

REVIEW OF ARBORICULTURAL SUBMISSIONS FOR

APPLICATION 2023/1116/P AT 26 ROSSLYN HILL ON BEHALF OF:

24 Rosslyn Hill London NW3 1PD

INSTRUCTING PARTY:

Private Client c/o Hereward & Co Solicitors, Planning Matters 94 Queensway London W2 3RR

REPORT PREPARED BY

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London Office: Holden House, 4th Floor, 57 Rathbone Place London W1T 1JU Registered Office: 15 Abbey Road, Oxford OX2 0AD Landmark Trees is the trading name of Landmark trees Ltd. Registered in Wales. Reg No. 3882076 PART 1: MAIN TEXT

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1. SUMMARY

- 1.1 A planning application has been submitted to the London Borough of Camden for redevelopment at 26 Rosslyn Hill, London NW3 1PD the proposal being "Demolition behind the retained front façade of 26 Rosslyn Hill and the erection of a replacement three storey dwelling with accommodation in the roof." The application was registered under reference 2023/1116/P on 4th May 2023 and is currently at consultation stage.
- 1.2 There are 7 trees on the proposed redevelopment site and adjoining land that are within close proximity which potentially pose constraints on the development and need to be assessed. The trees have been identified as T1 T7 in the Arboricultural Implications Assessment and Tree Protection Plan, prepared by Tretec, submitted as part of the application documentation.
- 1.3 Five of these 7 trees are growing at the adjacent property, 24 Rosslyn Hill, and these neighbours have requested Landmark Trees review the submitted arboricultural information to assist understanding of the likely impact, particularly on trees on their property.
- 1.4 This report has assessed the impacts of the development proposals and concludes that Tretec's Arboricultural Implications Assessment and Tree Protection Plan have significantly underestimated the likely potential impact on the trees.
- 1.5 Whilst the default position is that structures be located outside the Root Protection Area* (RPA) of trees to be retained, there are a number of encroachments which have been discounted by Tretec. Indeed, there appear to be several shortcomings in the Tretec information.
- 1.6 This report discusses the various shortcomings and sets out a series of recommendations as to what further information is considered appropriate to enable arboricultural assessment in accordance with the relevant British Standard BS5837:2012 ("Trees in relation to Design, Demolition and Construction Recommendations")* and Camden's adopted supplementary guidance ("Camden Planning Guidance Trees March 2019").
- 1.7 In conclusion, it is considered that the current arboricultural submissions significantly underestimate the likely impacts on the trees and fail to take account of a number of relevant factors. On the basis of the existing submitted information, the proposals are likely to result in considerable damage to the trees and the wider Hampstead Conservation Area contrary to the guidance referred to at 1.6 above plus relevant local planning policies comprise Policies G1 and G7 of the London Plan 2021 and Policies A3, D1, D2 of the Camden Local Plan (adopted 3rd July 2017).

* British Standards Institute: Trees in relation to design, demolition and construction BS 5837: 2012 HMSO, London

2. INTRODUCTION

2.1 Terms of Reference

- 2.1.1 Hereward & Co Solicitors, Planning Matters instructed Landmark Trees (LT) to prepare this Review of Arboricultural Submissions for planning application 2023/1116/P at 26 Rosslyn Hill on behalf of their client, at the adjacent property 24 Rosslyn Hill, London NW2 1PD.
- 2.1.2 The application relates to the development of 26 Rosslyn Hill, London NW3 1PD involving demolition of all but the front façade for development of a new five bedroom dwelling, relocation of the main entrance to the side of the property at upper ground floor level, new accessible approach route to main entrance, and increased floor to ceiling heights at lower ground floor and loft levels. Specifically, full planning permission is sought for:

"Demolition behind the retained front façade of 26 Rosslyn Hill and the erection of a replacement three storey dwelling with accommodation in the roof."

- 2.1.3 This report will assess the impact on trees and their constraints, identified in our survey, in the light of the planning application documentation available on Camden's website. The purpose of the report is to assist understanding of the likely impact of the proposed development, particularly on trees at 24 Rosslyn Hill.
- 2.1.4 Trees are a material consideration for a Local Planning Authority when determining planning applications, whether or not they are afforded the statutory protection of a Tree Preservation Order or Conservation Area. British Standard BS 5837:2012 Trees in Relation to Design, Demolition and Construction sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and new developments. The Standard recommends a sequence of activities (see Fig.1 overleaf) that starts in the initial feasibility and design phase (RIBA Stage 2 'Concept Design' as defined in 2012) with a survey to gualify and quantify the trees on site and establish the arboricultural constraints to development (above- and below-ground) to inform the design in an iterative process, and continues with an assessment of the arboricultural impacts of the final design and measures to mitigate such impacts should they be negative. Detailed technical specifications for mitigation and protection measures are devised in the design phase that follows (RIBA Stage 3-4 'Developed and Technical design'), and the sequence ends with the Implementation and Aftercare phase (RIBA Stages 5-7) with the implementation of those measures once planning permission is granted, guided by Arboricultural Method Statements (RIBA Stage 4-5, 'Technical Design and Construction) and professional guidance where appropriate.

2.1.5 This report identifies shortcomings in the Tretec Arboricultural Implications Assessment and Tree Protection Plan in the light of the process chart below – making recommendations as to what further information would be appropriate.



Figure 1 The design and construction process and tree care

Review of arboricultural submissions - Application 2023/1116/P at 26 Rosslyn Hill – for 24 Rosslyn Hill, London NW3 1PD Instructing party: Private client c/o Hereward & Co Solicitors, Planning Matters, 94 Queensway, London W2 3RR Prepared by: Ann Currell & Adam Hollis of Landmark Trees, Holden House, 4th Floor, 57 Rathbone Place, London W1T 1JU

2.2 Application Documents

2.2.1 The drawings and supporting documentation relied upon by Landmark Trees in the formulation of our report are available on the Camden website. In particular, regard was had to the following information (the date cited being "Date created" shown on website):

Existing plans – 4/05/2023 Demolition plans – 4/05/2023 Proposed plans – 4/05/2023 Design and Access Statement – 16/03/2023 Planning and Heritage Statement – 16/03/2023 Structural Report – 16/03/2023 Tree Survey and Arboricultural Method Statement – 16/03/2023 Tree Protection Plan – 16/03/2023 Construction Management Plan – 16/03/2023

- 2.3 Scope & Limitations of Survey
 - 2.3.1 As Landmark Trees' (LT) arboricultural consultant, Ann Currell surveyed the trees T2 T6 at 24 Rosslyn Hill on 30th May 2023, recording relevant qualitative data in order to assess both their suitability for retention and their constraints upon the site, in accordance with British Standard 5837:2012 Trees in relation to design, demolition and construction Recommendations [BS5837:2012]; the oak T1 at 26 Rosslyn Hill was remotely surveyed from the roadside; but there was no access to survey the offsite ash T7, so Tretec observations from February 2022 have been used.
 - 2.3.2 Our survey of the trees, the soils and any other factors, is of a preliminary nature. The trees were SURVEYED on the basis of the Visual Tree Assessment method expounded by Mattheck and Breloer (The Body Language of Trees, DoE booklet Research for Amenity Trees No. 4, 1994). LT have not taken any samples for analysis and the trees were not climbed but inspected from ground level.

2.4 Survey Data & Report Layout

- 2.4.1 Detailed records of individual trees are given in the survey schedule in Appendix 1.
- 2.4.2 A site plan identifying the surveyed trees, based on the application documents, but with Landmark's updated survey information (as far as possible) is provided at Part 3. This plan serves as the Tree Constraints Plan with the theoretical Recommended Protection Areas (RPAs), tree canopies and shade constraints, (from BS5837: 2012) overlain onto it. These constraints are then overlain in turn onto the Instructing Party's proposals to create a second Arboricultural Impact Assessment Plan in Part 3. General observations, discussion, conclusions and recommendations follow, below.

3. SITE CHARACTERISTICS

3.1 Property Description & Planning Context



Photograph 1: Aerial photograph showing trees in context (red icon marking 26 Rosslyn Hill) (Source: Google Satellite layer 2023)

3.1.1 26 Rosslyn Hill (marked with red icon in Photograph 1) is a Victorian house which was originally used as police living accommodation, adjoining the former Hampstead Police Station and Courthouse (Grade II listed). 26 Rosslyn Hill has a relatively small front garden standing within which is oak T1; the rear of the site is tarmac. To the east stands 24 Rosslyn Hill, set back within a large garden, part of another Grade II listed building (22 and 24 was originally a detached house which now comprises two residences). The side / rear garden of 24 Rosslyn Hill is well maintained and, as can be seen from Photograph 1, planted with a number of trees – including limes, London plane and purple plum T2 – T6 adjacent to the flank boundary of the application site. (There are also two limes in the front garden of 24 Rosslyn Hill which are included in a Tree Preservation Order, but these are at sufficient distance to be excluded from the scope of this report). The two properties are located on the north eastern side of Rosslyn Hill, close to the junction with Downshire Hill.

- 3.1.2 The land slopes down away from the Rosslyn Road frontage. The submitted Structural Report notes that there is a difference in levels between the front of the site at pavement level and the rear of the application site of approx. 3.20 metres. The spot levels on the Tree Protection Plan indicating the pavement frontage to be at approx. 81.35, whereas rear corner of the red outline of the proposed lower ground floor garden is 78.40.
- 3.1.3 The front garden of 26 Rosslyn Hill, in which oak T1 is located, currently has a raised bed surrounded by a brick wall adjacent to the pavement, then drops down to a grassed area, with the existing access to lower ground floor level from pavement level being through steps and a sloping footpath leading down to the house the oak stands adjacent to the wall of the raised bed at approx. 80.80. No spot levels have been provided for the garden at 24 Rosslyn Hill but the front garden has a very gentle slope down to the steps leading up to the main entrance; there is then a steep slope down to the rear lawn area (the top roughly aligns with the main access), with the lawn perhaps 1 metre lower that the trees which stand in a raised bed with a retaining wall (it appears that the lawn level has been subsequently altered from that at which the trees were planted). Next to the steeper gradient, there is a summer house standing on wooden decking close to Lime T3.
- 3.1.4 Both 26 and 24 Rosslyn Hill are within the Hampstead Conservation Area (26 being in sub area one, 24 in sub area 3). As the adopted Hampstead Conservation Area Statement notes in respect of character and appearance of the area "Hampstead has an exceptional combination of characteristics that provide the distinct and special qualities of the Conservation Area. The variety of spaces, guality of the buildings, relationships between areas, all laid upon the dramatic setting of the steep slopes are described below. The contrast between the dense urban heart of Hampstead and the spaciousness of the outer areas is one of its major characteristics." Sub area one of the conservation area, in which the application site is located, is described as the central spine of Hampstead, the route north from London over the Heath around which the settlement developed – and the shopping centre developed along this major route. By contrast, the part of Rosslyn Hill in sub area three (No. 24) is characterised by larger detached and semi-detached houses similar to those found in the Fitzjohns / Netherhall Conservation Area on the west side of Rosslyn Hill. "Set back from the road are Nos.22 &24, built as one house in the 18th century and rebuilt in the mid 19th century (listed). Largely hidden by the front fence. The hipped roof and, cornice and eaves and chimneys are visible from the road." It is considered that the trees along the flank boundary of 24 Rosslyn Hill contribute significantly to the demarcation of the boundary of character and appearance between the two different sub areas.
- 3.1.5 Relevant local planning policies comprise Policies G1 and G7 of the London Plan 2021 and Policies A3, D1, D2 of the Camden Local Plan (adopted 3rd July 2017).

3.2 Soil Description



Figure 2: Extract from the BGS Geology of Britain Viewer

- 3.2.1 In terms of the British Geological Survey, the site overlies the London Clay Formation (see indicated location on Fig.1 plan extract above). The associated soils are generally, highly shrinkable clay; e.g. slowly permeable seasonally waterlogged fine loam over clay. Such highly plastic soils are prone to movement: subsidence and heave. The actual distribution of the soil series are not as clearly defined on the ground as on plan and there may be anomalies in the actual composition of clay, silt and sand content.
- 3.2.2 Clay soils are prone to compaction during development with damage to soil structure potentially having a serious impact on tree health. The design of foundations near problematic tree species will also need to take into consideration subsidence risk. Further advice from the relevant experts on the specific soil properties can be sought as necessary.
- 3.2.3 The Structural Report confirms that no geotechnical investigation has been carried out.

3.3 Subject Trees

- 3.3.1 Of the 7 surveyed trees, 1 is category* A (High Quality), 4 are category* B (Moderate Quality) and 2 are category C (Low Quality); none are U (Poor Quality) although Landmark was unable to inspect ash T7. For the sake of consistency, the same numbering system adopted in the Tretec tree survey undertaken has been maintained.
- 3.3.2 The tree species found on / adjacent to the site comprise oak, lime, purple plum and ash.
- 3.3.3 In terms of age demographics there are all mature trees present.
- 3.3.4 Full details of the surveyed trees can be found in Appendix 1 of this report.

*page 9 of: British Standards Institute: Trees in relation to design, demolition and construction BS 5837: 2012 HMSO, London



Photograph 2: Oak T1, Lime T2 and part of T3 viewed from Rosslyn Hill



Photograph 3: Lime T3

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Photograph 4: London Plane T5 also showing steep sloping within 24's garden



Photograph 5: Lime T5 with part view of purple plum T6

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4. DEVELOPMENT CONSTRAINTS

- 4.1 Primary Constraints
 - 4.1.1 BS5837: 2012 defines an Recommended Protection Area (RPA) as a "layout design tool indicating the minimum area around a 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."
 - 4.1.2 BS5837: 2012 gives RPAs for any given tree size. The individual RPAs are calculated in the Tree Schedule in Appendix 1 to this report, or rather the notional radius of that RPA, based on a circular protection zone. The prescribed radius is 12-x stem diameter at 1.5m above ground level, except where composite formulae are used in the case of multi-stemmed trees.
 - 4.1.3 Circular RPAs are appropriate for individual specimen trees grown freely, but where there is ground disturbance, the morphology of the RPA can be modified to an alternative polygon, as shown in the diagram below (Figure 3). Alternatively, one need principally remember that RPAs are area-based and not linear notional rather than fixed entities.





4.1.4 In BS5837, paragraph 4.6.2 states that RPAs should reflect the morphology and disposition of the roots; where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution. This can be done as a desktop / theoretical exercise but is not altogether (scientifically) reliable and may also invite disagreement / differences of opinion as to that distribution.

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- 4.1.4 LT prefer where possible and practical to raise the issue of modification but suspend judgment until such time as more reliable site investigations have been undertaken (Tree Radar scans and / or trial pits). Of course, the justification for these investigations will depend upon whether trees are (or are likely to be once modified) subject to impacts and also upon their quality / condition: it is generally not worth commissioning a radar study to locate the roots of a poor- or low-quality tree. On other occasions, there may not be the opportunity to commission investigations, either because the access is restricted by ownership / tenancy or the report's turnaround simply does not allow it, and they may need to follow on or be conditioned. **No a priori RPA modifications have been made in this instance.**
- 4.1.5 It is to be noted that Tretec has depicted the circular RPA for oak T1 but not for any of the other trees. The Tretec Arboricultural Impact Assessment (AIA) states "The TPP shows that the normative RPA of T1 covers much of the front garden." (p.3). Tretec's AIA then contends (p.5) "Whilst of course the tarmaced area would be within the normative RPAs of the neighbours trees drawing circular RPAs on to the TPP in this case would show nothing useful.", suggesting "Should there be any significant roots in the tarmaced area this would indicate there is a breach of the wall, direct damage and actionable nuisance. The wall would have to be repaired and this would involve cutting back the roots to the boundary."
- 4.1.6 The oak's circular RPA depicted by Tretec on the Tree Protection Plan (TPP) traverses the site boundary and encompasses sections of the public highway, carriageway and footpath; concrete drive serving 24's garage; raised beds with brick retaining walls; and steps, with surface level changes of about a metre. It is further to be noted that Tretec's discounting of neighbouring trees' RPAs has not been informed by the undertaking of any trial pits (nor is there any suggestion of other root investigation), nor is there any indication provided of damage to the brick boundary wall. The Structural Report confirms that no trial pits nor survey of the boundary walls have been undertaken, indicating that "the profile and depth of the existing garden wall foundations on the south side of the site and the retained façade foundations" are currently unknown to the applicant's team.
- 4.1.7 There is no evidence provided as to why the category B neighbour's trees should be disregarded with such insoluciance. It may also be noted that Tretec appears unaware of Camden's policy guidance, as p.1 of Tretec's AIA states "*In the absence of adopted local supplementary planning guidance specific to trees....*".

- 4.1.8 Landmark considers that it is unreasonable to fail to consider the RPAs of all the trees proximate to the proposed development in accordance with the relevant British Standard BS5837:2012 ("Trees in relation to Design, Demolition and Construction Recommendations") and Camden's adopted supplementary guidance ("Camden Planning Guidance Trees March 2019"). In this instance, significant primary constraints on development are posed by the category A oak T1 at 26 and category B limes and London plane T2 T5 within the neighbouring garden at 24 Rosslyn Hill.
- 4.2 Secondary Constraints
 - 4.2.1 The second type of constraint produced by trees that are to be retained is that the proximity of the proposed development to the trees should not threaten their future with ever increasing demands for tree surgery or felling to remove nuisance shading (Figure 4), honeydew deposition or perceived risk of harm.
 - 4.2.2 The shading constraints are crudely determined from BS5837 by drawing an arc from northwest to east of the stem base at a distance equal to the height of the tree, as shown in the diagram opposite. Shade is less of a constraint on nonresidential developments, particularly where rooms are only ever temporarily occupied.





- 4.2.3 This arc (see Figure 5) represents the effects that a tree will have on layout through shade, based on shadow patterns of 1x tree height for a period May to Sept inclusive 10.00-18.00 hrs daily.
- 4.2.4 Assuming that they will be retained, the orientation of the trees will ensure that shading constraints, leaf deposition and honey-dew likely to be as it is today. However, the off-site trees have the potential to provide a variety of secondary constraints, including shading, organic deposition and the potential need to maintain crown clearance in the future (albeit they are already subject of regular maintenance pruning). The significance of these constraints will vary depending on the location and proximity to the proposed re-development which is considered below (in Sections 5 & 6). As specified by BS5837, this section (4) of the report considers only the site as it is, not in the light of pending proposals.

Table 1: Arboricultural Impact Assessment

(Impacts assessed prior to mitigation and rated with reference to Matheny & Clark (1998))

Hide irrelevant Show All Trees

Ref: HWD/24RH/AIA

| B.S. Cat. | Tree No. | Species | Impact | Tree / RPA Affected | Age | Growth Vitality | Species Tolerance | Impact on Tree Rating | Impact on Site Rating | Mitigation |
|-----------|----------|--------------|----------------------------------|---------------------------------|--------|--------------------|----------------------|--------------------------|--------------------------|------------|
| A | T1 | Oak | Building Construction within RPA | 0.8 m² .48 % | Mature | Normal | | | | |
| | | | Level Changes within RPA | | | | | | | |
| В | T2 | Lime | Building Construction within RPA | 12.40 m ² 9.76 % | Mature | Normal | | | | |
| | | | Level Changes within RPA | | | | | | | |
| В | Т3 | Lime | Building Construction within RPA | 30 m ² 15.69 % | Mature | Normal | | | | |
| | | | Wall Underpinning within RPA | | | | | | | |
| В | T4 | London Plane | Building Construction within RPA | 96.38 m ² 19.32 % | Mature | Normal | | | | |
| | | | Wall Underpinning within RPA | | | | | | | |
| В | Т5 | Lime | Wall Underpinning within RPA | m² N/A % | Mature | Normal | | | | |
| | | | | 14/7 (70 | | | | | | |

6. ARBORICULTURAL IMPLICATIONS

- 6.1 Rating of Primary Impacts
 - 6.1.1 Tretec contends that the principal impacts in the current proposals will be limited to the need for pruning back of limes T2 and T3 to facilitate the erection of scaffolding of the front and side elevations; plus the target pruning back to the boundary of London plane T4 where it overhangs the proposed rearward extension of the new dwelling footprint.
 - 6.1.2 As highlighted in Section 4, Tretec seems to have completely disregarded the impacts arising to retained trees from the both encroachment of their RPAs, the extent of which is evident from Table 1 above and Landmark's Tree Constraints Plan in Part 3 of this report and temporary works required during construction.
 - 6.1.3 These RPA encroachments are attributable to (i) the level changes the application proposes and (ii) the underpinning of the boundary wall and construction of new foundations within the rear of the application site. These are considered below:
 - 6.1.4 As set out in the Design and Access Statement (Section 3.0) "The house was originally designed to follow the characteristic hilly ground of Hampstead. The main entrance, at the front of the property, is set well below the street level. The front garden path presents two sets of steps to reach the main entrance. A narrow side passage, that connects the front garden to the rear garden, also presents a steep set of steps that leads to the back yard which is set almost 3.5m below street level. The building's internal circulation also reflects the site topography. The building was designed on split levels: the front lower ground floor level sits almost 1m above the rear lower ground floor level. The split-level arrangement also continues on upper ground floor and first floor." The proposal seeks to redevelop the house such that "The access is relocated on the south side of the property at Upper Ground Floor Level and can be reached via an accessible approach route from the front garden...... The Lower Ground Floor Level is dedicated to the family daily activities and presents large glazed opening toward a small garden. At this level the proposal retains service access to the property both at the front and at the rear. This facilitates the logistics of all those activities connected to the kitchen, such as grocery delivery and waste management. The back of the house area offers ample space for bike storage as well. The proposal incorporates the lowering of the original ground level at the front of the property to improve the floor to ceiling height, as well as raising the ground level at the rear of the property to match the front." In addition, "The proposal seeks to infill the side passage that connects the front and rear of the property, thus creating new space for all the back of the house activities. This level retains access both from the front and rear of the property." These level changes are depicted in Fig. 6 overleaf which is extracted from the Proposed Plans, the red line showing the existing ground level:



Fig. 6: Proposed Section EE (Source: Proposed plans)

- 6.1.5 The alteration of the ground level at the front would appear to be within the RPA of oak T1 and lime T2; that along the flank and rear within the RPAs of limes T3, T5 and London plane T4. It appears likely to result in root damage to both trees, with consequent impact on their health and appearance.
- 6.1.6 In terms of the construction of new foundations within RPAs, the Structural Report states *"it is anticipated that the brick garden wall will have to be underpinned to create the new lower ground floor service entrance, pantry and boot room. The reinforced concrete underpins and toes create a new retaining wall to the garden at No 22-24 Rosslyn Hill which is higher than the proposed new lower ground floor. A 450 mm toe to the 250 mm thick underpin forms the structural slab in the lower ground floor in the area adjacent to the original brick garden wall." The underpinning and toes (and associated waterproofing) would be within the RPAs of limes T3 and T5 and London plane T4 and would almost certainly result in root severance. Given the proximity of T4 and T5 in particular to the boundary wall, it must be assumed that this is likely to be significant enough to result in damage to and the possible loss of these trees of important public amenity value, contributing to the character and appearance of the conservation area.*

6.1.7 The Structural Report indicates the "main foundations of the new building behind the retained façade [would] consist of a traditional mass concrete trench fill foundation. Based on the structural loading and anticipated ground conditions the preliminary design indicates 600 mm wide and 1.20 m deep foundations centred under the masonry load bearing walls above". It includes a proposed foundations plan (see Fig. 7 below) which can usefully be compared with Landmark's Tree Constraints Plan to indicate the extent of RPA encroachment that Tretec have disregarded.



Fig. 7 Proposed Foundations Plan (Source: Structural Report)

6.1.8 We do of course note that Tretec acknowledge significant roots may be present in the tarmacked area but must object to their assertion that this would automatically infer that they had breached the wall via direct damage and constitute an actionable nuisance. Our first point of objection lies in the assumption that roots within the application site must have grown through (breached as per Tretec) the wall itself. This is far from certain, especially with regard to T4, and we have experience of numerous sites where roots have grown beneath boundary wall foundations to resurface on the far side. Our second point of objection is more nuanced but it is also far from certain that the pruning back of any roots that have penetrated the wall would be subject to an exemption from Conservation Area regulations given it may not be necessary to do so to repair the wall, if this were even required.

- 6.1.9 Further, the Structural Report notes that "It is proposed to build a bin and bike store to the front of the building. The footprint of this element at lower ground level falls within tree T1 root protected area. Consequently, a traditional trench fill foundations as per the main building cannot be adopted for the bike store. A screw pile foundations system with ground beams spanning between the piles and supporting the suspended floor is proposed for this part of the building." The proposed bike store at the front appears to contradict the Design and Access Statement's assertion that there is ample room for bike storage at the rear noted at 6.1.4 above. Whilst the use of a screw pile foundation system may often provide an acceptable solution, it is considered that combining this with level changes is likely to have significant impacts for both oak T1 and lime T2.
- 6.1.10 Moving to damage to trees arising from wider construction activities, the Structural Report also describes the methodology for the proposed façade retention system. It observes "As the front of the property is within tree T1 root protected area (RPA), the new foundations for the temporary façade retention system consist of a series of reinforced concrete pad foundations / ground beams on screw piles. Therefore, this option minimises the amount of excavations within the RPA." Whilst acknowledging the proposed methodology makes some allowance for the RPA of oak T1 (albeit not for that of lime T2), it is considered that combining this with level changes is likely to have potential impacts for both oak T1 and lime T2. In addition, there appears to have been no assessment of the likely implications for the canopies which are likely to require pruning to facilitate access for installation. Fig. 8 overleaf is a sketch of the façade retention system extracted from the Structural Report:



Fig. 8 Proposed façade retention sketch (Source: Structural Report)

6.1.11 The Construction Management Plan shows the proposed materials storage area to be immediately adjacent to lime T5, within its RPA. It is accepted that this area is currently covered with tarmac (albeit the load bearing capacity is unknown), but there is a realistic possibility of canopy damage to the tree being caused, e.g. by swinging arcs of machinery involved in moving materials.

- 6.1.12 There is no set RPA encroachment that is immediately permissible. However, at para 5.3.a of BS5837, the project arboriculturist is charged with demonstrating that affected trees will remain viable in the instance of RPA encroachment. In this case, it appears that Tretec have significantly underestimated the likely impacts of the proposed development failing to take account of level changes; boundary wall underpinning; and disregarding RPAs without sound justification. Additionally no protection to neighbouring trees is detailed on their Tree Protection Plan.
- 6.1.13 The Arboricultural Method Statement section of Tretec's report also fails to consider how any impacts of the proposed level changes, façade retention system, boundary wall underpinning and foundation construction will be achieved without causing undue damage to adjacent trees.
- 6.1.14 In the absence of information confirming the absence of roots from T2 T5 within the application site, the supplied information cannot be considered sufficient to demonstrate affected trees will remain viable. Landmark therefore considers ill-founded the assertions in the Applicant's Planning and Heritage Statement that:
 - "4.24 No trees are proposed to be removed as part of the development, in line with Policy A3 'Biodiversity'. The submitted Assessment identifies a mature Category A Oak tree at the front of the property and a number of other Category B and C trees off site.
 - 4.25 As the proposal retains the existing front garden arrangement as far as possible the implications of any development impacting the Oak tree are minimised whilst precautions during the construction phase, including tree protection fencing, will be put in place to ensure the tree is protected during construction.
 - 4.26 In terms of the pollarded lime trees along the boundary with Nos. 22 and 24, it is anticipated that some pruning will be required to these trees to facilitate scaffolding for the construction of the property. Similarly, it is also identified that some pruning may be required to the London Plane again along the boundary of the site, at the rear. The trees will not however otherwise be impacted by the proposed development.
 - 4.27 The proposal therefore ensures that all existing trees are retained and the provision of the Tree Protection Plan and Arboricultural Impact Assessment ensures that all will be satisfactorily protected during the demolition and construction phase of development in accordance with Policy NE2 of the Neighbourhood Plan "

7. CONCLUSION

- 7.1 This report has assessed the impacts of the development proposals and concludes that Tretec's Arboricultural Implications Assessment and Tree Protection Plan have significantly underestimated the likely potential impact on the trees and have not demonstrated trees with the potential to be affected by development can remain viable.
- 7.2 Whilst the default position is that structures be located outside the Root Protection Area* (RPA) of trees to be retained, there are a number of encroachments which have been discounted by Tretec without sound justification. Indeed, there appear to be several shortcomings in the Tretec information.
- 7.3 In conclusion, it is considered that the current arboricultural submissions significantly underestimate the likely impacts on the trees and fail to take account of a number of relevant factors. On the basis of the existing submitted information, the proposals are likely to result in considerable damage to the trees and the wider Hampstead Conservation Area contrary to the guidance referred to at 1.6 above plus relevant local planning policies comprise Policies G1 and G7 of the London Plan 2021 and Policies A3, D1, D2 of the Camden Local Plan (adopted 3rd July 2017).

8. **RECOMMENDATIONS**

8.1 Specific Recommendations

- 8.1.1 Trial pit investigations be undertaken to inform:
 - (i) the profile and depth of the existing foundations to boundary wall and front façade
 - (ii) the depth and extent of tree rooting within the application site
- 8.1.2 Detailed proposed levels information is provided to show the extent of level changes within RPAs of all retained trees on and adjacent to the site.
- 8.1.3 A treework specification be provided detailing the extent of any proposed pruning (above or below ground) of all retained trees on and adjacent to the site.
- 8.1.4 A more detailed Arboricultural Method Statement be provided which includes details of tree protection measures in accordance with clauses 6.1, 6.2.3, 6.2.4 and 6.3 of BS5837: 2012 and paragraphs 2.51 2.58 of Camden Planning Guidance Trees March 2019

9. COMPLIANCE: Trees and the Planning System

- 9.1 Under the UK planning system, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications. Where trees are statutorily protected, it is important to contact the local planning authority and follow the appropriate procedures before undertaking any works that might affect the protected trees.
- 9.2 The nature and level of detail of information required to enable a local planning authority to properly consider the implications and effects of development proposals varies between stages and in relation to what is proposed. Table B.1 provides advice to both developers and local authorities on an appropriate amount of information. The term "minimum detail" is intended to reflect information that local authorities are expected to seek, whilst the term "additional information" identifies further details that might reasonably be sought, especially where any construction is proposed within the RPA.
- 9.3 Landmark considers that the arboricultural information submitted in respect of application 2023/1116/P fails to deliver information appropriate to a full planning application and to the specific proposals as per BS5837 Table B.1 below, it does not provide even the minimum details let alone adequate further additional material in the form of general tree protection recommendations and constructional variation.

| Stage of process | Minimum detail | Additional information | | | | |
|--|---|--|--|--|--|--|
| Pre-application | Tree survey | Tree retention/removal plan (draft) | | | | |
| Planning application | Tree survey (in the absence of pre-application discussions) | Existing and proposed finished levels | | | | |
| | Tree retention/removal plan (finalized) | Tree protection plan | | | | |
| | Retained trees and RPAs shown on proposed layout | Arboricultural method statement – heads of terms | | | | |
| | Strategic hard and soft landscape design, including species and location of new tree planting | Details for all special engineering within the RPA and other relevant construction details | | | | |
| | Arboricultural impact assessment | | | | | |
| Reserved matters/ planning conditions | Alignment of utility apparatus (including drainage), where outside the RPA or | Arboricultural site monitoring schedule Tree and landscape management plan | | | | |
| | where installed using a trenchless method | | | | | |
| | Dimensioned tree protection plan | Post-construction remedial works | | | | |
| | Arboricultural method statement – detailed | Landscape maintenance schedule | | | | |
| | Schedule of works to retained trees, e.g. access facilitation pruning | | | | | |
| | Detailed hard and soft landscape design | | | | | |

Table B.1 Delivery of tree-related information into the planning system

Review of arboricultural submissions - Application 2023/1116/P at 26 Rosslyn Hill – for 24 Rosslyn Hill, London NW3 1PD Instructing party: Private client c/o Hereward & Co Solicitors, Planning Matters, 94 Queensway, London W2 3RR Prepared by: Ann Currell & Adam Hollis of Landmark Trees, Holden House, 4th Floor, 57 Rathbone Place, London W1T 1JU

10.0 REFERENCES

- Barlow JF & Harrison G. 1999. Shade By Trees, Arboricultural Practice Note 5, AAIS, Farnham, Surrey.
- British Standards Institute. 2012. Trees in Relation to Design, Demolition and Construction Recommendations BS 5837: 2012 HMSO, London.
- Centre for Ecology & Hydrology. 2006. Tree Roots in the Built Environment, HMSO, London.
- Helliwell R (1980) Provision for New Trees; Landscape Design; July/August issue
- International Society of Arboriculture (ISA). 1994. The Landscape Below Ground. ISA, Champaign, Illinois. USA.
- Lonsdale D 1999. Research for Amenity Trees No.7: Principles of Tree Hazard Assessment and Management, HMSO, London.
- Matheny, N; Clark, J. R.1998. Trees and Development: A Technical Guide to Preservation of Trees during Land Development. ISA, Champaign, Illinois. USA.
- Mattheck C. & Breloer H. 1994. Research for Amenity Trees No.2: The Body Language of Trees, HMSO, London.
- Thomas P, 2000 & 2014. Trees: Their Natural History, Cambridge University Press, Cambridge.
- Trowbridge J & Bassuk N (2004) Trees in the Urban Landscape: Site Assessment, Design, and Installation; J Wiley & Sons inc.
 NJ USA



Caveats

This report is primarily an arboricultural report. Whilst comments relating to matters involving built structures or soil data may appear, any opinion thus expressed should be viewed as qualified, and confirmation from an appropriately qualified professional sought. Such points are usually clearly identified within the body of the report. It is not a full safety survey or subsidence risk assessment survey. These services can be provided but a further fee would be payable. Where matters of tree condition with a safety implication are noted during a survey they will of course appear in the report.

A tree survey is generally considered invalid in planning terms after 2 years, but changes in tree condition may occur at any time, particularly after acute (e.g. storm events) or prolonged (e.g. drought) environmental stresses or injuries (e.g. root severance). Routine surveys at different times of the year and within two - three years of each other (subject to the incidence of the above stresses) are recommended for the health and safety management of trees remote from highways or busy access routes. Annual surveys are recommended for the latter.

Inherent in a tree survey is assessment of the risk associated with trees close to people and their property. Most human activities involve a degree of risk, such risks being commonly accepted if the associated benefits are perceived to be commensurate.

Risks associated with trees tend to increase with the age of the trees concerned, but so do many of the benefits. It will be appreciated, and deemed to be accepted by the client, that the formulation of recommendations for all management of trees will be guided by the cost-benefit analysis (in terms of amenity), of tree work that would remove all risk of tree related damage.

Prior to the commencement of any tree works, an ecological assessment of specific trees may be required to ascertain whether protected species (e.g. bats, badgers and invertebrates etc.) may be affected.



PART 2 – APPENDICES

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APPENDIX 1

TREE SCHEDULE

| Botanical Tree Names | |
|----------------------|---------------------------|
| Ash, Common | : Fraxinus excelsior |
| Lime, Common | : Tilia x europaea |
| Oak, English | : Quercus robur |
| Plum, purple | : Prunus cerasifera nigra |

Notes for Guidance:

- 1. Height describes the approximate height of the tree measured in metres from ground level.
- 2. The Crown Spread refers to the crown radius in meters from the stem centre and is expressed as an average of NSEW aspect if symmetrical.
- 3. Ground Clearance is the height in metres of crown clearance above adjacent ground level.
- 4. Stem Diameter (Dm) is the diameter of the stem measured in millimetres at 1.5m from ground level for single stemmed trees. BS 5837:2012 formula (Section 4.6) used to calculate diameter of multi-stemmed trees. Stem Diameter may be estimated where access is restricted and denoted by '#'.
- 5. Protection Multiplier is 12 and is the number used to calculate the tree's protection radius and area
- 6. Protection Radius is a radial distance measured from the trunk centre.
- 7. Growth Vitality Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
- Structural Condition Good (no or only minor defects), Fair (remediable defects), Poor Major defects present.
- Landscape Contribution High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
- 10. B.S. Cat refers to (British Standard 5837:2012 section 4.5) and refers to tree/group quality and value:
 'A' High, 'B' Moderate, 'C' Low, 'U' Unsuitable for retention. The following colouring has been used on the site plans:
 - High Quality (A) (Green),
 - Moderate Quality (B) (Blue),
 - Low Quality (C) (Grey),
 - Unsuitable for Retention (U) (Red)
- 11. Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservational, Historic and Commemorative.
- 12. Useful Life is the tree's estimated remaining contribution in years.

| W | K | Site: Date: | 24 (26) 30/05/2 | Ros 2023 | slyn H | ill | | | Арр | pendix | 1 | | | | Landmark Tre 020 7851 4544 | es Ltd |
|-------------|---------|----------------|--------------------|-------------|-----------------|---------------------|-----------------|--------------|----------------------|--------------------|----------------------|-------------|------------|----------------|---|-----------------------------|
| Landmark | < Trees | 20101 | | | | | BS583 | 87 Tree | Const | raints | Survey | v Sch | edul | e | Surveyor(s): Ref: | Ann Currell HWD/24RH/AIA |
| Tree No. | Engli | ish Name | e l | Height | Crown Spread | Ground Clearance | Stem Diamete | Age Class | Protection Radius | Growth Vitality | Structural Condition | B.S. Cat | Sub Cat | Useful Life | Comments | |
| T1 | | Oak | | 14 | 6/8/6/6 | 2.0 | 610 | Mature | 7.3 | Normal | Good | A | 2 | 40+ | Remote survey only (RS) At 26 Rosslyn Hill, no access so T | retec 2022 stem diameter |

| T2 | Lime | 12 | 5/8/4/3 | 3.0 | 530 | Mature | 6.4 | Normal | Good | В | 2 | 40+ | Two stems In bin / rubbish enclosure between garage and boundary; Base surrounded by debris and partially obscured |
|----|--------------|----|---------|-----|------|--------|------|----------|------|---|---|-----|--|
| Т3 | Lime | 10 | 3/3/3/4 | 3.0 | 650 | Mature | 7.8 | Normal | Good | В | 2 | 40+ | Basal growth to ground level Forks at 3.5m Base partially surrounded by decking; maintained as high |
| T4 | London Plane | 12 | 5/4/5/7 | 3.0 | 1050 | Mature | 12.6 | Normal | Good | В | 2 | 40+ | Considerable burrs on lower main stem; maintained as high pollard |
| T5 | Lime | 12 | 3/2/3/3 | 3.0 | 450 | Mature | 5.4 | Normal | Good | В | 2 | 40+ | Large lateral previously removed Forks to two main stems just below top of boundary wall; maintained as high pollard |
| Τ6 | Purple Plum | 9 | 1/3/2/2 | 3.0 | 492 | Mature | 5.9 | Moderate | Fair | С | 2 | 20 | Convoluted multi-stem Cut back at various heights inc. approx. 3m overhanging boundary of 3 Hampstead Hill Gardens |

| | | | Landmark Trees Ltd | | | |
|----------------|----------------------------|---|--|---|--|--|
| | Site: 24 (26) Rosslyn Hill | Appendix 1 | 020 7851 4544 | | | |
| Landmark Trees | Date: 30/05/2023 | BS5837 Tree Constraints Survey Schedule | Surveyor(s): Ann Currell Ref: HWD/24RH/AI | A | | |

| Tree No. | English Name | Height | Crown Spread | Ground Clearance | Stem Diamete | Age Class | Protection Radius | Growth Vitality | Structural Condition | B.S. Cat | Sub Cat | Useful Life | Comments |
|-------------|--------------|--------|-----------------|---------------------|-----------------|--------------|----------------------|--------------------|----------------------|-------------|------------|----------------|--|
| Τ7 | Ash | 11 | 4/4/5/6 | | 400 | Mature | 4.8 | | | С | | 5 | Remote survey only (RS) Offsite – no access so used Tretec 2022 figures |



PART 3 – PLANS

Review of arboricultural submissions - Application 2023/1116/P at 26 Rosslyn Hill – for 24 Rosslyn Hill, London NW3 1PD Instructing party: Private client c/o Hereward & Co Solicitors, Planning Matters, 94 Queensway, London W2 3RR Prepared by: Ann Currell & Adam Hollis of Landmark Trees, Holden House, 4th Floor, 57 Rathbone Place, London W1T 1JU

PLAN 1

TREE CONSTRAINTS PLAN

Review of arboricultural submissions - Application 2023/1116/P at 26 Rosslyn Hill – for 24 Rosslyn Hill, London NW3 1PD



NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).



Category U Trees Unsuitable for Retention

Key:

Landmark Trees

Landmark Trees Holden House, 4th Floor, 57 Rathbone Place, London W1T 4JU Tel: 0207 851 4544 Mobile: 07812 989928 e-mail: info@landmarktrees.co.uk Web: www.landmarktrees.co.uk

Site: 24 Rosslyn Hill 1:100@ A1 Drawing Title: Tree Constraints Plan June 2023 Crown Spread Category -Category A High Quality Tree Number Root Category B Moderate Quality Species Protection -Area Category Category C Low Quality



5m

ARBORICULTURAL IMPACT ASSESSMENT PLAN (S)

Lower Ground Floor

Review of arboricultural submissions - Application 2023/1116/P at 26 Rosslyn Hill – for 24 Rosslyn Hill, London NW3 1PD



NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground convicos underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).



Category B Moderate Quality

Category U
 Trees Unsuitable for Retention

Category C
 Low Quality

Landmark Trees

Holden House, 4th Floor, 57 Rathbone Place, London W1T 4JU Tel: 0207 851 4544 Mobile: 07812 989928 e-mail: info@landmarktrees.co.uk Web: www.landmarktrees.co.uk

– Species

Category

Site: 24 Rosslyn Hill 1:100@ A1 Drawing Title: Arboricultural Impacts Assessment June 2023 Key: Crown Spread Category - Category A
 High Quality Tree Number

Root

Area

Protection -

| w- | |
|----|-----|
| | 10m |