1-38-2606/3



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REPORT

on the impact on trees

of proposals for development

at

8 Pilgrims Lane, London, NW3 1SL

Pilgrim's Lane

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(25 April 2013)

01 Introduction and Instructions

I am instructed by Brod Wight Architects on behalf of clients to make an assessment of tree amenity value and condition of trees, at 8, Pilgrims Lane, London, NW3 1SL, and of the impact of a proposal for development on such trees. Accordingly, I visited the property on 24th August, 2010 in order to carry out an inspection.

02

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02.01

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03 <u>Notes</u>

03.01

PLANS

1-38-2606/P1 gives an approximate representation (in plan) of actual crown form, and is intended to indicate the relationship of neighbouring trees to each other, and should be read with the comments on crown shape and tree value in TREE DETAILS appended. The plan gives a quick reference assessment of value as per section 4, table 1, of BS 5837:2012. Assessment of value in the TREE DETAILS table appended is, in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' related mainly but not exclusively to the criterion of visual value to the general public. The Standard recommends a way of classifying trees when assessing their potential value in relation to proposed development. Some surveys may not include any trees of one or more categories. Table 1 suggests categories 'U', 'C', 'B' and 'A', in ascending merit. 'R' (RED crown outline on plan) category trees are dangerous \ low value trees that could require removal for safety or arboricultural reasons. 'C' (GREY or black/uncoloured crown outline on plan) category trees are of no particular merit, but in adequate condition for 'A' category trees (GREEN crown outline on plan) are trees of retention. high vitality or good form, or of particular visual importance: 'B' (BLUE crown outline on plan) category are good trees but may be of slightly poorer form or be not sited as importantly as 'A' category trees. See TREE DETAILS appended. Category Assessment appears in column 10. This standard also provides a way of determining an area (see TREE DETAILS column 7) - the RPA - root protection area - around the trunk of the tree in which protective measures should be used in order to prevent significant damage to trees. There are various ways of achieving this. A simple way is to use exclusion fencing, but other methods have been shown by established use to be very effective.

03.02

1-38-2606/P2B shows proposed retained trees and is colour-coded to indicate where arboricentric methods are proposed during the construction process.

04 Sources and Documents

Ground level inspection. Supplied plans refs:

999/AP3-S01A Existing Site Plan
999/AP3-01C Proposed site plan,
999/AP3-02E, Proposed Basement floor plan
999/AP3-03D Proposed Upper Basement floor plan
Greig-Ling 612 - 01

05 <u>Appraisal</u>

05.01

AMENITY / SCREENING BY TREES AND SHRUBS

The trees on and adjacent to the site are no significant general public amenity value, as they are scarcely if at all visible from any public viewing positions, and then only as 'glimpse' features. (See cover picture) Certain trees are of some strictly local amenity value to owners / users of the site and adjacent owners/users.

05.02

TREES AND LAYOUT - POTENTIAL FOR CONFLICT WITH ROOTS

(Details appear in the tree detail table appended.) The figures in columns 6 and 7 in the tree details table appended indicate the root protection area ('RPA'), and typically the basic exclusion fence position. New materials and methods have been developed and continue to be developed that assist in promoting the successful retention of trees in association with constructed features. It should be noted that BS 5837:2012 (section 7.4.2) supports 'up and over' methods of construction where appropriate. The design principle of this method is outlined within Arboricultural Practice Note 12 (Through the Trees to Development). This method has been used for many years on the recommendation of John Cromar's Arboricultural Co. Ltd. and has successfully allowed the retention of mature trees very close to construction activities.

05.03

An assessment as per BS5837:2012 section 4.6.2 has been carried out in connection with all trees to be retained. (This section requires that site conditions, tree mechanics, etc., are taken into account in determining the likely position of roots.)

05.04 FOOTING DESIGN No encroachment on any retained tree is proposed.

05.05

PERCEPTION OF TREES

The proposals do not entail any change to fenestration relevant to retained trees. In view of the above I conclude that shading by trees has been considered (as section 5.6.2.6 of BS 5837:2012 recommends) and appears insignificant.

05.06

Processing by the LPA of any due application from future owners for permission to carry out tree work will no doubt be carried out with due regard for good arboricultural practice and according to British Standard 3998:2010 'Tree Work – Recommendations'. In any appeal that might arise against refusal of LPA consent to reduce inappropriately, or fell trees, common arboricultural criteria to those of the LPA would be used by any specialist tree inspectors of the Planning Inspectorate, and thus the trees would in my view be thus protected against inappropriate work. I consider that any such notional issues are very likely to be dealt with appropriately as no doubt in the past they have been within the Borough, as such tree/building juxtapositions are far from rare.

05.07

SUPERSTRUCTURE AND TREE APPRAISAL - TREE PRUNING

I note from the drawings supplied that no conflict with the crown of retained trees will occur.

05.08

TREE PLANTING

Appropriate replacement tree planting will play some role in providing for future local amenity. On plan,

A= Parrotia persica 14/16cm girth ; 85L pot size.

B= Magnolia grandiflora 'Gallissoniere' , 14/16cm girth , 85L pot size.

05.09

SUPERVISION

Supervision by an arboriculturist is a desirable (but not always essential) element of site development where trees are present and to be retained. Good communication between site agent and arboriculturist can reduce the need for such a measure. I propose that this takes place at key points in the construction process, and additionally whenever required by the architect or LPA. These key stages are as per method 1 in section 06.02 below.

05.10

PUBLISHED GUIDANCE IN RELATION TO TREES AND DEVELOPMENT In conserving trees on development sites, expected best practice is as in B.S. 5837 : 2012. Section 5.1.1 notes :

"Certain trees are of such importance and sensitivity as to be major constraints on development or to justify its substantial modification : attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal."

05.11

The above advice appears to have been considered in formulating proposals for development.

05.12

CONCLUSION

I conclude that the construction proposed, subject to precautionary measures as outlined above and as per the recommendations outlined below, will not be injurious to trees to be retained, nor will require any trees of significant longevity or public amenity value to be removed.

06 <u>Tree Protection Proposals</u>

06.01

TREE PROTECTION - GENERAL

It is highly important to tree health and vitality that construction activities are carried out strictly in accordance with the tree protection methods specified. A single traverse of a root protection area by a mechanical excavator can cause SIGNIFICANT and PERMANENT (albeit temporarily invisible) damage to trees. Such machinery, including piling rigs, shall be kept at ALL times outside the root protection areas as indicated in the tree details table appended, and/or shall be subject to SPECIAL METHODS below. Fences to protect trees shall be respected as TOTAL EXCLUSION fences. Hence, before any site activity, including demolition, the fence lines shall be complete. Protective fencing and any temporary protection of ground surfaces will have to be removed in due course to allow finishing of landscaping, paving, etc., but this shall not take place until all need for vehicular access to the site has passed, and shall be agreed with arboriculturist / planners on site during progress of works.

06.02

TREE PROTECTION – SPECIAL METHODS 1 - 6 PLEASE READ WITH PLAN REFERENCE 1-38-2606/P2B, APPENDED.

Method 1 : Supervision by an arboriculturist shall take place at key points in the construction process, and additionally whenever required by the architect or LPA. These key stages are :

- At site possession by contractor, outline all tree protection measures with site agent and resolve any issues arising. Ensure tree work is carried out to specification and sign off. Ensure protective fencing is erected and completed as proposed. Ensure any site hut, mixing sites for mortars, disposal-to-skip sites, etc., are located appropriately, and sign off.
- 2) Approve timing of removal of protective fencing (post main phase) and sign off.

Method 2 : Tree work shall be in accordance with good arboricultural practice, to BS 3998:2010 'Tree Work - Recommendations'. The stumps of trees 1, 3 and 5 shall be removed by mechanical stump grinder, not by mechanical excavator.

Method 3 : Tree protection fencing shall be erected, consisting of 'Heras' type fencing (weld-mesh panels), each section securely attached to uprights driven at least 0.6m into ground, as per the layout as shown on the plan (pink lines). The standard rubber supports ('elephant's feet') shall used as per BS 5837:2012 section 6 figure 2. Below the crowns of trees with branches extending to less than 2m above ground level, in order to avoid unnecessary pruning, it is permissible to replace sections with manufactured boards at least 11mm thick (hoarding), attached securely to timber uprights driven at least 0.6m into the ground, providing the finished fence stands at least 1.5m above ground level.

Method 4 : This method shall apply after completion of main build only. Soil handling of any kind within the root protection areas shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. Screened topsoil (to BS3882:2007- multi purpose topsoil) shall be laid to a maximum depth of 100mm as required.

Method 5 : The replacement shrub and tree shall be supplied exactly as specified 'A' and 'B' on plan :

'A' = Parrotia persica 14/16cm girth ; 85L pot size.

Ground preparation for tree / shrub planting areas shall entail removal of any hard surfacing using hand tools or hand-held power tools only, the removal of degraded or compacted or contaminated soil to a depth of at least 0.6m below finished surrounding ground level. The base and sides of the pit shall be forked over to at least one hand fork's spit in depth. Screened topsoil (to BS3882 : 2007- multi-purpose topsoil) shall be laid to replace soil volume removed. Soil handling of any kind shall take place only after a minimum of 3 days after heavy rain, and shall where possible be carried out 7 days or more after such rainfall. Tree planting shall be in accordance with good arboricultural practice: the tree shall be planted so that the root collar lies at finished ground level, shall be short staked and tied with proprietary tree tie. The ground surface shall be mulched within 0.75m of the trunk location to a depth of 100mm with composted organic material or proprietary mulch mat. British Standard - BS8545 Code of Practice for trees from nursery to landscape (in early draft 2012)

Method 6 : In addition to the above, careful general operation and site handling shall be observed as outlined at 06.03 below.

^{&#}x27;B' = Magnolia grandiflora 'Gallissoniere' , 14/16cm girth , 85L pot size.

06.03

GENERAL TREE PROTECTION METHODS

- A) No fires shall be made on any part of the site, or within 20m of any tree to be retained.
- B) No spilling or pouring of fuels, oils, solvents, tar shall be made on any part of the site.
- C) No spillage or discharge of wet mortar or concrete shall be made on any part of the site.
- D) No storage of materials shall be made within the protective fences.
- E) No breaching or moving of the protective fences without the approval of an arboriculturist.
- F) Services, if planned to be laid in the root protection areas, (and which notionally appears unnecessary in this case) shall be laid using trenchless 'no dig' methods or by hand dug trenches to avoid cutting major roots.
- G) Alterations in levels within the tree protection fence areas shall be avoided.

06.04

It is recommended that acceptance of the recommendations in this report is demonstrated by, for example, the architect specifying in writing to the building contractor that tree care conditions apply in execution of the contract, and by an estimate or written undertaking from the contractor to the architect demonstrating that the practical aspects of observation of such recommendations have been priced in.

07 <u>General</u>

If conflicts between any part of a tree and the building(s) arise in the course of development these can often be resolved quickly and at little cost if a qualified arboriculturist is consulted promptly. Lack of such care is often apparent quickly and decline and death of such trees can spoil design aims and can of course affect saleability, and reflect poorly on the construction and design personnel involved. Trees that have been the recipients of careful handling during construction add considerably to the appeal and value of the finished development.

25th April 2013 Signed:

John C. M. Cromar, Dip.Arb.(RFS) F.Arbor A.

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APPENDICES

08 <u>Tree details</u>

| Tree number | Tree type | Height (m) | Number of stems | Stem diameter (combined if applicable) (mm) | Radius of RPA if circle (mm) | RPA (m²) | Comments | Life expectancy (years) | Assessed BS5837 value category |
|-------------|----------------------|------------|-----------------|--|------------------------------|----------|---|-------------------------|-----------------------------------|
| 1 | Japanese cherry | 9 | 1 | 310 | 3720 | 43 | some local screening value; low, decayed limb. NOT RETAINED. | 10+ | C2 |
| 2 | Euonymus | 3.5 | 1 | 120 | 1440 | 7 | Shrub | 10+ | (C2) |
| 3 | purple plum | 4 | 1 | 130 | 1560 | 8 | Moribund NOT RETAINED | <10 | U |
| 4 | western red cedar | 14 | 1 | 475 | 5700 | 102 | no access : screening value | 40+ | B2 |
| 5 | Japanese cherry | 6 | 1 | 200 | 2400 | 18 | Dead NOT RETAINED | | U |

TREE ASSESSMENT AND ROOT PROTECTION ZONES

09 <u>Schedule</u>

Trees at 8, Pilgrims Lane, London, NW3 1SL

Please read in conjunction with plan 1-38-2606/P1.

| No. | Tree | Heiaht (m) | Trunk / stem count dia. (mm) | Comments |
|-----|--------------------|------------|---------------------------------|--------------------------|
| 1 | Japanese cherry | 9 | 310 | remove, grind out stumps |
| 3 | purple plum | 4 | 130 | |
| 5 | Japanese cherry | 6 | 200 | remove including stump |

NOTES:

All tree work should be carried out to BS 3998 : 2010 'Tree Work - Recommendations'. The Wildlife and Countryside Act 1981 protects with certain exceptions all birds and their nests. It is an offence to destroy such nests or take or injure such birds in the course of tree works operations. If a tree is a bat-roost, a licence to work on the tree must first be obtained from the relevant Statutory Nature Conservation Organization (in England : Natural England 0845 601 4523.) Acting without a licence is likely to be justifiable only in acute emergencies threatening human life and where all other legally available option such as footpath diversion, fencing and warning signs cannot be applied.

10 <u>Plans</u>

1-38-2606/P1 1-38-2606/P2B



