower southern crown to the hedge line.
10	NT2	Rowan species (Sorbus sp.)	GOOD Exposed roots.	OTHER Apply a 1 metre radius of organic mulch (wood or bark chippings) around the tree.