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Arboriculture Impact Assessment

50 Compayne Gardens, London

Written By Alastair Gavin On behalf of Tree Aware UK Ltd
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The purpose of this document is to assess the tree or trees and/or any significant vegetation at the above site, to fully identify any constraints that the tree/trees or significant vegetation may pose to the proposed construction or design in line with BS 5837: 2012 “trees in relation to design, demolition and construction – recommendations”.

Contents

1.0 Summary

The following points in this summary are intended for quick reference only. As we recommend that the report is read fully.

1.1 Overview of Tree Constraints

Following a site inspection on the 15/02/2017, a general preliminary assessment of the site as a whole is that the existing trees located at the site this being the property 50, Compayne Gardens, London should not pose a constraint to the current proposed construction if the recommendations within this Impact Assessment are followed.

1.2 Overview of Construction Costs in Connection to the Trees

In terms of additional costs in the use of special construction techniques and providing adequate tree protection. It is deemed that the presence of the trees may pose a minor to medium additional cost. This is dependent on the final proposed design.

1.3 Notable Tree Constraints (Trees of a BS 5837 Category being either an A or B)

It was identified that the trees T1, and T2 located at the site were of a notable category being category B with the remaining tree T3 and group G1 being a category C group (Please see Appendix A, BS 5837 Tree Survey Schedule for specific tree details).

1.4 Impact on Trees

The foot print of the current proposed rear extension to the property does not encroach into the root protection areas (RPA) of any of the trees, as such the rear extension does not pose any impacts to the trees at the site.

The proposed garden room however does encroach into the root protection areas of T2 by approximately 10-15%, T3 by approximately 5-10%, and G1 by approximately 10%.

There is also a risk of some minimal overhang to the garden room from T2, T3, and G1 which could lead to the risk of falling debris collecting on the roof and leaf fall blocking the guttering system.

It is unlikely that any damage will occur to the trees this being T1, T2, T3 and group G1 from the construction process of the rear extension and garden room this being in the form of direct damage to the trees stems from impacts during construction as all the trees are adjacent to the site and protected by the boundary wall that encompasses the site. There is the risk however that compaction or contamination could occur to the roots of the trees that extend under the boundary wall foundations as indicated by the root protection areas.

2.0 Introduction

2.1 Instruction has been received from DVM Architects ltd to assess the impact on the trees at the site from the proposed rear extension to the property and proposed garden room, which might cause a constraint to the current proposed design/location of the extension and garden room.

2.2 A BS 5837 Tree Survey in accordance to BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations was carried out on the 15/02/2017. The trees included in the survey (please see Appendix A) have been visually inspected from ground level. No climbing inspection or any decay detection equipment has been used or carried out.

2.3 As there are trees located on and next to the site which are contributing to the character of the area it is important to assess and ascertain the quality and value of the trees and the likely impact on the trees from any proposed construction this being the rear extension to the property and proposed garden room.

2.4 Dependant on their age, condition and species trees differ in their ability to cope with root disturbance and damage. Subsequently, tree roots which are commonly located within the top metre of soil can be affected by natural and

manmade topography and structures, which can restrict, redirect and affect trees root growth rate. It is therefore important to consider all relevant factors when ascertaining the retention and or removal of trees.

3.0 Site Description

3.1 The site being made up of an existing building is within an urban environment that has a minimal to medium amount of tree cover. This is made up of predominantly privately owned trees in front and rear gardens and street trees and trees in public open space. The trees that are present near to the site are predominantly of same age but vary in species.

3.2 The area surrounding the site comprises of privately owned properties with medium to large gardens. The majority of the area is flat in gradient with little level change occurring over a wide area.

3.3 The trees in question are located in the neighbouring properties rear gardens and in an area of open space at the rear behind a boundary wall of the site and can be classed as individual trees with one group. During the BS 5837 Tree Survey no abnormal grounds conditions such as water logging or contamination were noted next to the trees or group surveyed.

4.0 Impact on Trees

4.1 The trees near to the proposed rear extension and proposed garden room to the property have been assessed in accordance to BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction"- Recommendations. Please see Appendix A for tree details in accordance to the methodology of BS 5837:2012. The trees and group of trees have been categorised as follows;

<u>Individual Trees</u>

T1	Purple leaved Plum	Category B
T2	Bay	Category B

T3 Apple Category C

Groups
G1 Sycamore Category C

4.2 The foot print of the current proposed rear extension to the property does not encroach into the root protection areas (RPA) of any of the trees, as such the rear extension does not pose any impacts to the trees at the site.

4.3 The proposed garden room however does encroach into the root protection areas of T2 by approximately 10-15%, T3 by approximately 5-10%, and G1 by approximately 10%, although there is a boundary wall with foundations between the trees stem and the site. It is likely that these foundations would not of acted as a complete root barrier as they are likely not to extend to a depth of more than a meter, as such it is likely that some trees roots from T2, T3 and G1 will be present in the location of the garden room as indicated in the locations of the root protection areas to each tree/group. It is therefore likely that some minimal impact will occur to the trees root systems from the construction of the garden room if standard trench foundations are used.

4.4 As there is some overhang of the canopies of T2, T3 and G1 into the site there is a risk of from falling debris and leaf fall collecting on the roof and blocking the guttering system.

4.5 With the presence of the boundary wall It is unlikely that any direct damage will occur to the trees structures this being T1, T2, T3 and group G1 from the construction process of the rear extension and garden room from of impacts to the trees stems as these are protected by the boundary wall. There is however a risk of compaction or contamination to the root protection areas of the trees (roots that extend under the foundations of the wall into the site) from the construction process of the proposed rear extension and garden room.

5.0 Conclusions and Recommendations

5.1 As there is some encroachment into the RPA of T2, T3 and G1 that may have an effect on the condition of the trees/group, the use of pile and beam foundations or alternative construction method for the foundations should be used to lessen or avoid any perceived root damage to the trees.

5.2 Based on the likelihood of some minimal overhang occurring between the canopies of T2, T3 and G1 and the garden room, it is recommended to address this, the trees branches that do overhang should be lightly reduced in accordance to BS 3998 2010 (this work should be listed within the arboricultural method statement). This work will reduce the debris from the trees affecting the roof and guttering system. In addition consideration should also be given to specifically protecting the garden rooms guttering system from leaf fall/debris encroachment.

5.3 As the root protection areas (RPA) of the trees extend into the site, they are at risk from the construction process in the form of compaction or contamination from the construction of the rear extension and garden room, as such basic tree protection in the form of tree protection fencing and ground protection matting should be used to protect the trees and group of trees RPA.

5.4 It is recommended to ensure adequate tree protection is used and to promote awareness to protect the trees during construction that an Arboricultural Method Statement (AMS) is produced along with a Tree Protection Plan.

5.5 In terms of additional costs in the protection of the trees, to stop damage occurring during the construction of the proposed rear extension and garden room, it is deemed that this may pose a minimal to medium additional cost dependant on the final design. This would be in the form of tree protection measures, specialised construction techniques such as a pile and beam foundations construction, and construction awareness of the trees on the site.

Appendix A BS 5837 Tree Survey Schedule

Sequential Reference Number	Species (Common Name)	Height	Stem Diameter	Branch Spread N S E W in meters	First Significant Branch	Canopy Height	Life Stage	General Observations	Estimated Remaining Contribution in years	BS 5837 Category
T1	Purple Leaved Plum	8m	400mm#	3, 3, 4, 3	1.7m	2m	Mature	Tree located in adjacent garden as such tree could not be fully inspected, tree shows evidence of past branch pruning, tree appears to be in good condition, dead wood in canopy, crossing branches (common to species) present, tree has good form. **<u>Recommendations</u>** **Remove dead wood**	20+	B
T2	Bay	6m	400mm#	3, 3, 3, 3	1.9m	1.7m	Mature	Tree located in adjacent garden as such tree could not be fully inspected, tree appears to be in good condition with good form, twin leaders to tree, tree likely reduced in the past, re-growths present.	20+	B

T3	Apple	8m	210mm#	2, 3, 2, 2	2.5m	3m	Mature	Poor conditioned tree in neighbours garden as such tree could not be fully inspected, evidence of large lost branch with tare present south east side of stem, one sided canopy favouring the south side, average form to tree, evidence of past reduction of canopy, re-growths present, climber present in trees canopy. **<u>Recommendations</u>** **Monitor condition**	10+	C
G1	Sycamore	18m+	350mm#	3, 4, 3, 3	Ground Level	2.5m	Mature	Group of approximately 3 trees closely planted, possible self sets, group located outside of garden boundary with Ivy covered stems as such group could not be fully inspected, dead wood in canopy, trees in group appear to be in an average condition, suppression evident with slender stems due to close planting, low limb present south side arising from ground	10+	C

								level, average form. **<u>Recommendations</u>** **Remove dead wood and Ivy**		

Appendix B Root Protection/Constraints Plan

(Please see separate document)