Arboricultural Impact Assessment

46 Avenue Road St Johns Wood London NW8

October 2011

200606-PD-02a

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1 INTRODUCTION

Terms of instruction

- 1.1 The following arboricultural impacts assessment (AIA) has been commissioned by BB Partnership Ltd on behalf of Brightwood Ltd,in order to provide information to assist all parties involved in the planning process to make balanced judgements with regard to arboricultural features in relation to the proposed basement extension to 46 Avenue Road, St Johns Wood, London, NW8.
- 1.2 This report includes:
 - an assessment of the trees, their quality and value and constraints to development posed by these;
 - the impact of the proposed extension upon the tree population in and around the site;
 - measures to be taken to protect trees during the proposed works.

Documents provided

- 1.3 This report has been prepared with reference to the following supplied information:
 - Topographical survey reference No. 4766/2 by Laser surveys.
 - Proposed layout reference 3977_001 by BB Partnership Ltd.

Methodology

- 1.4 The methodology used in the preparation of this report is based on the principles of British Standard BS5837:2005 *Trees in relation to construction*. The trees and other significant vegetation on and around the site have been surveyed using the recommendations of BS5837:2005.
- 1.5 Arboricultural involvement has followed the recommendations of BS5837:2005 including involvement from the very start of the design process. Following the arboricultural survey the constraints were presented to the design team and have been used to develop the layout as used within this report.

2 THE SITE AND ITS SETTING

General area description

- 2.1 The site is a detached residential dwelling located in the Elsworthy Conservation Area. The local area is well treed with mature specimens lining the roads and located within private gardens.
- 2.2 The site has a formally landscaped garden with a centrally positioned swimming pool and architectural pool house. Raised planters frame the view of the garden from the house and these are planted with a variety of small ornamental trees and shrubs.

3 DATA COLLECTION

Site visit

- 3.1 The site was visited in June 2010 when trees were inspected from ground level. The survey methodology has followed the recommendations of British Standard BS5837:2005 *Trees in relation to construction*.
- 3.2 The locations of trees have been taken from the supplied topographical survey. Where trees have not been plotted on the supplied topographical survey their positions have been shown but this is not from a measured survey and the location of these trees should be checked on site.

Methodology of survey

- 3.3 Each tree has been given a tree identification number for the purpose of this report. This is only a reference and the trees are not individually marked.
- 3.4 BS5837:2005 sets out the methodology for surveying trees on potential development sites in order to identify them within a prioritised system of retention categories summarised as:
 - **A Category** Trees of high quality and value in such a condition as to be able to make a substantial contribution for a minimum of 40 years
 - **B Category** Trees of moderate quality and value in such a condition as to make a significant contribution for a minimum 20 years
 - C Category Trees of low quality and value currently in adequate condition to remain until new planting could be established and expected to remain for a minimum of 10 years, or young trees with a stem diameter less than 150 mm measured at 1.5 metres above ground level.
 - **R Category** Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural or forestry management.

Summary and analysis of trees

3.5 The locations of trees and groups of trees are shown on plan 200606-P-01a at Appendix A, dimensions, comments and information for each tree are given in the tree schedule at Appendix B.

4 PLANNING GUIDANCE AND CONSTRAINTS

Legal protection of the trees

4.1 The site is within the Elsworthy Conservation Area. We have not carried out any investigations as to whether the site or adjacent properties contain any trees protected by tree preservation orders (TPO).

National policies and guidance

- 4.2 Planning policy statement 1 states at paragraph 13 (KEY PRINCIPLES): (iv) Planning policies should promote high quality inclusive design in the layout of new developments and individual buildings in terms of function and impact, not just for the short term but over the lifetime of the development. Design which fails to take the opportunities available for improving the character and quality of an area should not be accepted"
- 4.3 The British Standards Institute published BS5837:2005 in September 2005. The document was developed through consultation with engineers, architects landscape architects, central government and developers and gives clear and current best practice recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees with structures. Where development is proposed, the standard provides guidance on how to assess the value and quality of trees and to decide which trees are appropriate for retention. The surveying of trees as part of the feasibility assessment of a site is important to ensure that the trees inform the design process.
- 4.4 The structured approach to survey, assessment, design, construction and aftercare of trees within BS5837:2005 includes:
 - tree survey establish what trees are present on and adjacent to the site and to measure their dimensions;
 - tree categorisation give each tree or group of trees a classification based on arboricultural, landscape and conservation values;

- consider trees suitable for retention based on agreed appropriate layout in the format of an arboricultural implications assessment;
- arboricultural method statement setting out clearly how the trees will be managed through the process of development. This will include a tree protection plan.

Local policies and guidance

- 4.5 The City of Westminster adopted its Core Strategy on 26th January 2011. This is the main document within the LDF and sets out the key planning policies in relation to development within the borough. The adoption of the strategy has resulted in the deletion of some UDP policies however the following remain adopted and are relevant to trees and landscaping;
 - Policy ENV4: Planting around or on buildings. Relates to new planting on development schemes whilst maintaining the amenity of neighbours, listed buildings, conservation areas and strategic views from the Royal parks.
 - Policy ENV 16: Trees and shrubs. Relates to the protection, retention and replacement of important and protected trees.
 - Policy ENV 17: Nature conservation and biodiversity. Relates to the protection and enhancement of habitats and protected or locally important species.
 - **Policy DES 12: Parks, gardens and Squares.** Relates to development close to open spaces or those areas that form important elements within the townscape.
- 4.6 Within the Core Strategy the main policy relating to trees and landscaping is CS37:
 Biodiversity and Green Infrastructure. This policy states that biodiversity and green infrastructure throughout Westminster will be protected and enhanced and where harm is unpreventable sufficient mitigation will be required.
- 4.7 The council adopted the Supplementary Planning Document (SPD) *Trees and the Public Realm* in September 2011. The main purpose of the document is ensure that the right tree is planted in the right place and details specific planting objectives in relation to the character and appearance of areas.
- 4.8 The SPD (2011) should be read in conjunction with the existing SPG, *Trees and other planting* on development sites, which was adopted in 2004. This document focuses on the councils approach to retaining, protecting and enhancing trees in relation to development proposal and states that a tree survey in accordance with BS5837 will be expected as part of a

- planning submission. It also states that the council will make tree preservation orders wherever necessary and protect all trees that are the subject of TPOs.
- 4.9 The SPG (2004) is aimed at providing guidance to the private sector in relation to trees and development but still refers to out of date Policies from the UDP.
- 4.10 Together the two documents form the City of Westminster Tree Strategy.

5 DEVELOPMENT PROPOSALS

Proposed development

5.1 The layout for the proposed development is shown on plan 200606-P-02a, at Appendix A.

The proposal is for a new basement and lower basement within the rear garden of the property and alterations to the layout of the existing property.

The main arboricultural impacts to be considered

- 5.2 The main arboricultural issues in respect of the proposals are as follows:
 - Required trees works
 - Impact of the proposal on adjacent trees
 - Methods to protect trees

Tree works

- 5.3 The proposal will involve the removal of the following trees;
 - G1 Italian cypress Remove
 - T9 silver birch Remove
- 5.4 All of the above trees are young with little public amenity value due to their small size and position in the rear garden which prevents public visibility.

Note: Local Authority approval will be required for tree works or the removal of trees especially in relation to tree preservation orders, conservation areas, restrictive covenants and planning conditions.

6 JUXTAPOSITION OF TREES AND STRUCTURES

Above ground constraints

- 6.1 Availability of daylight and sunlight is not considered an issue with regards to this application as it is for a basement, and there will be no retained trees in close proximity to the development.
- 6.2 There is an early mature London plane adjacent to the entrance drive. This appears to have a high crown and so it is not considered to be a significant constraint; however it will require adequate protection to ensure construction traffic cannot cause any damage to the stem or canopy. These details can be adequately dealt with using appropriately worded planning conditions.

Below ground constraints

- 6.3 The below ground constraints are generally summarised as the root protection area (RPA).

 BS5837:2005 recommendations provides a formula for calculating the RPA which indicates an area required to be protected for existing trees that are to be retained. The shape of the RPA and its exact location will depend upon arboricultural considerations including:
 - likely tolerance of the tree to root disturbance;
 - morphology and disposition of the roots when known influenced by past or existing site conditions;
 - soil type and structure; and
 - topography and drainage.
- 6.4 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Damage can be made to live roots by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.
- 6.5 The only perceived constraint on this site is the root protection area of the neighbouring mulberry and sycamore trees (T2 & T3) however this is a minor encroachment that will cause no detrimental harm to the long term health or stability of the trees.
- 6.6 T2 (mulberry) is closest to the boundary however due to its position and the presence of other vegetation the stem diameter was based on an estimate and therefore the root protection area is likely to be smaller. The visible condition of the tree also indicates decline

and therefore it has been classified as a C grade tree of low quality and value. BS5837 recognises that C grade trees should not pose a significant constraint to development.

7 TREE PROTECTION

The use of planning conditions to safeguard trees

7.1 Section 197 of the Town and Country Planning Act 1990 places a duty on the Local Planning Authority to ensure that planning permissions are granted making adequate provision for the preservation and planting of trees by the imposition of conditions.

Physical protection

- 7.2 Trees can be readily damaged if care is not taken during development of site from demolition through construction and also landscaping.
- 7.3 It is important that a continuous tree protective fencing is securely fixed to a static fence around trees. The use of weld mesh fencing without a fixed base will not be acceptable and is not in accordance with BS5837:2005 recommendations.
- 7.4 The positioning of tree protective fencing should take into account the size and condition of the individual trees to be protected and the risks to their health posed by the development during and after construction. An indicative position of protective fencing can be found on drawing 200606-P-03a at Appendix A

8 SUMMARY AND CONCLUSIONS

- 8.1 British Standard BS5837:2005 contains clear and current recommendations for a best practice approach to the assessment, retention and protection of trees on development sites. The proposed development has followed this guidance by:
 - Seeking arboricultural advice to inform the layout and design of the proposed building;
 - Respecting the constraints posed to development of the site by high or moderate quality trees; and
 - Continuing to take advice on all aspects to the proposal that may impact upon trees.
- 8.2 The proposed development has been specifically designed to take the root protection areas of the trees into account despite their poor condition and categorisation. Existing site features have previously altered the root protection areas of trees and the proposed basement construction will not cause any further harm to any of the trees within or neighbouring the site.
- 8.3 The proposal will offer new opportunities for planting as removal of the swimming pool will allow for planting above the new basement.
- 8.4 The use of appropriately worded planning conditions on granting consent will ensure that the careful intentions of the proposal are secured and can be enforced.