

THE OLD POST OFFICE DORKING ROAD TADWORTH SURREY KT20 5SA

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# **Arboricultural Technical Note**

## Proposed re-development at

## **1 Frognal Gardens**

## Hampstead



July 2022

Ref. SJA ten 22278-01

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## 1. INTRODUCTION AND BACKGROUND INFORMATION

#### 1.1. Instructions

1.1.1. SJAtrees has been instructed by Burk Hunter Adams LLP on behalf of Mr Ben Lewis, to visit No. 1 Frognal Gardens Hampstead and to survey the trees growing on or immediately adjacent to the proposed re-development area.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during construction.

#### 1.2. Scope of report

1.2.1. This report and its appendices reflect the scope of our instructions, as set out above. It is intended to accompany a planning application to be submitted to the London Borough of Camden Council (the LPA), and complies with local validation requirements, and with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* ('BS 5837').

1.2.2. The proposed development comprises the refurbishment and, upgrade and enlargement of an external condenser, servicing the existing basement development at No.1 Frognal Gardens.

1.2.3. This report summarises and sets out the main conclusions of the baseline data collected during the tree survey and identifies those trees or groups of trees whose removal could result in a significant adverse impact on the character or appearance of the local area (Section 3). It then details and assesses the impacts of the proposed development on individual trees and groups of trees, including those to be removed (Section 4), those to be pruned (Section 5), those which might incur root damage that might threaten their viability (Section 6). A summary and conclusions, with regard to local planning policy, are presented in Section 7.

## 1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Nigel Kirby of SJAtrees on
 Wednesday 22<sup>nd</sup> June 2022. Weather conditions at the time were clear dry and bright.
 Deciduous trees were in full leaf.

## 1.4. Site description

1.4.1. The site is a detached dwelling located on the west side of Frognal Gardens, as shown at *Figure 1* below. The north, west and south boundaries adjoin residential properties on Merton Road. The east boundary adjoins Frognal Gardens.



Figure 1: Site location shown on AutoCAD geolocation satellite image; yellow cloud identifies area of re-development

1.4.2. The site is on made ground that decreases by approximately 1.5m -2m from the east to the west, at which point between the boundary wall and western off-site garden there is a level drop of 700mm. The site currently comprises a detached dwelling with basement development under the area of the proposed development.

## 1.5. Statutory controls

1.5.1. At the time of writing, we have no information if any of these trees are covered by a tree preservation order (TPO).

1.5.2. The site is within the boundaries of the Hampstead Conservation Area. The conservation area statement for this area mentions trees specifically in the roads description in relation to Frognal Gardens on page 39, stating: *"Frognal was extended southwards in the 1880s and today much of Frognal and its offshoots (Frognal Lane, Frognal Gardens, Frognal Way and Frognal Rise) are characterised by late 19th century and 20th century houses set in spacious large and well-treed gardens."* 

## 1.6. Non-statutory designations

1.6.1. There are no woodlands within or abutting the site that are classified as 'Ancient'. Ancient woodland is defined as "any area that's been wooded continuously since at least 1600 AD" and is considered an important and irreplaceable habitat.

1.6.2. There are no trees within or abutting the site that can be classified as 'Ancient' or 'Veteran'. Ancient and veteran trees are also considered to be irreplaceable habitats, and contribute to a site's biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

## 2. METHODOLOGY

#### 2.1. Local policy context

2.1.1. Local planning policies are contained in the Camden Council Local Plan 2017.

2.1.2. The relevant section of Policy A3 Biodiversity of the local plan states:

"A3... j. resist the loss of trees and vegetation of significant amenity, historic, cultural or ecological value including proposals which may threaten the continued wellbeing of such trees and vegetation;

k. require trees and vegetation which are to be retained to be satisfactorily protected during the demolition and construction phase of development in line with BS5837:2012 'Trees in relation to Design, Demolition and Construction' and positively integrated as part of the site layout;

I. expect replacement trees or vegetation to be provided where the loss of significant trees or vegetation or harm to the wellbeing of these trees and vegetation has been justified in the context of the proposed development;

m. expect developments to incorporate additional trees and vegetation wherever possible."

2.1.3. The relevant section of Policy A5 Basements of the Local Plan states:

"A5. ...m. avoid the loss of garden space or trees of townscape or amenity value.

..... u. do not prejudice the ability of the garden to support trees where they are part of the character of the area."

2.1.4. The relevant section of Policy D2 Heritage of the Local Plan states:

"h. preserve trees and garden spaces which contribute to the character and appearance of a conservation area or which provide a setting for Camden's architectural heritage."

### 2.2. Neighbourhood policy context

2.2.1. The Hampstead Neighbourhood Plan 2018-2033 (October 2018) states at Policy NE2: Trees: **"1. Development will protect trees that are important to local character, streetscape, biodiversity and the environment**."

#### 2.3. Tree survey and baseline information

2.3.1. We surveyed individual trees with trunk diameters of 75mm and above<sup>1</sup>, trees with trunk diameters of 150mm and above growing in groups or woodlands, and shrub masses, hedges and hedgerows<sup>2</sup> growing within or immediately adjacent to the site; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.

2.3.2. The baseline information collected during the site survey was recorded on site using a hand-held digital device. This information was then imported into an Excel spreadsheet and used to produce the tree survey schedule at **Appendix 2**. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree protection plan.

2.3.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion shelter), visually (e.g., avenues or screens) or culturally<sup>3</sup>. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.

2.3.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We did not undertake a full hazard or risk assessment of the trees, and therefore can give no guarantee, either expressed or implied, of their safety or stability.

<sup>3</sup> Ibid, 4.4.2.3

<sup>&</sup>lt;sup>1</sup> BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a preplanning land and tree survey.

<sup>&</sup>lt;sup>2</sup> Ibid, 4.4.2.7

2.3.5. We have categorised the trees in accordance with BS 5837, and details of the criteria used for this process can be found in the notes that accompany the tree survey schedule.

2.3.6. We have applied this methodology in line with the NPPF's presumption in favour of sustainable development, giving greater weighting to the contribution of a tree to the character and appearance of the local landscape, to amenity, or to biodiversity, where its removal might have a significant adverse impact on these factors.

## 2.4. Tree constraints

2.4.1. In line with the NPPF's presumption in favour of sustainable development, we have assessed whether any trees should be retained in the context of a proposed redevelopment. To do this, we identified the main arboricultural features within or immediately adjacent to the site, whose removal we considered could have an adverse impact on the character and appearance of the local landscape, on amenity or on biodiversity.

2.4.2. Whilst BS 5837 states that trees in categories 'A', 'B' and 'C' are all a material consideration in the development process, the retention of category 'C' trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary should they impose a significant constraint on development.

2.4.3. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature "**need not necessarily be a significant constraint on the site's potential**"<sup>4</sup>.

2.4.4. Moreover, BS 5837 states that ".... care should be taken to avoid misplaced tree retention; 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"<sup>5</sup>.

<sup>&</sup>lt;sup>4</sup> Ibid. 4.5.10.

<sup>&</sup>lt;sup>5</sup> Ibid. 5.1.1.

2.4.5. The 'Root Protection Areas' (RPAs)<sup>6</sup> of the trees identified for retention were calculated in accordance with Section 4.6 of BS 5837; and were assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs (although not their areas) were modified based on these considerations, so that they reflect more accurately the likely root distribution of the relevant trees.

## 2.5. Arboricultural impact assessment and tree protection plan

2.5.1. Once finalised, we assessed the arboricultural impacts of the proposed condenser layout, and produced the tree protection plan (TPP) presented at **Appendix**2. This is based on the proposed condenser acoustic enclosure detail by Ralph T. King & Associates, drawing no. 2052-M700 Condenser enclosure detail-A1.

2.5.2. The TPP identifies the tree which will be removed to accommodate the proposed development, either because it is situated within the footprints of proposed structures or surfaces, or because in our judgment it is too close to these structures or surfaces to enable them to be retained. This is shown by means of a **red cross** on the TPP.

2.5.3. The TPP also shows how trees to be retained will be protected from damage during construction, and the measures identified are set out and described at **Appendix 1** to this report. The implementation of, and adherence to, these measures can readily be secured by the imposition of appropriate planning conditions.

2.5.4. For the trees shown to be retained, all measurements for pruning specifications, percentage estimates of RPA incursions and shading issues have been calculated using AutoCAD software.

<sup>&</sup>lt;sup>6</sup> The minimum area around a retained tree "deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority." BS 5837, paragraph 3.7.

2.5.5. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 6 below.

2.5.6. Based on these findings, we have assessed the magnitude of the overall arboricultural impact of the proposals according to the categories defined in *Table 1* below.

Impact	Description						
High	Total loss of or major alteration to main elements/ features/ characteristics of the baseline, post-development situation fundamentally different						
Medium	Partial loss of or alteration to main elements/ features/ characteristics of the baseline, post- development situation will be partially changed						
Low	Minor loss of or alteration to main elements/ features/ characteristics of the baseline, post- development changes will be discernible but the underlying situation will remain similar to the baseline						
Negligible	Very minor loss of or alteration to main elements/ features/ characteristics of the baseline, post-development changes will be barely discernible, approximating to the 'no change' situation						

Table 1: Magnitude of impacts<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Determination of magnitude based on DETR (2000) Guidance on the Methodology for Multi-Modal Studies, as modified and extended.

## 3. THE TREES

### 3.1. Survey findings

3.1.1. We surveyed a total of 3 individual trees, and two groups of trees, growing within or immediately adjacent to the proposed area of re-development. Their details can be found in the tree survey schedule at **Appendix 2**.

#### 3.2. Assessment of suitability for retention

3.2.1. As noted above in Section 2.3, local planning policies require the retention of trees that are "**of significant amenity value**." The individuals and groups of trees within or adjacent to the site, whose attributes we consider meet these criteria, are as follows:

• the off-site maidenhair (no.3) which is visible from rear amenity gardens and from Frognal Gardens, Frognal and Church Row, where it contributes towards the character of well-treed gardens typical of the conservation area.

3.2.2. There are no category 'A' trees and only one category 'B' specimen, which is off-site Maidenhair no. 3 within the rear amenity garden of No. 90a Frognal. The remaining two trees and two groups (nos. 1 - 2 and G1 - G2) are assessed as category 'C' trees, being either of low quality, very limited merit, only low landscape benefits, no material cultural or conservation value, or only limited or short-term potential; or young trees with trunk diameters below 150mm; or a combination of these.

## 4. TREES TO BE REMOVED

### 4.1. Details

4.1.1. To accommodate the proposed refurbishment and enlargement of the condenser unit, as shown on the proposed layout plan, one individual tree (Tibetan cherry no. 2) is to be removed, because it is situated within the footprint of the proposed new condenser structure and because it is too close to it to enable it to be retained. The location of the tree to be removed is shown on the TPP and a summary of its details are included at **Table 2** below

Tree no.	Species	Height	Trunk diameter	Age class	BS category
2	Tibetan cherry	5.5m	4 stems @ 60mm 2 stems @ 80mm	Semi-mature	C (1)

#### Table 2: Tree to be removed

4.1.2. One group of trees/shrubs (G1) will be partially removed as part of the proposals.

#### 4.2. Assessment

4.2.1. All those trees or groups of trees that constitute the main arboricultural features of the site and which make the greatest contribution to the character and appearance of the local landscape, to amenity or to biodiversity (see paragraph 3.2.1), will be retained.

4.2.2. We have no information as to whether the Tibetan cherry no. 2 is covered by a TPO (see 1.6.1 above). However, it is unlikely due to its current age, height and limited visibility from the public realm.

4.2.3. Current Planning Practice Guidance states (paragraph 007) that TPOs should be used to protect selected trees if their removal would have "a significant negative impact on the local environment and its enjoyment by the public." In this case, the removal of this one, small ornamental tree will not result in a significant negative impact on the character of the local environment. 4.2.4. The Tibetan cherry (no. 2) is a small, multi-stemmed ornamental specimen which is hidden in direct public views by existing boundary screening and adjacent dwellings. In addition, given its size of 5.5m, it is not a tree of significant amenity value or contributes to the character of the local area. Its removal will not have a significant impact on the character or appearance of the conservation area.



Images 1 – 2: Left – looking NW, Maidenhair, Tibetan cherry (no.1) and section of G1 retained outlined in yellow; Tibetan cherry (no. 2) and section of G1 to be retained outlined in red; Right – Multistemmed Tibetan cherry (no. 1) in foreground with existing condenser unit in background

4.2.5. In the light of these considerations, and taking account of the numbers, sizes and locations of the trees to be retained, including those that are off-site, the felling of the individual tree will represent no alteration to the main arboricultural features of the site.

## 5. TREES TO BE PRUNED

#### 5.1. Details

5.1.1. One tree (Tibetan cherry no. 1) will be pruned to facilitate implementation of the proposals.

#### 5.2. Assessment

5.2.1. The extent of pruning proposed to the Tibetan cherry is minor. The east canopy extent will be crown lifted by the reduction of small diameter pendulous branches to facilitate access and construction of the new condenser. Branches to be removed are small in size and will result in a maximum wound size no greater than 30mm in diameter; this will have an insignificant effect on the health and physiological condition of this tree and complies with the recommendations of British Standard BS 3998:2010, *Tree work – Recommendations*.

5.2.2. In terms of impact upon the landscape, the proposed pruning is minor in extent, and will be largely screened in views by either the remainder of the trees' canopies, or by other trees growing within or adjacent to the site and will not detract from the character or appearance of the site or conservation area.

## 6. ROOT PROTECTION AREA INCURSIONS

## 6.1. Details

6.1.1. No parts of the proposed condenser refurbishment and enlargement is within the RPAs of any of the trees to be retained.

#### 6.2. Assessment

6.2.1. As no parts of the proposed condenser refurbishment and enlargement are within the RPAs of any of the trees to be retained, subject to the implementation of protective measures specified on the TPP, its construction will not cause unacceptable damage to roots or rooting environments as a result of root severance or damage, or compaction or pollution of the soil.

6.2.2. There is a level difference between the on-site ground level adjacent to the existing condenser unit and the ground level in the adjacent property, No. 90a Frognal Gardens, of approximately 700mm. Given the difference in level and the existing basement development of No. 1 Frognal Gardens the boundary wall is acting as a retaining structure and as a rooting barrier between the proposal and the RPA of the off-site Maidenhair tree (no. 3) which abuts this boundary. As detailed in *Images nos.* 1 - 3 below.

Images 3 – 5: Laser disto from top level of wooden palisade screening to existing ground levels on east and west side of boundary retaining wall

6.2.3. As the proposal, and specifically the enlargement of the condenser unit, directly adjacent to the boundary retaining wall, only extends to 600mm beneath the existing soil level within the curtilage of No. 1 Frognal Gardens, there is no risk of it causing an impact within the RPA of the off-site Maidenhair tree.

6.2.4. Accordingly, subject to implementation of the above measures, and considering the ages, current physiological condition and tolerance of disturbance of these retained trees, no significant or long-term damage to their root systems or environments will occur as a result of the proposed development.

## 7. CONCLUSIONS

#### 7.1. Summary

7.1.1. Our assessment of the impacts of the proposals on the existing trees concludes that no mature, trees, no category 'A' or 'B' trees, and no trees of high landscape or biodiversity value are to be removed. None of the main arboricultural features of the site are to be removed. The proposed removal of one small, 5.5m, tall Tibetan cherry tree (no. 2) will represent no alteration to the main arboricultural features of the site, only a very minor alteration to the overall arboricultural character of the site and will not have an adverse impact on the arboricultural character and appearance of the local landscape or the conservation area.

7.1.2. The proposed pruning of one Tibetan cherry (no.1) is minor in extent, will not detract from the health or appearance of this tree, and complies with current British Standards.

7.1.3. There are no incursions into the Root Protection Areas of trees to be retained, as such no significant or long-term damage to their root systems or rooting environments will occur.

## 7.2. Compliance with national planning policy

7.2.1. As the proposals will retain all the main arboricultural features of the site, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 130 of the National Planning Policy Framework.

7.2.2. As the proposals will not result in the loss or deterioration of any ancient woodland or any ancient or veteran trees, they comply with paragraph 180 of the NPPF.

#### 7.3. Compliance with regional planning policy

7.3.1. As all of the existing trees assessed as being features in the existing built environment will be retained, in arboricultural terms the proposed development complies with Policy G1 'Green infrastructure' of the London Plan.

## 7.4. Compliance with local planning policy

7.4.1. As the proposed development will not result in the removal of trees which are of significant amenity value or loss of garden space and trees of townscape or amenity value, does not prejudice the abilities of gardens to support trees where they are part of the character of the area and preserves trees which contribute to the character and appearance of the conservation area, it complies with Policies A3, A3 and D2 of the Camden Borough Council Local Plan.

## 7.5. Compliance with neighbourhood planning policy

7.5.1. As the proposed development will not result in the removal of trees which are important to local character, streetscape, biodiversity and the environment, it complies with Policy NE2 of the Hampstead Neighbourhood Plan.

## 7.6. Conclusion

7.6.1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of negligible magnitude, as defined according to the categories set out in *Table 1* of this report.

# **APPENDIX 1**

# **Tree Survey Schedule**



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## **Preliminary Tree Survey Schedule**

**Frognal Gardens Hampstead** 

June 2022

SJA tss 22278-01

## **Tree Survey Schedule: Explanatory Notes**

## Frognal Gardens Hampstead

This schedule is based on a tree inspection undertaken by Nigel Kirby of SJAtrees (the trading name of Simon Jones Associates Ltd.), on Wednesday the 22nd June 2022. Weather conditions at the time were clear, dry and bright. Deciduous trees were in full leaf. The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas. The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given. Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date. <b>1. Tree no.</b> Given in sequential order, commencing at "1". <b>2. Species.</b> 'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.	<ul> <li>7. Crown clearance. Distance from adjacent ground level to lowest part of lowest branch, in metres.</li> <li>8. Age class. Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance. Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height. Mature: Apical dominance lost, tree close to ultimate height. Over-mature: Mature, but in decline, no crown retrenchment Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, and a crown showing retrenchment and a structure characteristic of the latter stages of life. Ancient: Beyond the typical age range and with a very large trunk diameter for species; with extensive decay or hollowing; and a crown that has undergone retrenchment and has a structure characteristic of the latter stages of life.</li> <li>9. Physiology. Health, condition and function of the tree, in comparison to a normal specimen of its species and age.</li> </ul>	<ul> <li>12. Category. Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012; adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to arboricultural biodiversity.</li> <li>Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.</li> <li>(1) Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).</li> <li>(2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.</li> <li>(3) Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.</li> <li>Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.</li> <li>(1) Trees that are particularly good examples of their species, especially if rare or unusual.</li> <li>(2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.</li> </ul>
<ul> <li>3. Height. Estimated with the aid of a hypsometer, given in metres.</li> <li>4. Trunk diameter. Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.</li> <li>5. Radial crown spread. The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.</li> </ul>	roots, trunk and major stems and branches, and on the presence of any structural defects or decay. Good: No significant morphological or structural defects, and an upright and reasonably symmetrical structure. Moderate: No significant pathological defects, but a slightly impaired morphological structure; however, not to the extent that the tree is at immediate or early risk of collapse. Indifferent: Significant morphological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse. Poor: Significant and irremediable morphological or pathological defects, such that there may be a risk of failure or collapse. Hazardous: Significant and irremediable morphological or pathological defects, with a risk of imminent collapse.	<ul> <li>commemorative or other value.</li> <li>Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</li> <li>(1) Trees that might be included in category 'A', but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.</li> <li>(2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.</li> <li>(3) Trees with material conservation or other cultural value.</li> </ul>
<b>6. Crown break.</b> Height above ground and direction of growth of first significant live branch.	<ul> <li>11. Comments.</li> <li>Where appropriate comments have been made relating to:</li> <li>-Health and condition</li> <li>-Safety, particularly close to areas of public access</li> <li>-Structure and form</li> <li>-Estimated life expectancy or potential</li> <li>-Visibility and impact in the local landscape</li> </ul>	<ul> <li>Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.</li> <li>(1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.</li> <li>(2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.</li> <li>(3) Trees with no material limited conservation or other cultural value.</li> </ul>

## TREE SURVEY SCHEDULE

## **Frognal Gardens Hampstead**

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear- ance	Age class	Physio - logy	Structure	Comments	Cate gory
1	Tibetan cherry	5.75m	3 stems @ 70mm 2 stems @ 55mm 2 stems @ 100mm	N 2m E 4m S 3.5m W 2.5m	1.5m	E 1m	Semi- mature	Average	Indifferent	Small ornamental tree; contributes to boundary screening; hidden in all direct public views; unremarkable specimen of limited merit.	C (1)
2	Tibetan cherry	5.5m	4 stems @ 60mm 2 stems @ 80mm	N 2.25m E 3.25m S 2.8m W 2m	1m	S 1m	Semi- mature	Average	Moderate	Small ornamental tree; contributes to boundary screening; hidden in all direct public views; unremarkable specimen of limited merit.	C (1)
3	Maidenhair	14.5m	450mm est.	N 3.5m E 3.75m S 4.25m W 3.75m	4m	4m	Semi- mature	Average	Indifferent	Off-site ornamental tree; upper 6m canopy glimpsed from rear amenity gardens and from road known as Frognal; softens built form; in keeping with character of site and local area.	B (12)
G1	Various	3m	Max 5 stems @ 55mm est.	2m	0.1m	0m	Semi- mature	Average	Indifferent	Small ornamental trees and shrubs, soften built form; hidden in all direct public views; readily replaceable; spp. in. Pittosporum, box, skimmia, elder, camelia, bay.	C (1)
G2	Hornbeam	6m	Max 145mm	3.75m	1.25m	1m	Semi- mature	Average	Moderate	Collection of small ornamental specimens; row of closely planted specimens, designed to form a hedge or screen; contributes to boundary screening; upper canopies glimpsed from road known as Frognal.	C (12)

## **Root Protection Areas (RPAs)**

Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837:2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is modified to reflect more accurately the likely distribution of roots.

Tree No.	Species	RPA	RPA Radius
1	Tibetan cherry	17.5m <sup>2</sup>	2.4m
2	Tibetan cherry	12.1m <sup>2</sup>	2.0m
3	Maidenhair	91.6m <sup>2</sup>	5.4m
G1	Various	2.5m <sup>2</sup>	0.9m
G2	Hornbeam	9.5m <sup>2</sup>	1.7m

## APPENDIX 2 Tree Protection Plan

