Pre-development Arboricultural Report

Re:

Garden Flat, 25 Nassington Road, London, NW3 2TX

Commissioned by:

Garden Art, Attn: Mr. Evans, Caspari House, I Noel Road, London, N1 8HQ

Compiled by:

Modern Arboricultural Services Paul Macqueen (NCH, ND ARB)

Inspection date:

Monday 24th July 2006

Pre-development Tree Report

1. Instructions, Objectives and limitations

- 1.1 I am instructed by Mr. Evans to inspect and report on the trees liable to be effected by the development of the land at the Rear of 25 Nassington Road. The objectives of the report are to advise on the current condition of the trees, identify trees for retention and limit damage to the tree/s during construction in the interests of both health and safety, and to continue to promote the visual character and amenity of the area.
- 1.2 The following report is in accordance with BS 5837:2005 Trees in Relation to Construction-Recommendations.
- 1.3 The report includes;
 - i) Tree Survey: Including tree categorisation and identification of trees suitable for retention.
 - Tree Constraints Plan (TCP): Showing the Root Protection Area (RPA) and representing the effect that the mature height and spread of trees suitable for retention will have on layouts through shade, dominance etc.
 - should inform site layout design, it is recognised that the competing needs of development mean that trees are only one factor requiring consideration.

 Tree constraints and design: The presents of Tree Preservation orders or conservation area, above and below ground constraints, possible design modifications etc.

 Proximity of trees to structures: A realistic assessment of the probable impact of any proposed development on trees and vice versa etc.
 - Arboricultural Method Statement (AMS): To include details of tree protection prior to and during construction. Also tree pruning recommendations to promote the trees health and maximise the juxtaposition between development and post construction remedial methods to promote recovery.
 - Tree Protection Plan (TPP): Showing finalised layout proposals, tree retention and tree and landscape protection measures detailed within the AMS, which can be shown graphically.
- 1.4 The inspection has been carried out from a ground level only. Should more detailed inspection be required then this will be highlighted in survey recommendations.
- 1.5 Trees are living organisms whose health and condition can change rapidly, the health and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for one year. This period of validity may be reduced in the case of any change in conditions to or in proximity to the tree.

2 Information Received

- 2.1 The following correspondence and drawings of the existing site and the proposed development have been received on which this report is based;
 - i) A land survey including a preliminary site layout. This drawing is used as a basis for the TCP and TPP.
- 2.2 These correspondence and drawings have been copied and attached within Appendix.

3 Site description

3.1 The development is the proposed construction of a swimming pool within the rear garden at the above address.

4 Tree Survey

- 4.1 The following information is provided:
 - a) Reference number (recorded on plans)
 - b) Species
 - c) Height in metres
 - d) Stem diameter in millimetres at 1.5m or immediately above the root flare for multi-stemmed trees
 - e) Branch spread in metres taken at the four cardinal points to derive an accurate representation of the crown
 - f) Height in metres of crown clearance above ground level
 - g) Age class (young, middle aged, mature, over-mature, veteran)
 - h) Physiological condition (e.g. good, fair, poor, dead)
 - i) Structural condition, e.g. presence of decay
 - j) Preliminary management recommendations
 - k) Estimated remaining contribution in years (e.g. less than 10, 10-20, 20-40, more than 40)
 - 1) R or A to C category grading (see Table 1) (recorded on TCP)
 - m) Restrictions i.e. Conservation Area (CA) or (Tree Preservation Order) TPO
- 4.2 The trees are catergorized in accordance with the BS 5837 Table 1 Cascade chart for tree quality assessment. A copy is enclosed within the appendix.
- 4.3 On the date of inspection a limited visual inspection from the ground was achieved. A copy of the Tree Survey is enclosed within the appendix.

5 Tree Constraints Plan (TCP)

- 5.1 The influence that trees on and adjacent to the site will have on the layout is plotted on a plan called the TCP. This design tool shows how the below ground constraints, represented by the RPA, and the above ground constraints that the trees pose by virtue of their size and position. Also their future potential sizes and influence.
- 5.2 In order to avoid damage to the rhyzosphear (rooting area) of retained trees, the RPA is plotted around each of the category A, B and C trees. This is a minimum area in m², which must be left undisturbed around each retained tree.
- 5.3 The RPA is calculated using BS 5837 Table 2 (A copy of Table 2 is enclosed within the appendix) as an area equivalent to a circle with a radius 12 times the stem diameter at 1.5m for single stem trees and 10 times basal diameter for trees with more than one stem.
- 5.4 A copy of the TCP is enclosed within the appendix.

6 Arboricultural Implications Assessment (AIA) and Design Issues

- 6.1 Due to the proposed location of the storage shed and skimmer pump being to close to T1, a slight adjustment to the plan is required to allow for yearly increment growth. The shed and skimmer pump location will still fall within the trees RPA, however the structure is lightweight and requires no foundations, therefor it will have a minimal impact on the trees rhyzosphear (rooting area).
- 6.2 The tree T3 requires protection to the RPA during the excavation of the swimming pool to prevent compaction and consequent asphyxiation of the Rhyzosphear.

7 Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP)

- 7.1 All trees must be adequately protected before development operations start. Therefore the following sequence of operations must work hand in hand with the development process.
 - i) Tree Works: The removal of T2 and T4.
 - Design implications: The alternative location of the storage shed and skimmer pump is out lined in red on the TPP.
 - iii) The construction exclusion zone. Barriers and ground protection: The location of the protective barriers are plotted accurately on the TPP around T3.

The barriers must be erected and installed prior to any materials brought onto the site and before any excavation commences.

The Barriers: Should consist of a scaffold framework in accordance with BS 5837 Figure 2 (a copy of which is enclosed within the appendix). However, due to no machinery being used on site, basic 'haras' fencing will be sufficient.

Once the exclusion zone has been protected by barriers and or ground protection, construction work can commence. All weather notices should be erected on the barrier with words such as

"Construction exclusion zone-Keep out"

- iv) During construction the following processes must be adhered to;
 - a) No materials can be stored within 5m of the tree's bole.
 - Oil, bitumen, cement or other material likely to be injurious to a tree must not be stacked or discharged within 5m of the tree's bole.
 - c) Concrete mixing must not be carried out within 5m of the tree's bole.
 - d) It is essential that fire must not be lit beneath or within close proximity to the canopies.
 - e) The trees must not be used as anchorage for equipment.
 - f) Care must be exercised when using cranes or similar equipment near the spread of the canopy.
- vi) Removal of the barriers can occur at the end of the excavation of the swimming pool.
- A de-compaction method such as compressed air and Mychorrizae injections with a Terravent within the ground protection area of the RPA of T3 post construction, should be considered to improve the trees recovery. Contact: Goroots (0208 429 8049)
- 7.2 The tree should be inspected by a competent arboriculturalist following the completion of development for safety, any deterioration in the trees condition, and any accidental damage to identify the need for tree works.

This report is for the sole use of the above client and refers to only the trees identified within, use by any other person(s) in attempting to apply its contents for any other purpose renders the report invalid for that purpose.

Yours sincerely

Paul Macqueen

(NCH ARB, ND ARB)