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Arboricultural Report

**5 Hillway
London
N6 6QB.**

August 2023

Introduction

1. This is an Arboricultural Report written by Russell Miller, an arboricultural consultant engaged by the owner of 5 Hillway, London N6 6QB (hereafter, the property). This report includes an Arboricultural Impact Assessment in respect of a proposed rear garden building.
2. The author was instructed to inspect trees at the back of the rear garden at the property and any other trees on neighbouring properties that might be effected by the proposed development.

Scope of Report

3. This is an arboricultural impact assessment regarding the above mentioned trees and the proposed development. It does not consider trees elsewhere or other issues.

Limitations

4. Trees are constantly changing, living organisms. The observations in this report are valid for a limited period of 12 months. Further tree inspections are required if an accurate understanding is to be achieved at any future date.

Trees in Relation to Development

5. This report is written by an experienced, qualified arboricultural consultant and it relies on industry accepted standards. In particular it adopts guidance in *British Standard 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations*.
6. *BS5837* specifies how to protect trees to be retained during development, including how to calculate root areas requiring protection. It should be noted that dimensions for Root Protection Areas (RPAs) specified in *BS5837* are minimum areas considered necessary for a tree to remain healthy.
7. *BS5837* **Root Protection Area (RPAs)** are circular and represent theoretical root areas. Tree roots are however very variable in morphology following natural rather than theoretical patterns. Roots will proliferate where soil conditions are favourable to their growth

(i.e. water, air, nutrients). Roots cannot grow in very dry, compacted or anaerobic mediums. Therefore the actual root area for any tree is likely to differ from BS5837 idealised circles.

8. Changes to ground level can adversely affect roots as can compaction or anything that changes sub surface conditions.

The Trees

9. **All trees likely to be effected by the proposed development have been surveyed (see Tree Survey Schedule at Appendix 1 below).**

10. Trees on site at 5 Hillway – to be removed for development

- T1 Yew Tree – small semi-mature tree, overtopped by T7 – Category C2.
- T2 Elder – multi stem, mainly dead, shaded by T7 – Category C3.
- T3 and T4 – early mature orchard apples – Category C3.
- T5– early mature orchard apple – Category C3. It may be possible to retain this tree and the owners would like to do so, however for planning purposes it should be assumed it will be removed.

11. Trees on Neighbouring Land – to be retained

- T6 Wild Cherry (4 Hillway) – a young tree of good form close to the boundary of 4 and 5 Hillway so that its crown and RPA extend over the boundary – B2/3.
- T7 Lawson Cypress – an early mature tree close to the west boundary that overhangs the garden and whose RPA extends well into the garden – B2.
- T8 Small Leaved Lime – an early mature tree that leans toward the property, overhanging the garden and RPA extends into garden – B2/3.

Arboricultural Impact Assessment

12. Tree Removals

- Loss of trees T1-T4 are inevitable. They are all small specimens suppressed by bigger trees or each other. Canopy loss is therefore fairly low. Two new fruit trees will be planted. The author is

instructed that permission for removal has already been granted.

- T5 is slightly further from the proposed building and it might therefore be possible to retain it. If so a significant crown reduction would enable it to regrow with a more balanced form. However, for the purposes of planning consent it should be assumed this tree may be lost.
- The shading, cooling, carbon storage and flood mitigation impacts of the proposed removals will be very low because all the trees are small, close together and over topped by other trees. However, the apple trees and even the dying elder have some wildlife value and most of the larger diameter wood should be retained on site as habitat.

13. Retained Trees

14. Trees 6, 7 and 8 all overhang the property but can be easily be crown lifted, if necessary, to facilitate the development. There should be no long term above ground conflicts with these trees.

15. Foundations, Roots and Root Protection Areas

16. In accordance with BS5837 the RPA radius for each retained tree is listed in the Tree Schedule below (see **Appendix 1**).
17. RPAs and crown spread have been plotted but without a setting out topographic survey these are very approximate (see draft **Tree Protection Plan – Appendix 2 below**).
18. It is clear that the generic RPAs for T6, T7 and T8 all extend under the proposed building. Without the benefit of test pits or root radar it is very difficult to determine precisely where roots do or do not occur. However, in this case generic circles are likely to capture most of the most important root areas.
19. An Arboricultural Method Statement (AMS) or other agreed document will be required to finalised foundation and operating restrictions within RPAs.
20. Proposed foundations are 'Swift Stones' on concrete pads or possibly helical ground screws. In either case the locating of these foundations will require care and any excavations within RPAs will have to be by hand, supervised by a suitably qualified arboricultural consultant.

21. The ground is not level, dropping from west to east. The author understands it is not currently proposed to change soil levels but should that be desired any ground levelling within RPAs would have to be done by hand and supervised as above.

Recommendations

1. Trees T1-T4 to be removed.
2. Tree T5 to be retained if possible.
3. Trees T6, T7 and T8 to be crown lifted to 4m by a suitably qualified arboricultural contractor.
4. Retain larger diameter (>100mm) wood on site as habitat.
5. Foundation specification to be agreed between groundworks contractor and a suitably qualified arboricultural consultant.
6. An Arboricultural Method Statement (AMS) to set out additional limitations and prohibitions to be followed within the RPA if ground levelling or other possibly damaging operations are to be attempted.
7. Any AMS to be shared with all contractors pre-tender and to be incorporated into contractual agreements.
8. If specified within the AMS a pre-commencement of works on site briefing and subsequent supervision by a suitably qualified arboricultural consultant.

Russell Miller

August 2023

GLOSSARY

AMS Arboricultural Method Statement – a specification for works written by a qualified professional who understands the requirements of trees.

CEZ Construction Exclusion Zone – area of no construction access, even on foot, without prior consultation with a qualified arboricultural consultant.

GPZ Ground Protection Zone – an area requiring temporary ground surfacing designed to avoid compacting the soil beneath.

RPA Root Protection Area – the **minimum** area that must be protected if a retained tree is to survive; i.e. to avoid unacceptable root damage the entire RPA must be protected from trenching, digging, compaction, spillage and other construction activity unless as specified in an Arboricultural Method Statement.

Generic RPA – area around a tree defined by a circle of radius equivalent to 12 times the diameter of the tree (measured at 1.5m from the ground).

Appendix 1 - Tree Survey Schedule

Site	5 Hillway N6 6BU
Client	Emma Jay
Surveyor	Russell Miller Arboriculture
Survey date	24/08/23

Tree No.	SPECIES Scientific/Common	Height m	Stem Diameter @ 1.5m mm	Branch Spread m	Height of Crown Clearance m	Age Class	Physiological Condition	Structural Condition	Comments	Category Grading	Years remaining	RPA radius m	Distance to Boundary
	TREES OF Ø >75mm on site												
	5 Hillway												
1	<i>Taxus baccata</i> Common Yew	8	120	N 3 E 3 S 2.5 W 0.5	2	SM	Fair	Poor	Overtopped and suppressed by T7 Lawson Cypress	C2	40+	1.5	n/a
2	<i>Sambucus nigra</i> Common Elder	4	200 @ 0.3m	N 3 E 5 S 0 W 0	2	M	Poor	Poor	3 stems from >1m, half dead, leaning to East	C3	10	2.1	n/a
3	<i>Malus domestica</i> Orchard Apple	5	185	N 1 E 2 S 3 W 1	2	M	Fair	Fair	Leaning to East, too close to T4 & T5	C3	10-20	2.4	n/a
4	<i>Malus domestica</i> Orchard Apple	5	180 @0.1m	N 2 E 4 S 1 W 2	2	M	Poor	Poor	Bifurcates @ 0.4m, hollowing. Wildlife value.	C3	10-20	1.8	n/a
5	<i>Malus domestica</i> Orchard Apple	5	165 @0.8m	N 1.5 E 2 S 1.5 W 0	2	M	Fair	Poor	Hollow wound @ 0.3m Wildlife value	C3	10-20	1.8	n/a

	TREES OF Ø >75mm on adjacent land												
	4 Hillway												
6	<i>Prunus avium</i> Wild Cherry	11.5	#250	N 2.5 E 2.5 S 2.5 W 2.5	3	SM	Fair	Good	Young tree of good form	B1/2/3	20-40	3	0.75m
	St. Anne's Close												
7	<i>Chamaecyparis lawsonia</i> Lawson Cypress	14.5	430	N 4.5 E 4.5 S 4.5 W 4.5	3	EM	Good	Good	Early mature tree of good form	B2	20-40	5.1	1.1m
8	<i>Tilia cordata</i> Small Leaved Lime	#12	#350	N 3 E 5 S 5 W 3	1.5	EM	Good	Fair	Leaning to East, twisted	B2	20-40	4.2	2.5m

Appendix 2 – Draft Tree Protection Plan

