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Arboricultural Implications Report

Proposed re-development at

26A Ferncroft Avenue

London



June 2023

Ref. SJA air 23137-01a

SUMMARY

S1. On the basis of our assessment, we conclude that the arboricultural impact of this scheme is of low magnitude, as defined according to the categories set out in **Table 1** of this report.

S2. Our assessment of the impacts of the proposals on the existing trees concludes that no trees of high landscape or biodiversity are to be removed. Whilst the removal of one mature tree (London plane no. 1) will represent a partial alteration to the main arboricultural feature of the property, its removal is necessary to safeguard the heritage value of the existing grade 2 listed building at 26A Ferncroft Avenue. Otherwise, the proposed removal of individuals and groups of trees will represent only a minor alteration to the overall arboricultural character of the property and will not have a significant adverse impact on the arboricultural character and appearance of the local landscape or the conservation area.

S3. The proposals include space within the existing rear garden for the replacement planting of a suitable large-canopied species such as a London plane, the establishment of which will progressively mitigate the impact of the loss of tree no. 1 on the character and appearance of the conservation area. As the new tree will be planted at a suitable distance from the listed building, it will have the space to grow a full crown without coming into conflict with the building and so will ultimately have a greater and more long-term benefit to the local amenity of the area than that currently provided by tree no. 1.

S4. No trees are to be pruned to facilitate implementation of the proposals.

S5. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

S6. No parts of the proposed extension are likely to be shaded by retained trees to the extent that this will interfere with its reasonable use or enjoyment by occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

S7. Whilst the proposed development results in the removal of a significant tree (no. 1) that appears to relate to Policy A3 of the London Borough of Camden Local Plan, the tree's presence represents a threat to the listed building at 26A Ferncroft Avenue and so is at odds with Policy D2 which requires the protection of listed buildings. As tree no. 1 is of limited arboricultural quality and landscape value, its loss will not have a significant impact on the arboricultural character of the local area whereas its removal will secure the retention and protection of the listed building and so, on balance, is compliant with local planning policy.

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1. Outline arboricultural method statement
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3. Tree protection plan (SJA TPP 23137-041)

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1. INTRODUCTION AND BACKGROUND INFORMATION

1.1. Instructions

1.1.1. SJAtrees has been instructed by Mr and Mrs Cremer to visit 26A Ferncroft Avenue, London and to survey the trees growing on or immediately adjacent to this property.

1.1.2. We are further asked to identify which trees are worthy of retention within a proposed re-development of the property; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during demolition and 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 (the LPA), and complies with local validation requirements.

1.2.2. It complies also with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations* ('BS 5837'). However, the British Standard is not a Code of Practice that consists of written rules outlining how actions or decision must be taken and it "should not be quoted as if it were a specification¹"; it is a set of recommendations intended to "assist decision-making with regard to existing and proposed trees in the context of design, demolition and construction²". It doesn't form part of planning policy; however, it is mentioned in Policy A3 of the London Borough of Camden Local Plan (2017) and it is a material consideration to which weight is likely to be given.

1.2.3. The proposed development comprises the extension and partial remodelling of the existing dwelling, amounting to a two storey rear extension, to create additional

¹ British Standard BS 5837:2012. *Trees in relation to design, demolition and construction – Recommendations*; Foreword. *The British Standards Institution*.

² *Ibid.*, p.1, Introduction.

and enhanced living space, replacing and improving upon an existing late 20th Century extension to the building that is of poor quality.

1.2.4. 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) and those that might become under pressure for removal after occupation because of shading (Section 7). A summary and conclusions, with regard to local planning policy, are presented in Section 8.

1.3. Site inspection

1.3.1. A site visit and tree inspection were undertaken by Anthony Harte of SJAtrees on Thursday the 30th March 2023. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in leaf.

1.4. Site description

1.4.1. The property is located on the north side of Ferncroft Avenue which forms the south-west site boundary, as shown in **Figure 1** below. The south-east, north-west and north-east boundaries are all contiguous with the residential curtilages of adjacent properties.

1.4.2. The site lies on relatively level ground and comprises a semi-detached house with associated front hard standing and rear garden.



Figure 1: Site location shown on Google Earth image

1.5. Property History

1.5.1. The house at 26A Ferncroft Avenue is a grade 2 listed building. It was built in 1898 and comprises one of the multiple buildings in the local area that were designed by the Architect C.H.B Quennell.

1.6. Soil type

1.6.1. The British Geological Survey Solid and Drift Geology map of the area indicates the property overlies a bedrock of clay, silt and sand ('Claygate Member').

1.6.2. The class of soil in this area is recorded on the Department for Environment, Food & Rural Affairs ('Defra') Magic website as a naturally freely draining lime-rich loamy soil.

1.6.3. We are not aware of a site investigation or soil analysis having been undertaken; but the class of soil and the indications of the British Geological Survey map suggest that the soil is unlikely to be particularly susceptible to compaction.

1.7. Statutory controls

1.7.1. The LPA website does not make information available as to whether trees are covered by a Tree Preservation Order (TPO), and at the time of writing there is no

indication that any of the trees growing within and adjacent to the property are covered by a TPO or that they are likely to be designated as such in the near future.

1.7.2. The property is within the boundaries of the Redington Froggnal Conservation Area. The Character Appraisal for this area mentions trees throughout the document, and specifically with regards to Ferncroft Avenue at paragraph 4.6 where it states, "Mature London Plane street and garden trees are an important part of the character."

1.8. Non-statutory designations

1.8.1. There are no woodlands within or abutting the property 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.

1.8.2. There are no trees within or abutting the property 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. National policy context

2.1.1. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when considering planning applications. The effects of proposed development on trees are therefore a material consideration, and this is normally reflected in local planning policies.

2.1.2. The National Planning Policy Framework ('NPPF')³ sets out the Government's planning policies for England and how these should be applied in both plan and decision-making. Paragraph 2 makes it clear that the NPPF is itself a material consideration in the determination of planning application. Paragraph 11 states that **"Plans and decisions should apply a presumption in favour of sustainable development."**

2.1.3. In paragraph 130, within Section 12 "Achieving well-designed places" the NPPF states: **"Planning policies and decisions should ensure that developments:**

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

³ The National Planning Policy Framework (NPPF) (July 2021) Ministry of Housing, Communities & Local Government

e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.”

2.1.4. Paragraph 131 in this section states: **“Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”**

2.1.5. The section titled Planning for climate change states at paragraph 153: **“Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.”**

2.1.6. In paragraph 174, within Section 15 “Conserving and enhancing the natural environment” the NPPF states: **“Planning policies and decisions should contribute to and enhance the natural and local environment by:**

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and

other benefits of the best and most versatile agricultural land, and of trees and woodland;...

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

2.1.7. In paragraph 180, under the 'Habitats and biodiversity' section, the NPPF states: **"When determining planning applications, local planning authorities should apply the following principles:**

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists...."

2.2. Regional policy context

2.2.1. Policy G1 'Green infrastructure' of the London Plan⁴ states:

"A London's network of green and open spaces, and green features in the built environment, should be protected and enhanced. Green infrastructure should be planned, designed and managed in an integrated way to achieve multiple benefits.

B Boroughs should prepare green infrastructure strategies that identify opportunities for cross-borough collaboration, ensure green infrastructure is optimised and consider green infrastructure in an integrated way as part of a network consistent with Part A.

C Development Plans and area-based strategies should use evidence, including green infrastructure strategies, to:

⁴ The London Plan (March 2021); Greater London Authority

- 1) identify key green infrastructure assets, their function and their potential function**
- 2) identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.**

D Development proposals should incorporate appropriate elements of green infrastructure that are integrated into London’s wider green infrastructure network.”

2.2.2. Policy G7 ‘Trees and woodlands’ of the London Plan states:

“A London’s urban forest and woodlands should be protected and maintained, and new trees and woodlands should be planted in appropriate locations in order to increase the extent of London’s urban forest – the area of London under the canopy of trees.

B In their Development Plans, boroughs should:

- 1) protect ‘veteran’ trees and ancient woodland where these are not already part of a protected site¹³⁹**
- 2) identify opportunities for tree planting in strategic locations.**

C Development proposals should ensure that, wherever possible, existing trees of value are retained.¹⁴⁰ If planning permission is granted that necessitates the removal of trees there should be adequate replacement based on the existing value of the benefits of the trees removed, determined by, for example, i-tree or CAVAT or another appropriate valuation system. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

¹⁴⁰ **Category A, B and lesser category trees where these are considered by the local planning authority to be of importance to amenity and biodiversity, as defined by BS 5837:2012”.**

2.3. Local policy context

2.3.1. Local planning policies are contained in the London Borough of Camden Local Plan, adopted 3rd July 2017.

2.3.2. The relevant section of Policy A3 (Biodiversity) of the Local Plan states:

“A3. The Council will protect, and seek to secure additional, trees and vegetation. We will:

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;

l. 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.”

2.3.3. The relevant section of Policy D1 (Design) of the Local Plan states, *inter alia*:

“D1. The Council will seek to secure high quality design in development. The Council will require that development:

(...) K. incorporates high quality landscape design (including public art, where appropriate) and maximises opportunities for greening for example through planting of trees and other soft landscaping, (...)”

2.3.4. The relevant section of Policy D2 (Heritage) of the Local Plan states, *inter alia*:

“The Council will preserve and, where appropriate, enhance Camden’s rich and diverse heritage assets and their settings, including conservation areas, listed buildings, archaeological remains, scheduled ancient monuments and historic parks and gardens and locally listed heritage assets.

Designated heritage assets

Designed heritage assets include conservation areas and listed buildings. The Council will not permit the loss of or substantial harm to a designated heritage asset, including conservation areas and Listed Buildings, unless it can be demonstrated that the

substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- a. the nature of the heritage asset prevents all reasonable uses of the site;**
- b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation;**
- c. conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and**
- d. the harm or loss is outweighed by the benefit of bringing the site back into use.**

The Council will not permit development that results in harm that is less than substantial to the significance of a designated heritage asset unless the public benefits of the proposal convincingly outweigh that harm.

Conservation areas

Conservation areas are designated heritage assets and this section should be read in conjunction with the section above headed 'designated heritage assets'. In order to maintain the character of Camden's conservation areas, the Council will take account of conservation area statements, appraisals and management strategies when assessing applications within conservation areas.

The Council will:

- e. require that development within conservation areas preserves or, where possible, enhances the character or appearance of the area;**
- f. resist the total or substantial demolition of an unlisted building that makes a positive contribution to the character or appearance of a conservation area;**
- g. resist development outside of a conservation area that causes harm to the character or appearance of that conservation area; and**
- 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."**

2.3.5. The Council has prepared a Supplementary Planning Document (SPD) dealing with the protection of trees on development sites. The guidance presented in this document has been closely followed in the preparation of this report.

2.4. Neighbourhood policy context

2.4.1. The Redington Froggnal Neighbourhood Plan 2021- 31.12.2045 (adopted September 2021) states at Policy SD2 Redington Froggnal Conservation Area: **“New developments must preserve or enhance the green garden suburb character and appearance of the Conservation Area. This includes retention of buildings or features that contribute to that special interest, including gaps between buildings, trees, hedges and the open garden suburb character created by well-vegetated front, side and rear gardens.”**

2.4.2. The relevant section of Policy BGI 2 Tree Planting and Preservation of the Neighbourhood Plan, states: **“(i) Trees should be retained and incorporated in any development. Where felling is required, on grounds of safety or because it is an invasive species, supported by a suitably qualified expert, one or more trees should be planted in replacement, unless it can be demonstrated to the Council's satisfaction that replacement planting is not appropriate.”**

2.5. Tree survey and baseline information

2.5.1. We surveyed individual trees with trunk diameters of 75mm and above⁵, trees with trunk diameters of 150mm and above growing in groups, and shrub masses, hedges and hedgerows⁶ growing within or immediately adjacent to the property; and recorded their locations, species, dimensions, ages, condition, and visual importance in accordance with BS 5837 recommendations.

2.5.2. 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.

2.5.3. We surveyed trees as groups where they have grown together to form cohesive arboricultural features, either aerodynamically (trees that provide companion

⁵ BS 5837, paragraph 4.2.4 b), recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

⁶ Ibid., 4.4.2.7

shelter), visually (e.g., avenues or screens) or culturally⁷. However, where it might be necessary to differentiate between specific trees within these groups, we also surveyed these individually.

2.5.4. We inspected the trees from the ground only, aided by binoculars as appropriate, but did not climb them. We took no samples of wood, roots or fungi. 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.

2.5.5. 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. We 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.

2.6. Tree constraints

2.6.1. In line with the NPPF's presumption in favour of sustainable development, we assessed whether any trees should be retained in the context of the proposed re-development. Our assessment of which trees might have to be retained, and which can be removed, is based on:

- which trees contribute to local character and history, including to the surrounding landscape setting; which trees contribute to biodiversity; and which trees help mitigate and adapt to climate change; and whose removal would thereby be unlikely to comply with national planning policy guidance;
- which trees are significant features of the local landscape, such that their removal would be contrary to local planning policies: specifically, Policies A3 and D2 of the London Borough of Camden Local Plan, as set out above; and
- our assessment of the trees' quality, value and remaining life expectancy, in accordance with BS5837:2012, as summarised in the notes that accompany the tree survey schedule.

⁷ Ibid., 4.4.2.3

2.6.2. As trees growing outside the boundaries of the site are in the control of others, we have assumed they will be retained, irrespective of their size, age or condition.

2.6.3. Whilst we have categorised trees in accordance with BS 5837, we have not used these categorisations as the main criterion of whether specimens might be removed or should be retained. Trees in categories 'A', 'B' and 'C' are all a material consideration in the development process; but 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.

2.6.4. 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"**⁸.

2.6.5. 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"**⁹.

2.6.6. The 'Root Protection Areas' (RPAs)¹⁰ 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.

2.6.7. Based on these principles and recommendations, the tree survey and assessment of suitability for retention informed the production of a tree constraints

⁸ BS 5837, 4.5.10.

⁹ Ibid., 5.1.1.

¹⁰ Ibid., paragraph 3.7. "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."

plan (TCP) which indicates the most suitable trees for retention, and their associated below-ground and above-ground constraints.

2.6.8. As a design tool, the TCP also indicates how close to those trees selected for retention the proposed development could be positioned, in terms of two key criteria:

- a). avoidance of unacceptable root damage;
- b). avoidance of the necessity for unacceptable pruning works;

2.7. Arboricultural impact assessment and tree protection plan

2.7.1. Once finalised, we assessed the arboricultural impacts of the proposed layout, by overlaying it onto the TCP, and produced the tree protection plan (TPP) presented at **Appendix 3**. This is based on the proposed site layout by Bere Architects, drawing no. 494 A.G10.P02 rev C.

2.7.2. The TPP identifies the trees to be removed to accommodate the proposed development, either because they are situated within the footprints of proposed structures or surfaces, or because in our judgment they are too close to these structures or surfaces to enable them to be retained. These are shown by means of **red crosses** on the TPP.

2.7.3. The TPP also shows how trees to be retained will be protected from damage during demolition and 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.

2.7.4. 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.

2.7.5. Details of the impacts identified within these categories, and our assessment of their respective significance, are analysed in Sections 4 to 7 below.

2.7.6. 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 impacts¹¹

¹¹ 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 16 individual trees, two groups of trees and two hedges growing within or immediately adjacent to the property. Their details can be found in the tree survey schedule at **Appendix 2**.

3.1.2. The arboricultural character of the property is defined by mixed native and non-native broadleaved species growing along and adjacent to the boundaries of the rear garden and front hard standing.

3.1.3. The trees encompass a diverse range of species, both deciduous and evergreen, including ash, London plane, privet, holly, laburnum and cherry laurel among others, and show a variety of ages with no particular tree type predominating.

3.1.4. There are, however, three mature London plane trees, two of which are located off-site to the front of the property and one within the rear garden, which are notably larger than the surrounding trees and which accordingly possess a greater arboricultural presence.

3.1.5. Overall, the heterogenous character of the trees is consistent with the surrounding suburban landscape.

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, historic, cultural or ecological value.**” We consider the two London plane trees (nos. 15 and 16) located at the front of the property adjacent to Ferncroft Avenue, and the single London plane tree within the rear garden (no. 1) as possessing attributes that meet these criteria.

3.2.2. One individual tree (no. 3) has been assessed as category 'U'. This is a tree that is unsuitable for retention, on the basis of it being in such a condition that it cannot realistically be retained as a living tree in the context of the current land use for longer than 10 years. On-site trees that need removing solely to accommodate the proposed

development are not placed in this category. The category 'U' tree is indicated on the accompanying tree protection plan by a **bracketed red** number.

3.2.3. There are no category 'A' trees and three category 'B' specimens (nos. 1, 15 and 16). The remaining 12 trees 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.

3.2.4. All the groups of trees and hedges have been assessed as category 'C'.

4. TREES TO BE REMOVED

4.1. Details

4.1.1. To accommodate the proposed development, as shown on the proposed layout plan, three individual trees (nos. 1, 2 and 4) and one hedge (H2) are to be removed, either because they are situated within the footprints of proposed structures or surfaces, or because they are too close to these to enable them to be retained.

4.1.2. Details of the trees to be removed, including their dimensions, age class and British Standard categorisation, are shown and listed on the TPP and at **Table 2** below.

Tree no.	TPO No.	Species	Height	Trunk diameter	Age class	BS category
1	n/a	London plane	16m	720mm	Mature	B (2)
2	n/a	Cherry Laurel	7m	75mm 100mm 80mm 85mm 105mm 90mm 2 stems @ 120mm 2 stems @ 70mm	Semi-mature	C (1)
4	n/a	Spindle	8m	#T4 3 stems @ 80mm est. @ base #T5 110mm est. @ base	Young	C (1)
H2	n/a	Cherry Laurel	2.5m	Max 80mm est.	Young	C (2)

Table 2: Trees to be removed

4.1.3. In addition, one group of trees (G1) is to be partially removed as part of the proposals.

4.2. Assessment

4.2.1. Of those three trees that constitute the main arboricultural features of the property, and which make the greatest contribution to the character and appearance of the local landscape (see paragraph 3.2.1), one (no. 1) will be removed.

4.2.2. Whilst the removal of London plane tree no. 1 is regrettable, its loss represents no more than a minor alteration to the arboricultural character of the landscape and

more importantly, is necessary to ensure the continued viability of the existing grade 2 listed building, as discussed below.

4.2.3. The trunk base of tree no. 1 grows in very close proximity to the wall of the existing rear extension, with the two being less than 500mm apart as can be seen in **photographs 1 & 2** below. Indeed, the flattening of the trunk on the side closest to the wall and the localised raising of soil and debris between the two imply that there is direct pressure beneath the surface.



Photographs 1 & 2: Showing the significant proximity between tree no. 1 and the rear extension of the grade 2 listed building at 26A Ferncroft Avenue

4.2.4. In view of their significant proximity, it is foreseeable that the tree poses a significant threat to the fabric of the grade 2 listed building.

4.2.5. London plane is a long-lived species of large ultimate size. When mature, specimens can achieve heights of up to 40m. Currently, the tallest London plane was recorded at 48.6m in 2008, and the largest trunked specimen was recorded at 2930mm, measured at 1.2m above ground level in 1997¹². Tree no. 1, which is a

¹² Johnson, O., (2011) Champion Trees of Britain & Ireland, The Tree Register Handbook

mature specimen with a trunk diameter of 720mm, therefore has the capacity to grow well beyond its current dimensions. As the tree naturally grows and expands in size, and already appears to be in direct contact with the rear wall of the dwelling (albeit beneath the surface at present), it is inevitable that it will cause physical damage to the extension's foundations and walls and so poses a threat to the structural integrity of the building at large.

4.2.6. Indeed, it is our understanding that the building is already manifesting internal damage, as evinced by separation of parts of the existing wooden flooring within the extension adjacent to the tree (see **Photograph 3** below). Without further detailed investigation we cannot say with certainty whether this internal damage is due to the tree, whether it is direct or indirect damage, other factors, or a combination of these, but considering the significant proximity between the tree and the extension, it would be reasonable to consider the tree's roots as the likely cause or a significant contributing factor.



Photograph 3: Showing separation of parts of the wooden flooring of the kitchen within the extension adjacent to tree no. 1

4.2.7. In addition to the threat posed by the trunk base and tree roots below ground, the tree also poses a risk of damage to the building by falling branches from above. In the event of any of its main stems or structural limbs failing, the significant proximity between tree no. 1 and the building greatly increases the chance of these impacting the latter. The significant size of the stems and limbs means that any resultant damage to the building could be substantial, and possibly also pose a threat to the occupants at 26A Ferncroft Avenue. Whilst we currently consider the likelihood of such stem or

limb failure and aerial damage to the grade 2 listed building as being low, it is nonetheless a possibility that should be accorded some weight.

4.2.8. Policy D2 of the Local Plan which addresses the relationship between proposed development and heritage within the borough, states: “**The Council will not permit the loss of or substantial harm to a designated heritage asset, including conservation areas and Listed Buildings.**” Because London plane tree no. 1 poses a threat of harm to the grade 2 listed building, its removal to safeguard the building complies with local planning policy.

4.2.9. Nonetheless, as the tree is located within the conservation area, its loss could also be perceived as harming the heritage asset as constituted by Redington Frogmal Conservation Area. In light of these apparently conflicting policies, the question of whether the tree or the grade 2 listed building is more important to the borough’s heritage needs to be considered. Whilst we cannot comment on the building or its contribution, we can say that on one side of the balance, the landscape (and public amenity) value of the tree no. 1, could prove to be a significant factor.

4.2.10. Although tree no. 1 is a mature specimen of a species of large ultimate size, its contribution to the arboricultural character of the area is limited by both its arboricultural quality and its restricted visibility within the public realm.

4.2.11. The tree has been heavily pruned in the past, with all its main structural limbs having been significantly reduced (‘pollarded’) at a height of 11m resulting in a crown comprised exclusively of young regrowth arising densely from the pruning points (see **Photograph 4** below). Whilst this treatment is a typical way of managing London plane trees within urban environments, it is indicative of the close proximity of this tree to the dwelling and represents a significant diminishment of the tree’s visual amenity value. Indeed, due to the tree’s continued presence and the fact it continues to overhang the existing building, it is likely to be subject to future pressure from residents for routine pruning (i.e. ‘re-pollarding’). This may indeed be why the tree is not covered by a TPO – the Council not seeing fit to protect it from significant pruning to manage its proximity to the building. Consequently, tree no. 1 is unlikely to ever be afforded an opportunity to grow a full crown and so will never realise its full amenity potential within the local landscape.

4.2.12. The tree's health appears to be under some stress, with multiple areas of necrotic bark observed on the trunk base, as shown at **Photograph 5** below. Whilst we are unable to establish the exact cause or causes of this bark necrosis, at the very least it is likely to indicate an underlying physiological dysfunction which has the potential to weaken the tree's disease defence mechanisms which in turn could make it more susceptible to pests and diseases. Furthermore, by periodically diminishing its photosynthetic capacity, any future recurrent crown pruning, as anticipated, is likely to add further strain to the tree's health. Considering the above it would be reasonable to surmise that tree no. 1 is therefore of reduced longevity.



Photograph 4: Showing heavy pruning of tree no. 1's crown



Photograph 5: Showing area of necrotic bark on trunk base

4.2.13. Tree no. 1 is of limited landscape value. Whilst from Ferncroft Avenue, full views of its crown are available through the gap between the gable ends of houses Nos. 26A and 28 (see ***Photograph 6***), for the most part it is obscured by the surrounding houses, with all other views of the tree confined to the upper 7m of its crown above the roofline of No. 26A (as shown at ***Photograph 7***) and would not be visible following anticipated future pruning.



Photographs 6 & 7: Whilst the tree's full crown is visible from Ferncroft Avenue through the gap between houses Nos. 26A and 28 as shown in Photograph 6 (left), all other views of the tree are otherwise are confined to the upper crown visible above the roofline of No. 26A, as shown in Photograph 7 (right)

4.2.14. By contrast, the off-site London plane trees nos. 15 and 16 growing along Ferncroft Avenue make a far more important contribution to the local landscape and as these will be retained, the removal of tree no. 1 does not therefore represent a significant alteration to the Conservation Area.

4.2.15. Tree no. 1's significant proximity to the grade 2 listed building at 26A Ferncroft Avenue poses a threat of harm to this heritage asset, and is clearly a case of 'the wrong tree in the wrong place;' and in view of the tree's reduced arboricultural quality and lack of prominence within the Conservation Area, its removal is therefore considered, on balance, to be justifiable in the broader context of the borough's heritage value, irrespective of the proposed development.

4.2.16. The remaining two category 'B' trees (nos. 15 and 16) are to be retained.

4.2.17. Two of the twelve category 'C' trees on site are to be removed: these are either of low quality, low value, or short-term potential. For these reasons, their removal will have no significant impact on the character or appearance of the area.

4.2.18. One of the trees to be removed (no. 4) is a young specimen, which BS 5837 states “**need not necessarily be a significant constraint on the site’s potential**”.

4.2.19. The proposals include space within the existing rear garden for the replacement planting of a suitable large-canopied species, such as a London plane. The establishment of the new tree will progressively mitigate the impact of the loss of tree no. 1 on the character and appearance of the conservation area. By planting the new tree at a suitable distance away from the listed building and proposed extension, it will have the space to develop a full crown without significant pressure for heavy pruning or removal and so ultimately has the potential to be of greater and more long-term benefit to the local amenity of the area compared to tree no. 1. The indicative location for the replacement tree is shown on the TPP at **Appendix 3**.

4.2.20. 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 trees and groups identified for removal will represent only a minor alteration to the main arboricultural features of the site.

5. TREES TO BE PRUNED

5.1. Details

5.1.1. None of the trees to be retained are to be pruned to facilitate implementation of the proposals.

5.2. Assessment

5.2.1. As no trees are to be pruned, and no parts of the proposed extension are within 3m of the extents of the canopies of individual trees to be retained, there will be adequate working space for construction close to trees, and a reasonable margin of clearance for future growth.

6. ROOT PROTECTION AREA INCURSIONS

6.1. Details

6.1.1. Parts of the proposed planters and low retaining wall will encroach within the RPAs of eight of the trees to be retained. These are shown in **Table 3** below.

Tree no.	Species	Incursion	Extent of incursion	% of RPA
5	Spindle	Proposed retaining wall	1.4m ²	26.4%
6	Buddleia	Proposed retaining wall	0.3m ²	3.7%
7	Holly	Proposed retaining wall	0.3m ²	1.1%
8	Himalayan tree-cotoneaster	Proposed retaining wall	0.2m ²	2.5%
10	Ash	Proposed retaining wall	0.8m ²	1.6%
13	Wild cherry	Foundations for proposed planter	0.4m ²	0.3%
14	Tree of Heaven	Foundations for proposed planter	0.8m ²	5.2%
15	London plane	Foundations for proposed planter	11.8m ²	4%

Table 3: Proposed incursions within RPAs

6.1.2. In addition, replacement hard surfacing is required within the RPAs of three trees (nos. 14, 15 and 16).

6.2. Assessment

6.2.1. The incursions by parts of the proposed planters and retaining wall into the RPAs of the eight trees listed at **Table 3** equates to no more than 26.4% of individual RPAs. Any potential adverse impacts can be satisfactorily mitigated as set out below.

6.2.2. The incursions into the RPAs of trees nos. 5, 6, 7, 8, 10, 13, 14 and 15 are by proposed foundations for new planters and a retaining wall, and accordingly some degree of excavation will be required. To minimise impacts on these specimens, excavation within these RPAs will be undertaken manually, under the direct control and supervision of an appointed arboricultural consultant, so that any over dig into the RPAs is avoided, and any roots encountered can be treated appropriately.

6.2.3. The proposed planters and retaining walls are lightly loaded structures the foundations of which are anticipated to require excavation to depths no greater than 300mm below the existing soil level. Studies have shown that typically as much as 90% of tree root length occurs in the upper metre of the soil¹³ and so it is highly unlikely that these incursions into the RPAs will result in all the roots in these areas being severed. For example, as only the upper 300mm of the upper metre of soil will be removed, the 11.8% incursion into the RPA of the London plane tree no. 15 may result in a reduction of only 4% of roots within the RPA.

6.2.4. By the same token, the 26.4% incursion within the RPA of tree no. 5 is unlikely to necessitate the severance of all its roots to the full extent of encroachment. Despite this, it should be noted that the proposed retaining wall extends up to 450mm from the base of tree no. 5 and so in this case excavation may still necessitate the severance of one or two significant roots. However, should excavation within the tree’s RPA lead ultimately to its decline, as tree no. 5 is a young, small ornamental specimen, its loss will not have any impact on the arboricultural character of the site or landscape and can be readily mitigated with replacement planting.

6.2.5. Excluding spindle, buddleia and cotoneaster (which are all ornamental shrubs of low arboricultural quality), the tree species impacted by incursions into their RPAs have been identified as good to moderate at tolerating root pruning and disturbance¹⁴, as shown in **Table 4**. From our experience, wild cherry and holly also show a moderate tolerance of root pruning. As these specimens are of average physiological condition, there is no reason to suggest that they will not be able to tolerate the cutting of roots within these small sections of their RPAs.

Species	Tolerance
Ash	Moderate
Tree of Heaven	Good
London plane	Poor or Good

Table 4: Species tolerance to root pruning and disturbance

¹³ Roberts J., Jackson N., & Smith M. (2006). Tree Roots in the Built Environment. TSO.

¹⁴ MATHENY, N. P. and CLARK, J. R. (1998). Trees and Development. International Society of Arboriculture.

6.2.6. The areas lost to encroachment within the RPAs of the trees nos. 5, 6, 7, 8, 10 and 13 can be compensated for in the areas to the east and west of the trees, where there is soft landscaping suitable for root growth, contiguous to the RPAs. Therefore, there will be no net loss of suitable rooting area, and no foreseeable risk of future cumulative impacts, so there is no reason to suggest that they will not be able to tolerate the cutting of roots within these small sections of their RPAs or that they will not remain viable.

6.2.7. Furthermore, within the site boundary the opportunity exists for the soil used by these trees for root growth to be improved. Subject to proposed landscaping, the soil and rooting environments within the RPAs of these specimens could be enhanced to promote improved root growth by de-compaction, aeration, fertilisation or mulching, as appropriate, and this can be ensured by condition. As these trees can remain viable by being able to root in other areas, contiguous to their RPAs, and the soil environment in which they are rooting can be improved, these incursions comply with paragraph 5.3.1 of BS5837.

6.2.8. In addition to those RPA incursions requiring excavation, replacement hard surfacing, which includes a bin and bike store and ramp, is required within the RPAs of trees nos. 14, 15 and 16. Taking account of existing ground levels and likely proposed levels of these areas, these will allow for design and construction of the replacement surfaces to be entirely above existing soil level, and accordingly no excavation will be required. As such, the replacement hard surfacing will not result in any change from the current situation vis-à-vis the trees' rooting environment and essentially represents a continuation of the *status quo*.

6.2.9. Furthermore, where appropriate, replacement surfaces could incorporate an appropriate cellular confinement system, filled and finished with suitable porous materials, to minimise soil compaction. To ensure no damage occurs to the roots or rooting environments of the relevant trees, installation will be undertaken under the control and supervision of the arboricultural consultant.

6.2.10. Implementation of measures to prevent other incursions into the RPAs of retained trees and to protect them during demolition and construction can be assured by the erection of appropriate protective fencing and the installation of ground protection, as shown on the TPP at **Appendix 3**.

6.2.11. 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. RELATIONSHIP OF RETAINED TREES TO NEW DWELLINGS

7.1. Details

7.1.1. The proposed extension does not lie within the shadow patterns of trees to be retained; that is, the proposed extension is not sited in an arc between the north-west and the east of retained trees and is closer to them than the current heights of these specimens.

7.2. Assessment

7.2.1. As no parts of the proposed extension lie within the shadow patterns of trees to be retained, it will not be shaded by retained trees to the extent that this will interfere with its reasonable use or enjoyment by occupiers; which might otherwise lead to pressure to permit felling or severe pruning that the LPA could not reasonably resist.

8. CONCLUSIONS

8.1. Summary

8.1.1. Our assessment of the impacts of the proposals on the existing trees concludes that no trees of high landscape or biodiversity are to be removed. Whilst the removal of one mature tree (London plane no. 1) will represent a partial alteration to the main arboricultural feature of the property, its removal is necessary to safeguard the heritage value of the existing grade 2 listed building at 26A Ferncroft Avenue. Otherwise, the proposed removal of individuals and groups of trees will represent only a minor alteration to the overall arboricultural character of the property and will not have a significant adverse impact on the arboricultural character and appearance of the local landscape or the conservation area.

8.1.2. The proposals include space within the existing rear garden for the replacement planting of a suitable large-canopied species such as a London plane, the establishment of which will progressively mitigate the impact of the loss of tree no. 1 on the character and appearance of the conservation area. As the new tree will be planted at a suitable distance from the listed building, it will have the space to grow a full crown without coming into conflict with the building and so will ultimately have a greater and more long-term benefit to the local amenity of the area than that currently provided by tree no. 1.

8.1.3. No trees are to be pruned to facilitate implementation of the proposals.

8.1.4. The incursions into the Root Protection Areas of trees to be retained are minor, and subject to implementation of the measures recommended on the Tree Protection Plan and set out at **Appendix 1**, no significant or long-term damage to their root systems or rooting environments will occur.

8.1.5. No parts of the proposed extension are likely to be shaded by retained trees to the extent that this will interfere with its reasonable use or enjoyment by occupiers, which might otherwise lead to pressure on the Local Planning Authority to permit felling or severe pruning that it could not reasonably resist.

8.2. Compliance with national planning policy

8.2.1. As the proposals will retain most of the main arboricultural feature of the property, its arboricultural attractiveness, history and landscape character and setting will be maintained, thereby complying with Paragraph 130 of the National Planning Policy Framework.

8.2.2. Whilst some trees are to be removed, there is no duty in planning policy to retain all existing trees in all circumstances. Paragraph 131 of the NPPF states (*italics added for emphasis*): “**Planning policies and decisions should ensure... that existing trees are retained wherever possible**”; and thereby recognises circumstances in which it might not be possible to retain every tree. Accordingly, the proposed removal of trees does not mean that this application must thereby be refused; and does not mean it conflicts with Paragraph 131 of the NPPF.

8.2.3. The retention of most of the main arboricultural features of the property recognises and will maintain the local landscape and the wider benefits of the existing trees within the Redington Froggnal Conservation Area, and thereby complies with Paragraph 176 of the NPPF.

8.2.4. 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 (c) of the NPPF.

8.3. Compliance with regional planning policy

8.3.1. As the majority 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.

8.3.2. As space exists within the proposed layout for replacement planting, including of large-canopied trees, the proposed development will protect, maintain and enhance the main arboricultural features of the property. As such, it complies with Policy G7 ‘Trees and woodlands’ of the London Plan.

8.4. Compliance with local planning policy

8.4.1. Whilst the proposed development results in the removal of a significant tree (no. 1) that appears to relate to Policy A3 of the London Borough of Camden Local Plan, the tree's presence represents a threat to the listed building at 26A Ferncroft Avenue and so is at odds with Policy D2 which requires the protection of listed buildings. As tree no. 1 is of limited arboricultural quality and landscape value, its loss will not have a significant impact on the arboricultural character of the local area whereas its removal will secure the retention and protection of the listed building and so, on balance, is compliant with local planning policy.

8.5. Compliance with neighbourhood planning policy

8.5.1. As the proposed development will preserve the green garden suburb character and appearance of the Conservation Area it complies with Policy SD2 of the Redington Froggnal Neighbourhood Plan 2021- 31.12.2045.

8.6. Conclusion

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

APPENDIX 1
Outline Arboricultural Method Statement

Outline arboricultural method statement

A1.1. Tree Protection Plan

A1.1.1. The TPP at **Appendix 3** shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in proximity to, retained trees, as described in the relevant panels on the drawing.

A1.2. Pre-start meeting

A1.2.1. Prior to the commencement of any site clearance, ground preparation, demolition or construction works the developer will convene a pre-start site meeting. This shall be attended by the developer's contract manager or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. If appropriate, the tree felling/surgery contractor should also attend. At that meeting contact numbers will be exchanged, and the methods of tree protection shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to the TPP required as a result of the meeting shall be circulated to all attendees.

A1.3. Site clearance

A1.3.1. No clearance of trees or other vegetation shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below). If any vegetation clearance is required behind the line of the protection fencing this will be made clear at the pre-start meeting and arrangements will be made to do this prior to the fencing's erection, under the supervision of the arboricultural consultant, who will ensure it doesn't cause any soil compaction or damage to the roots of trees to be retained.

A1.3.2. Except where within the RPAs of trees to be retained, all trees and other vegetation to be removed may be cut down or grubbed out as appropriate; but within

the RPAs of trees to be retained, trees and vegetation will be cut by hand to ground level and stumps will be either left in place or ground out with a lightweight self-powered stump grinding machine. No excavators, tractors or other vehicles will enter the RPAs.

A1.4. Ground preparation and demolition

A1.4.1. No ground preparation or excavation of any kind, including topsoil stripping or ground levelling, shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below).

A1.4.2. Demolition of existing buildings and removal of existing areas of hard surfacing that abut or overlie RPAs will be undertaken with care, under the control and supervision of an appointed arboricultural consultant, to ensure that the adjacent soil is not unacceptably excavated, disturbed or compacted.

A1.5. Tree protection fencing

A1.5.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837, Section 6.2, prior to the commencement of construction. This will be at least 2.1m in height, comprising welded mesh panels; every other one braced with a 45° strut that is pinned to the ground; and seated in concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm, as shown in **Figure 3** of that document. Individual panels will be fixed to each other with at least two clamps, one of which will be a security clamp. "**TREE PROTECTION ZONE - KEEP OUT**" or similar notices will be attached with cable ties to every third panel.

A1.5.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

A1.5.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be

considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

A1.5.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

A1.6. Ground protection

A1.6.1. To allow space for construction and protection from soil compaction where proposed structures are in close proximity to RPAs of trees to be retained, the ground between the protective fencing and the footprints of the proposed structures will be covered by appropriate ground boarding, in accordance with the guidelines of Section 6.2.3.3 of BS 5837. The locations where these measures will be required are marked by **pink hatching** on the TPP.

A1.6.2. For purely pedestrian traffic, scaffold boards (or similar) will be used. Scaffold boards will comply with British Standard BS 2482: 2009 *Specification for timber scaffold boards* and be at least 225mm in width and 38mm thickness; they will be butted up and attached to each other with wooden battens or metal tie straps, and laid either on an above-ground scaffold framework, or secured to the ground with steel pins above a compressible material (a 75mm deep layer of woodchips may be appropriate) laid on top of a geotextile membrane of an appropriate specification.

A1.6.3. For wheeled or tracked traffic, ground boarding will be designed by a structural engineer, to take account of the type of soil and the likely loadings. Temporary aluminium roadway ('Trakway' or similar), interlocking plastic tread boards ("Ground-Guards" or similar), or reinforced concrete slabs may be appropriate. These will also be laid on top of a compressible material above a geotextile membrane.

A1.7. Manual excavation within RPAs

A1.7.1. The first 750mm depth of excavations required within the RPAs of the trees to be retained (as shown by **bold orange lines** on the TPP) will be dug by hand, using

a compressed air soil pick if appropriate, and under on-site arboricultural supervision, to safeguard against the possibility of unacceptable root damage being caused to these specimens. Any roots encountered of over 25mm diameter will be cut back cleanly to the face of the dig nearest to the tree, using a sharp hand saw or secateurs, and their cut ends covered with hessian to prevent desiccation.

A1.8. Proposed replacement hard surfaces within RPAs

A1.8.1. Unacceptable damage to the roots and rooting environments of the trees to be retained during the construction of proposed replacement hard surfaces that encroach within RPAs will be avoided by building them above the sub-base of existing hard surfaces, to avoid digging and thus severing of roots; and an appropriate ground covering will be used beneath the sub-base, to prevent or minimise compaction of the soil. This will be done in accordance with Section 7.4 of BS 5837. The locations where these measures will be required are marked by cyan **cross-hatching** on the TPP.

APPENDIX 2

Tree Survey Schedule



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(Operations)

Tree Survey Schedule

26A Ferncroft Avenue, London

March 2023

SJA Ref: tss 23137-01

Tree Survey Schedule: Explanatory Notes

26A Ferncroft Avenue, London

This schedule is based on a tree inspection undertaken by Anthony Harte of SJAtrees (the trading name of Simon Jones Associates Ltd.), on Thursday the 30th March 2023. Weather conditions at the time were clear, dry and bright. Deciduous trees were not in 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.

1. Tree no.

Given in sequential order, commencing at "1".

2. Species.

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

3. Height.

Estimated with the aid of a hypsometer, given in metres.

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.

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.

6. Crown break.

Height above ground and direction of growth of first significant live branch.

7. Crown clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

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, a crown showing retrenchment and a structure characteristic of the latter stages of life.

Ancient: Beyond typical age range and with a very large trunk diameter for species; with extensive decay or hollowing, a crown that has undergone retrenchment and a structure characteristic of the latter stages of life.

9. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

10. Structure.

Structural condition of the tree – based on both the structure of its 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 irreparable morphological or pathological defects, such that there may be a risk of failure or collapse.

Hazardous: Significant and irreparable morphological or pathological defects, with a risk of imminent collapse.

11. Comments.

Where appropriate comments have been made relating to:

- Health and condition
- Safety, particularly close to areas of public access
- Structure and form
- Estimated life expectancy or potential
- Visibility and impact in the local landscape

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.

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.

(1) Trees that have a serious, irreparable, 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).

(2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

(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.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.

(1) Trees that are particularly good examples of their species, especially if rare or unusual.

(2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.

(3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

(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.

(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.

(3) Trees with material conservation or other cultural value.

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.

(1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.

(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.

(3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE
26A Ferncroft Avenue, London

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
1	London plane	16m	720mm	NE 7.8m SE 6.8m SW 6.5m NW 6.3m	NE 4m	NW 4.5m	Mature	Average	Indifferent	Trunk base grows less than 500mm from adjacent extension, the walls of which comprise three different brick colours suggestive of repair works possibly associated with damage induced by tree's close proximity; ivy root grows SE to NW across tree's N buttress root with potential for future girdling of the latter; boundary fence and ivy impede inspection of SE side of trunk and base; trunk and main stems ivy-covered to 6m which impedes full inspection of tree's structure, although lowest 2.5m of NW side of trunk clear of ivy; areas of necrotic bark spread over lowest 900mm of trunk to NW and NE, as discerned by dark staining and soft texture, with bark surface breaking up easily upon impact with acoustic mallet; sounded lower trunk and base with acoustic mallet: no significant variations in tone; trunk divides into four main stems from 2.5m: unions obscured by ivy but potential compression fork discernible between two central most stems; crown previously reduced at height of 11m resulting in truncated main limbs and stems with regrowth of average 150mm diameter at base arising from pruning points to form crown; regrowth recently reduced at height of 14m with regrowth of average 30mm diameter arising from secondary pruning points. Upper 12m of tree visible in gap between gable ends of houses Nos. 26A and 28 in views from Ferncroft Avenue; otherwise views of tree from Ferncroft Avenue limited to upper 7m of crown visible above roofline of No. 26A. Significant component of the internal landscape but arboricultural quality diminished by pruning.	B (2)
2	Cherry Laurel	7m	2 stems @ 120mm 75mm 100mm 80mm 85mm 2 stems @ 70mm 105mm 90mm	NE 5m SE 3.5m SW 3.1m NW 5.3m	1.5m	1.5m	Semi-mature	Average	Moderate	Multi-stemmed from base; small ornamental tree; suppressed crown as overtopped by adjacent tree no. 1; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
3	Red snake-bark maple	9m	195mm	NE 1.9m SE 2m SW 2.6m NW 2.9m	1.75m	1.75m	Semi-mature	Low	Indifferent	Moribund; extensive necrotic bark on trunk and main stems; significant dieback of buds; inessential component of group in which it stands.	U
4-5	Spindle	8m	#T4 3 stems @ 80mm est. @ base #T5 110mm est. @ base	NE 2m SE 2.5m SW 1.3m NW 2.8m	2.5m	2m	Young	Average	Indifferent	Pair of small ornamental trees; inessential components of group in which they stand. # 4: three-stemmed from base. # 5: three-stemmed form base, growing tight together with compression fork.	C (1)
6	Buddleia	6.5m	100mm 50mm 80mm all est. @ base	NE 1.4m E 1m SE 3m S 3m SW 1m NW 3m	2.5m	NW 2.5m	Semi-mature	Average	Indifferent	Three-stemmed from base; middle stem pruned at 1.75m; asymmetrical crown as suppressed by adjacent specimens; small ornamental tree; inessential component of group in which it stands.	C (1)
7	Holly	7.5m	3 stems @ 150mm est.	NE 3m SE 3.5m SW 3m W 3m NW 1.4m	1.75m	NW 2m	Semi-mature	Average	Moderate	Off-site tree; comprises total of three main stems: twin-stemmed from base with compression fork, S stem then bifurcates from 1.5m; small ornamental tree; inessential component of group in which it stands.	C (1)
8	Himalayan tree-cotoneaster	4.5m	90mm 50mm 105mm	NE 2.3m SE 3.5m S 2m SW 3.5m W 4.5m NW 2.8m	W 2m	W 2m	Semi-mature	Average	Indifferent	Three-stemmed from base; stems lean significantly W; small ornamental tree; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
9	Privet	7m	2 stems @ 80mm 6 stems @ 50mm 100mm all est.	NE3m SE2.8m SW3.5m NW2.5m	0.5m	SW 1m	Semi-mature	Average	Indifferent	Multi-stemmed from base with multiple tight compression forks; suppressed crown as overtopped by adjacent ash tree no. 10; small ornamental tree; inessential component of group in which it stands.	C (1)
10	Ash	14m	265mm 205mm	NE 5.5m SE 5m S 4.7m SW 5.2m NW 5m	SE 4m	SW 4.5m	Semi-mature	Average	Poor	Partially exposed surface roots extending up to 3m S from trunk centre; base and lower stems grows tight against adjacent boundary fence; twin-stemmed from base with tight compression fork and evidence of included bark extending to height of 1.2m: represents potential weak point in structure but possibly mitigated by natural bracing between stems at 2.5m and 4m; upper 3m of crown visible above roof line of house No. 26A in long-distance views from Ferncroft Avenue but otherwise hidden by surrounding buildings; significant component of group in which it stands but of impaired form and structure.	C (1)
11	Laburnum	8m	2 stems @ 70mm est. 60mm 70mm 90mm 120mm	N 3.5m NE 4.5m E 3.3m S 3.4m W 2m	E 2.75m	S 3m	Semi-mature	Average	Indifferent	Multi-stemmed from base with tight compression forks; asymmetrical crown as suppressed by adjacent specimens; small ornamental tree; inessential component of group in which it stands.	C (1)
12	Cherry Laurel	10m	135mm 130mm 145mm	NE 3m SE 2.7m SW 2.4m NW 3m	SE 1.5m	SE 1.5m	Semi-mature	Average	Indifferent	Off-site tree; comprises three main stems: twin-stemmed from base with compression fork, S stem bifurcates at 1m; significant component of hedge H1.	C (1)
13	Wild cherry	12m	500mm est.	NE 3m SE 2.9m SW 5.3m NW 5m	SW 3m	S 5m	Mature	Average	Indifferent	Off-site tree; cluster of secondary stems at 2.5m N pruned back to trunk leaving multiple wounds up to 120mm diameter; upper 4m of crown visible above roof line of house No. 26A in long-distance views from Ferncroft Avenue; significant component of group in which it stands.	C (1)
14	Tree of Heaven	8m	70mm 180mm both est.	NE 1m SE 4.2m SW 2.8m NW 2.5m	SE 3m	3.5m	Semi-mature	Average	Indifferent	Off-site tree; trunk and stems inaccessible: surrounded by dense hedge; one-sided crown; inessential component of the local landscape.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
15	London plane	14.5m	805mm	NE 5m SE 5m SW 4.5m NW 4.5m	E 4.5m	NE 4.5m	Mature	Average	Moderate	Off-site tree; multi-stemmed from 5m; stems heavily reduced ('pollarded') at 13m; crown comprises dense regrowth of average 30mm diameter arising from pruning points; makes significant contribution to amenity of Ferncroft Avenue; essential component of the local landscape.	B (2)
16	London plane	14.5m	640mm	NE 4.5m SE 4.8m SW 4.8m NW 5.2m	N 4m	NE 4m	Mature	Average	Moderate	Off-site tree; multi-stemmed from 5m; stems heavily reduced ('pollarded') at 13m; crown comprises dense regrowth of average 30mm diameter arising from pruning points; makes significant contribution to amenity of Ferncroft Avenue; essential component of the local landscape.	B (2)
G1	Various	5m	Max 80mm est.	2m	0m	0m	Young	Average	Indifferent	Group comprising small-growing trees and shrubs growing within garden soil beds; species include mahonia, rose and bamboo amongst others; of ornamental interest only; readily replaceable; inessential component of the local landscape.	C (1)
G2	Various	4m	Max 80mm est.	2m	0m	0m	Young	Average	Indifferent	Off-site group of trees growing on E side of boundary fence within rear garden of No. 28; comprises small-growing trees and shrubs; species include holly, buddleia, rhododendron and privet; of ornamental interest only; provides limited boundary screening; inessential component of the local landscape.	C (1)
H1	Cherry Laurel	9m	Max 150mm est.	2m	0m	0m	Semi-mature	Average	Indifferent	Off-site hedge planted densely in single line along W boundary; trees multi-stemmed from bases with stems growing into and deforming adjacent chicken wire fence; lapsed hedge showing no recent maintenance; provides notable boundary screening between gardens; significant component of the local landscape.	C (2)
H2	Cherry Laurel	2.5m	Max 80mm est.	1m	0m	0m	Young	Average	Indifferent	Hedge; provides some screening of views into site from Ferncroft Avenue; of ornamental interest only.	C (2)
H3	Privet	4m	Max 70mm est.	1.5m	0m	0m	Young	Average	Indifferent	Off-site hedge; provides some boundary screening; of ornamental interest only.	C (2)

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	London plane	234.5m ²	8.6m
2	Cherry Laurel	37.9m ²	3.5m
3	Red snake-bark maple	17.2m ²	2.3m
4-5	Blackthorn	8.7m ² 5.5m ²	1.7m 1.3m
6	Elder	8.6m ²	1.6m
7	Holly	30.5m ²	3.1m
8	Himalayan tree-cotoneaster	9.8m ²	1.8m
9	Privet	15.8m ²	2.2m
10	Ash	50.8m ²	4.0m
11	Laburnum	17.4m ²	2.4m
12	Cherry Laurel	25.4m ²	2.8m
13	Wild cherry	113.1m ²	6.0m
14	Tree of Heaven	16.9m ²	2.3m
15	London plane	293.2m ²	9.7m
16	London plane	185.3m ²	7.7m
G1	Various	2.9m ²	1.0m
G2	Various	2.9m ²	1.0m
H1	Cherry Laurel	10.2m ²	1.8m
H2	Cherry Laurel	2.9m ²	1.0m
H3	Privet	2.5m ²	0.9m

APPENDIX 3
Tree Protection Plan

Arboricultural Impacts: Summary
(For details, see below)

Impact	No. of Trees
Trees to be removed	3
Groups of trees/hedges to be removed	1
Groups of trees/hedges to be partially removed	1
TPO trees to be removed	0
Trees to be pruned	0
Trees where supervised demolition needed within RPAs	9
Trees where manual excavation needed within RPAs	8
Trees where replacement surfacing needed within RPAs	3
Trees with proposed underground services within RPAs	0

Trees to be Removed

No.	Species	Category
1	London plane	B (2)
2	Cherry laurel	C (1)
4	Spindle	C (1)
G1	Various (partial removal)	C (1)
H2	Cherry laurel	C (2)

Total numbers of trees to be removed

Category	No. of trees	Category	No. of trees
A	0	B	1
C	2 + 1g	U	0

Trees that require supervised demolition within RPAs

No.	Species	Type of structure / surface
5	Spindle	Demolition of existing retaining wall section
6	Buddleia	Demolition of existing retaining wall section
7	Holly	Demolition of existing retaining wall section
8	Cotoneaster	Demolition of existing retaining wall section
9	Privet	Demolition of existing retaining wall section & removal of gravel bed
10	Ash	Demolition of existing retaining wall section & removal of gravel bed
13	Wild cherry	Removal of existing brick border and gravel footpath
14	Tree of Heaven	Demolition of existing wall section
15	London plane	Demolition of existing wall section & planter

Supervised demolition

Within root protection areas (RPAs) existing foundations and hard surfaces shall be removed with care, under the direct supervision of the arboricultural consultant. Foundations or surfaces will be broken up with hand-held breakers, and then removed by hand, wheelbarrow, or in the bucket of an excavator standing outside the RPA. At the discretion of the arboricultural consultant, an excavator positioned outside the RPA and using an appropriately sized toothless bucket may be used in some instances. Once completed, the base of the excavation and/or the edge closest to the trees will be covered immediately with hessian sacking to prevent drying out of the soil, and where necessary be shuttered to prevent soil collapse.

Trees that require manual excavation within RPAs

No.	Species	Type of structure
5	Spindle	Proposed retaining wall
6	Buddleia	Proposed retaining wall
7	Holly	Proposed retaining wall
8	Cotoneaster	Proposed retaining wall
10	Ash	Proposed retaining wall
13	Wild cherry	Proposed planter
14	Tree of Heaven	Proposed planters
15	London plane	Proposed planters

Manual Excavation

Within root protection areas the first 750mm depth of any excavation, whether for proposed foundations, hard surfacing, or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be cleared from roots with a compressed air soil pick. All roots will be cut cleanly with a hand saw or secateurs. The edge of the excavation closest to the trees will be covered with hessian sacking to prevent drying out, and if necessary be shuttered with an appropriate material to prevent soil collapse. Where appropriate, the soil beneath this depth may be sheet piled; and deeper excavation may be undertaken by a machine provided it works from outside the root protection areas.

Trees that require replacement surfacing within RPAs

No.	Species	Type of structure
14	Tree of Heaven	Replacement hard standing
15	London plane	Replacement hard standing including bin & bike storage area
16	London plane	Replacement hard standing

Above Soil Replacement Surfacing

Proposed replacement hard surfacing within root protection areas (RPAs) of retained trees to be constructed in accordance with section 7.4 of BS 5837: 2012. Trees in relation to design, demolition and construction - Recommendations. Existing surfaces will be carefully removed, using hand tools, and new surfaces will be installed no deeper than the base of the existing surfacing it is replacing, so that the underlying soil is not disturbed and no roots are severed. If appropriate, a ground covering, possibly using a geogrid, or a geoweb, or a combination of the two will be placed beneath the sub-base to minimise compaction of the soil in which tree roots are growing. Edge supports will also be installed above existing soil level.

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise 2m tall 'Heras' welded mesh panels on rubber or concrete feet. The panels shall be joined together with two anti-tamper couplers, installed so that they can only be removed from inside the fence. Distance between the couplers should be at least 1m and should be uniform throughout the fence. Panels should be supported (where possible) on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins (see Figure 3a below). Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts shall be mounted on a block tray (see Figure 3b). "TREE PROTECTION ZONE - KEEP OUT" or similar notices to be attached to every fifth panel.

Ground Protection

To be installed prior to commencement of demolition or construction works, at same time as erection of protective fencing. For purely pedestrian traffic: scaffold boards or similar, of at least 35mm thickness, butted together and attached to each other with wooden battens or steel tie straps, laid either on an above ground scaffold framework, or on a compressible material (a 75mm deep layer of woodchips may be appropriate) above a biaxial geotextile grid ('geogrid' - 'Tensar' or similar) and pinned to the ground with steel pins to prevent movement. For wheeled or tracked traffic: temporary aluminium roadway ('Trakway' or similar), interlocking polyethylene tread boards ('Ground-Guards' or similar), or reinforced concrete slabs laid on an appropriate compressible layer above a biaxial geotextile grid - to be designed by a structural engineer to accommodate likely loadings.

Arboricultural Supervision

The arboricultural consultant will directly supervise all construction works that have to be undertaken within root protection areas. These include:

1. Location of ground protection.
2. Lifting/excavation of existing hard surfaces.
3. Excavation/demolition of existing foundations.
4. Construction of above-ground replacement hard surfacing.
5. All excavations, whether for proposed foundations, hard surfacing, or underground services.



Figure 3 Examples of above-ground stabilizing systems

TREE PROTECTIVE FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 3.

New Proposed Planting Schedule

Name	Designation	Girth/height	Root system	Planting location	Quantity	Normal life expectancy
London plane <i>Platanus x acerifolia</i>	Ex. Heavy Standard	18-20cm/ 4.5-5m	Container -grown	A	1	150-200yrs

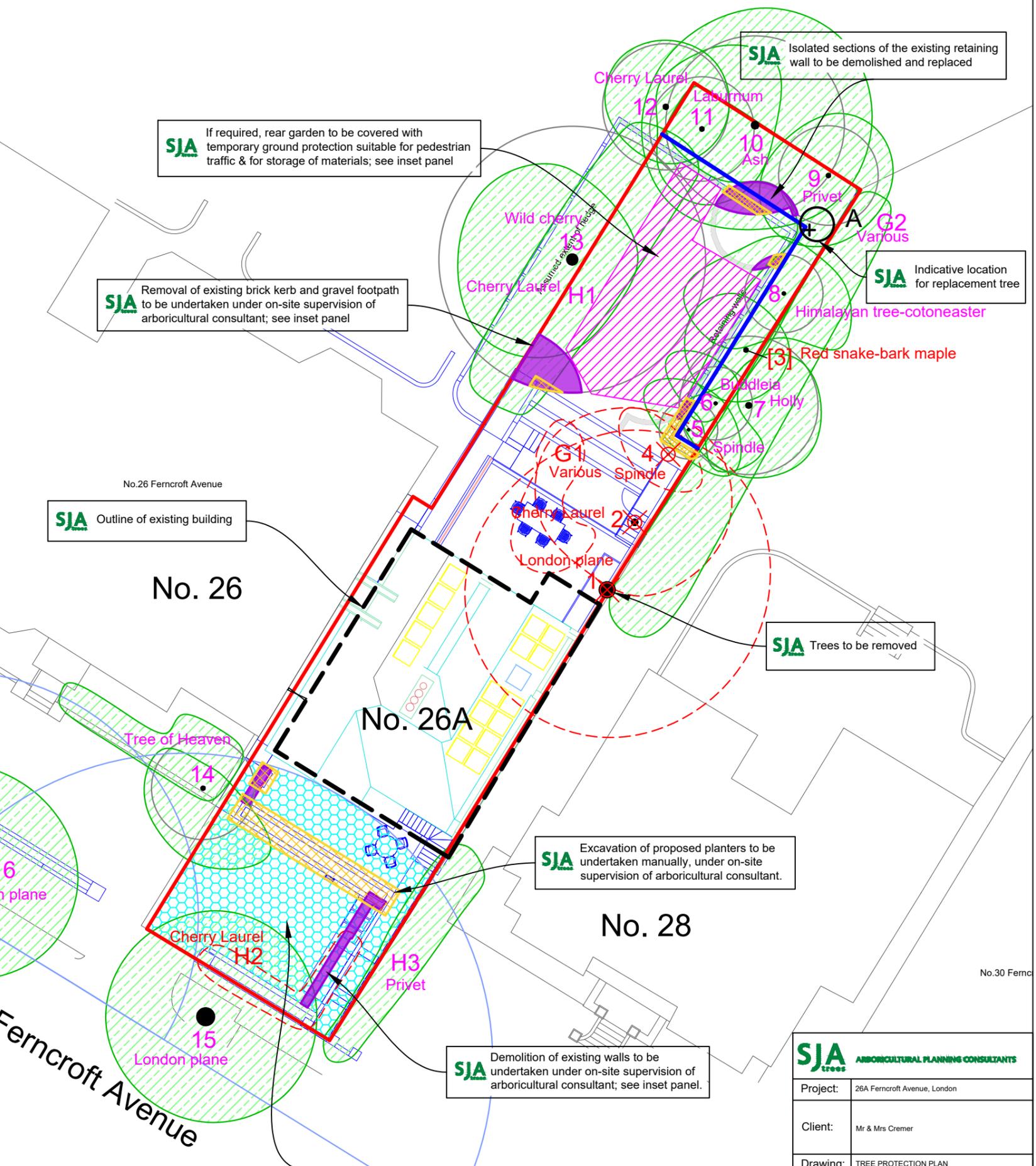
Ground Protection

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3. Excavation/demolition of existing foundations.
4. Construction of above-ground replacement hard surfacing.
5. All excavations, whether for proposed foundations, hard surfacing, or underground services.



SJA Outline of existing building

SJA If required, rear garden to be covered with temporary ground protection suitable for pedestrian traffic & for storage of materials; see inset panel

SJA Removal of existing brick kerb and gravel footpath to be undertaken under on-site supervision of arboricultural consultant; see inset panel

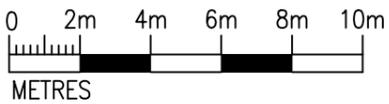
SJA Isolated sections of the existing retaining wall to be demolished and replaced

SJA Indicative location for replacement tree

SJA Excavation of proposed planters to be undertaken manually, under on-site supervision of arboricultural consultant.

SJA Demolition of existing walls to be undertaken under on-site supervision of arboricultural consultant; see inset panel.

SJA Existing hard surfacing or proposed replacement surfacing to be used as ground protection to safeguard RPA of tree no. 15. In the event replacement surfacing cannot be installed immediately following removal of existing surfacing, underlying soil to be covered with appropriate temporary ground protection; see inset panel for details



1 : 200 @A3

SJA ARBORICULTURAL PLANNING CONSULTANTS

Project:	26A Ferncroft Avenue, London		
Client:	Mr & Mrs Cremer		
Drawing:	TREE PROTECTION PLAN		
Drawing no.:	SJA TPP 23137-041		
Based on:	494-A-G10-P02 PROPOSED SITE		
Drawn by:	Date of Issue:	Scale:	
APH	June 2023	1:200 @ A3	
Checked by:	Tel.:	sja@sjatrees.co.uk	
FPS	(01737) 813058		
Tree nos.:	● 15	Category 'U' trees:	● [3]
Category 'B' RPA:	○	Category 'C' RPA:	○
Ground protection:	▨	Replacement surfacing:	▨
Manual excavation:	▨	Protective fencing:	▨
		Supervised demolition:	▨
		Replacement tree:	⊕
		Canopies of trees to be retained:	▨
		Trees to be removed:	⊕

For further information refer to the SJATrees Tree Survey Schedule. Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. SJATrees (the trading name of Simon Jones Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd. 2023. This drawing is copyright and may not be used or changed without the written consent of SJATrees. This drawing is based on the proposed layout plan shown and referred to above. SJATrees authorises its reproduction, without amendment, by the Local Planning Authority (LPA), and to its posting on the LPA website, to assist in consideration of this application only. This drawing is designed to reflect only the principles of layout and for design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.