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Arboricultural Impact Assessment and Method Statement

No. 2 Murray Road, Northwood, Middx HA6 2YN

CLIENT:	**Dr Nizar Merali**
CLIENT REF:	**NM/MRNM**
AAAL REF:	**SAL/KMA/11913**
AAAL CONSULTANT:	**Shane A. Lanigan**
REPORT DATE:	**28th February 2024**

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Validation Statement for Local Planning Authority (LPA) registration of this report

This report fulfils the recommended national list criteria for tree survey/arboricultural information. More specifically, it contains the following.

- A full tree survey compliant to the requirements of BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations, undertaken by a qualified arboriculturist.
- A plan to a suitable scale with a north point and showing tree survey information, retention categorisation and root protection areas.
- An assessment of the arboricultural implications of development detailing trees to be retained/removed and appropriate protection measures.
- An arboricultural method statement detailing the means of tree protection, implementation, and phasing of works.

EXECUTIVE SUMMARY

This development proposal is to refurbish the existing building and create a new entrance way from the existing hard-surfaced car parking area to the rear – southwest. The main vehicular and pedestrian access will be from Murray Road, as it is now, though will be widened to allow vehicles to enter and leave simultaneously. One tree (T1 – London plane) will need to be removed to facilitate this.

Renovation works will take place within the calculated Root Protection Areas (RPAs) of T14, T15, T16 and T17. It is probable that the existing car park in this area will be resurfaced and entail disturbance to the southeastern sectors of the RPAs of these trees. Special Construction Methods (SCMs) will be needed here to avoid damage to the roots of the retained trees. A small, declining, poor-quality pear tree (T18) will need to be removed to 'free-up' space for parking bays. Two small early mature trees are growing on third-party land near to the southwest corner of the existing car park. Special construction methods will be needed here too, in-order to avoid damage to the encroaching roots of these trees.

Existing grassed areas between the building and trees T1-T8 and T10-T13 are to be retained as soft-landscape.

S.A. Lanigan – Chartered Arboriculturist
MICFor, Dip.Arb. (RFS), M.Arbor A, RCArborA – ISA, BCMA, CUEW,
ASCA Registered Consulting Arborist #588

Reference publications are listed at the back of this report (Appendix 4)

1. Introduction

1.1 **Instruction**: I am instructed by Mr Simon Foxell of The Architects Practice to prepare a BS 5837 compliant report relating to trees/hedges for this site. The assessment will consider trees that might be adversely affected by the works in the context of the outline building design. A survey of those trees more than 75 mm diameter at Breast Height (DBH) has been undertaken and data from this will be used to create a Tree Constraints Plan (TCP). I have assumed the project will progress and so have used data from the tree survey to create a Tree Constrains Plan (TCP) and from this a Tree Protection Plan (TPP) with a supporting arboricultural method statement. I will provide the following information and associated data within my report which will accompany the planning application.

- A schedule of trees to include basic data as required by BS 5837: (2012) complete with a condition assessment.
- An arboricultural impact assessment in respect of the impact on retained trees and local landscape character.
- An arboricultural method statement pertaining to working methods and the protection and management of retained trees.

1.2 I began my inspection at 8.27 am concluding at 10.16 am on Tuesday 27th February 2024. Weather conditions during my time on site were cold and overcast though dry. Visibility was good.

1.3 The arboricultural issues in relation to this site are highlighted below with accompanying recommendations provided in Appendix 1 – Tree Survey Schedule.

1.4 **Documents provided**:

- Existing Site Plan – Drawing No. MRN/P/02 - Prepared by The Architects Practice
- Proposed Site Plan – Drawing No. MRN/P/22 - Prepared by The Architects Practice
- Topographical Survey – Drawing No. MB-SURV-MR-TS-001 – Prepared by ICELABZ

1.5 **Ecological Constraints**: Impacts on wildlife must be considered prior to and during any tree works deemed necessary. Such matters are governed by various pieces of primary legislation, specifically:

Conservation of Habitats and Species Regulations 2019
EC Habitats Directive
Environment Act (2021) – Schedule 14 Para 6 2006
ODPM Circular O6/05 Para 99
Natural Environment and Rural Communities (NERC) Act
Natural Planning Policy Framework (as amended 2021) Clause 15 Paras 174, 180 & 188
Town and Country Planning (Environmental Impact Assessment Regulations 2017)
Town and Country Planning Act 1990
Town and Country Planning (Trees) (England) Regulations 2012
Wildlife and Conservation Act (1981)
Additional Subordinate legislation and guidance should be considered including:
Ancient Woodland Inventory (Natural England)
Ancient Tree Inventory (Woodland Trust)
Chartered Institute of Ecology and Environmental Management (CIEEM) Guidance
Biodiversity 2020 'A Strategy for England's Wildlife and Ecosystem Services (2011)'
BS 42020: 2013 Biodiversity: Code of Practice for Planning and Development
(The) England Tree Strategy
Forestry Commission Standing Advice
(A) Green Future: Our 25 Year Plan to Improve the Environment (UK Government)
Natural Forest Strategy (National Forest Company)
Natural Vegetation Classification (NVC) JNCC
Natural England Standing Advice
UK Biodiversity Action Plan (UKBAP)
UK Forestry Standard
UK Woodland Assurance Standard

1.6 **Statutory Tree Protection**: I have made enquiries of the Local Planning Authority which in this instance is the London Borough of Hillingdon, to ascertain the existence or otherwise of any Tree Preservation Orders which may be applied to this site, or whether the site falls within a designated conservation area (see Appendix 6 'A Brief Explanation of Tree Preservation Orders/ Conservation Areas' at the back of this report). The local authority's web site shows that the trees on this site are not protected by any Tree Preservation Orders but the site does lie within a designated conservation area, namely, the Northwood Town Centre, Green Conservation Area. The status of the tree preservation order and conservation area designation is only confirmed at the time of writing.

1.7 **Qualifications and professional experience**: This report is based on my site inspection and assessment of the existing trees. I hold formal qualifications in arboriculture and have the benefit of fifty-three years professional experience in this discipline. A summary of these matters is enclosed as Appendix 2.

1.8 **Background Information**: The building within this site was formerly used as a police station. It has a large car parking area to the rear which was historically accessed from Murray Road. Two lines of historically pollarded London plane trees are growing on the site perimeters: one line borders Murray Road while the second runs parallel with Maxwell Road.

1.8.1 The trees were originally pollarded at around 3 m before being allowed – at some time in their maintenance cycle – to grow on before being cut at about 6 m above ground level. They have all now regrown to around 13 m and in summer function as a highly visible and cohesive arboricultural feature. With the exception of T1, which is to be removed to create a wider and safer entrance/exit road, all the plane trees can be retained. They are however, all structurally compromised to varying degrees and so will need to be re-pollarded to the 6 m level and maintained by pruning back to this level every third year.

1.9 **Soils**: I accessed the United Kingdom Soil Observatory web site to gain insight into the type of soil present here. The web site showed that the soil depth was Deep with a texture of Loam to Clayey Loam to Silty Loam, the parent material from which this has evolved by the 'weathering process' is described as Prequaternary Marine/ Estuarine Sand and Silt. This material could be subject to desiccation and concomitant shrinkage in certain circumstances. The UKSO website is generally a good guide to soil type within a general area but is not site-specific. Site soil testing by way of trial pits, boreholes, and technical analysis is the recognized way to obtain truly accurate site-specific results.

2. Arboricultural Impact Assessment

2.1 **Summary of the impact on existing trees**: Development of sites, particularly those with existing tree cover can impact upon the trees both by the direct effect of tree loss and by indirect effects caused by root loss or damage, or alterations to the site topography and hydrology. Such impacts can lead to loss of visual amenity due to tree removals or significant pruning. These losses can also impact upon the cultural and ecological values of the area particularly by way of disruption of wildlife habitat. I have summarised the impact of this proposal on trees in Table 1. This site is identified as No. 2 Murray Road. Northwood, Middx HA6 2YN –
Grid Reference: TQ 091913 – Elevation: 74 m

TABLE 1

IMPACT	REASON	A	B	C	U
Trees to be removed: Trees to be removed: T1 – London plane T8 – Pear T21 – Japanese laurel	 To enable widening of the access road. To enable efficient use of the car park area. Because it is outgrown and will hinder the renovation work.	**0**	**0**	**0**	**3**
Retained trees that may be affected by disturbance to their calculated root protection areas. Trees/hedges that may be affected by works within their calculated RPA's: T2 – London plane T3, T4, T5, T6, T7, T8 – London plane T9 – Lime T10, T11, T12, T13, T14, T15, T16, T17 – London plane T22, T23 - Lime	 Works to widen the access road Minor works to fence the existing access way and install the new acoustic fence. Significant works to take up the existing car park surface and install a new wearing surface.	**0**	**0**	**18**	**0**
Retained trees to be pruned: None		**0**	**0**	**0**	**0**

2.2 **Detailed Impact Appraisal**

2.2.1 **Trees to be removed to enable the development**:
Three trees, numbers 1, 18 & 21 (see Photographs 1 & 5, Appendix 3, at the back of this report) are to be removed to enable necessary development works. Tree one (London plane) is the first, easternmost tree of the line, that borders Murray Road. It is an aged tree that has been historically maintained as a pollard and which is now appreciably decayed as a result of this practice. Nonetheless, it retains significant value as part of this cohesive arboricultural feature. Should it be removed the intrinsic value of the tree line will be only minorly diminished. Its loss will be partially mitigated by enhanced growth of T2, which is also a London plane.

2.2.1.1 Tree 18 is a small domestic pear tree which is in generally poor condition. Its loss can be compensated for by planting elsewhere on open site areas. T21 (Japanese laurel) is an insignificant large shrub which has become outgrown such that it is now in contact with the building and will prevent the proposed renovation works.

2.2.2 **Trees to be pruned to enable the development**:
No trees are to be pruned to enable the development although all the plane trees will need to be re-pollarded to around 6 m (the most recent pruning point) (see Photographs 3 & 4, Appendix 3, at the back of this report) to re-initiate the lapsed management regime. The work will also reduce the likelihood of tree failure due to decay at the original, lowest pruning points at around 3 m above ground level.

2.2.3 **Category C trees that may be affected by way of RPA disturbance**:
Eighteen category C trees will be minorly affected by way of RPA disturbance (see table 1, page 9). Works will be undertaken within their calculated RPAs in-order to install fencing to the sides of the existing building entrance and acoustic fencing behind the existing laurel hedging. Provided that this work takes place at least 2 m from the inner edge of the tree trunks, and is executed by means of special construction methods, e.g. hand-digging of post holes to avoid damage to significant roots there should be little effect on any tree parts.

2.2.3.1 Trees 15, 16 and 17 (see Photographs 4, Appendix 3 and Appendix 7, Tree Constraints Plan, at the back of this report) have calculated RPAs that extend quite significantly into the existing car parking area (see Photographs 5 & 7, Appendix 3, at the back of this report). It is likely that this area will be taken up and resurfaced. If this is so then special construction methods shall be used to avoid damage to roots of the retained trees (see paragraph 3.4). These methods will need to be employed when working within the calculated RPAs of T19 and T20 (see Photograph 6, Appendix 3, at the back of this report).

2.3 **Mitigation of construction impacts**

2.3.1 **Protection of retained trees**: It is important that trees scheduled for retention are protected against damage caused by construction work. Such damage can be caused by physical operations, particularly excavation works. Other means of damage are by way of ground compaction or discharge of toxic or other prejudicial materials. Protective barriers and ground cover are an effective means to prevent direct and indirect damage to retained trees. Such an arboricultural method statement is an effective means of ensuring tree protection and can be referred to in a planning condition. An arboricultural method statement for this site is set out in Section 3.

2.3.2 **New Planting**: The site is currently well-populated with trees, perhaps excessively so (see Photographs 1, 2, 3 & 4, Appendix 3, at the back of this report). Even so, there is space to install perhaps four new trees within the grassed area to the front, northwest, of the existing building. These will be included within the site landscaping plan.

2.3.3 **Summary of the impact on local landscape character:** The three trees to be removed will impact only minorly on local landscape character. Increased growth of T2 will mitigate the loss of T1, T18 is a poor-quality declining tree that is barely visible from outside the site, whilst T21 is more an overgrown shrub than a tree.

3. Arboricultural Method Statement

3.1 **Introduction:** The arboricultural impact appraisal in Section 2 outlined the impact of the development proposals on the existing trees and how that may affect local landscape character, it will not. This section is an arboricultural method statement which identifies necessary tree protection details and associated management needs that will serve to protect the trees and enable their successful retention. In-order to prepare effective proposals for both physical tree protection and associated management and supervision I have prepared two plans to assist in tree protection provision and necessary management. The first plan is a tree constraints plan detailing the tree categories, crown spread, and calculated root protection area (Appendix 7). My second plan details the location of the tree protection barriers, storage areas and the means of access to the working area (Appendix 8). I used the following primary reference material in [proposing this report:

- BS 5837:2012- Trees in relation to design, demolition and construction – Recommendations.
- Hillier's Manual of Trees and Shrubs
- National Joint Utilities Group Volume ,4 Issue 2.
- NHBC Standards 2020
- Tree Roots and Buildings

3.2 **Plan TPP SAL/NM/MRNM/11913**: The tree protection plan (TPP) which is included as Appendix 8 is illustrative only and may exclude various on-site features. I have prepared the plans myself using scaled measurements from the plans provided by The Architects Practice and ICELABZ. The plans relate specifically to the potential tree/construction process issues. My measurements are as accurate as possible but as an aid to quality control I advise that all scaled measurements be checked against the submitted documents. The precise location of all tree protection measures including barriers and ground protection should be confirmed at the pre-commencement site meeting before any significant demolition or construction activity begins. Methods for working within tree RPAs are detailed in section 3.4 and the placement of tree protection barriers is specified in 3.2.1 while also being shown on the tree protection plan (see Tree Protection Plan, Appendix 8).

3.2.1 **Tree Protection Barriers**: On this site tree protection barriers shall be placed west of trees 1-8 and G1 (see Appendix 7), and east of trees 10-14 and G2 (see Appendix 7). It will be impractical to place tree protection barriers around the extensive RPAs of trees 15, 16 and 17 because these encompass the existing hard-surfaced car parking area. Instead, the areas above the calculated RPAs shall be designated as one where special construction methods will be used to avoid ground compaction and collateral root damage.

3.2.2 Trees growing within and near to the site that may be affected by construction activity are shown on the plans (see TCP & TPP - Appendices 7 & 8). These are numbered and coloured in accordance with BS 5837:2012 Trees in relation to design, demolition and construction Recommendations (p19, 20, 21, & 22). The colours denote the BS: 5837 categorisations, as follows:

A - green
B - blue
C - grey
U - red

3.2.3 All plant, machinery and materials will be stored on the existing car park behind the building. This area currently has a load-bearing surface and so will not be subject to compaction and concomitant harm to tree roots.

3.2.4 I have specified special construction methods to be used over the calculated RPAs of T15, T16, T17 (see Photograph 4, Appendix 3 at the back of this report) T19 and T20 (see Photograph 6, Appendix 3, at the back of this report) in-order to avoid the use of mechanical excavators – and other powered equipment - which could damage tree roots. The use of mechanical augers to install posts for the acoustic fence will be permitted provided these are operated with care and damage to any structural roots is avoided.

3.3 **Design of the Barriers:** Any barriers will be installed in compliance with the requirements of BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations (p19, 20, 21 & 22) (see Appendix 9).

3.3.1 **Other construction activities:** It is not only direct protection of the tree RPAs that is needed. Other construction activities that may impact adversely upon trees include:

- movement of plant and machinery;
- storage of materials;
- the location of site huts and welfare facilities; and the mixing of mortar and concrete with associated 'washout-residues.'

Any mixing of concrete and storage of materials and plant shall be confined to the areas that are marked with green hatching on the tree protection plan (see TPP Appendix 8).

3.4 **Methodology for working in Root Protection Areas:** Some construction will take place within most of the trees on site and the three lime trees growing on public land to the front and side of the site. I have specified special construction methods to be used here to avoid harmful damage to any significantly-sized roots that might be encountered when installing the new, wider driveway, the acoustic fence and the new surface to the existing car parking area behind the existing building. Hand-digging and limited mechanical auguring in these areas should prevent significant damage to tree roots and enable retention of the trees and hedging.

3.5 **Site works that may impact upon retained trees**

3.5.1 **Tree work recommendations:** Three trees are to be removed prior to any construction work beginning: these are T1 (London plane), T18 (domestic pear) and T21 (Japanese laurel). All of the retained plane trees will need to be re-pollarded within the next year or so to initiate a new cyclical pruning regime. This work is not needed to begin the building renovations.

3.5.2 **Site access**: Site ingress and egress shall take place solely over the existing hard-surfaced car parking area. There is sufficient room inside the site for vehicles and plant to manoeuvre so reversing in will not always be necessary. When it is, a 'banksman' will be used.

3.5.3 **Site huts, welfare facilities, toxic run off**: Site huts, welfare facilities and activities that may generate toxic run-off will be sited within the areas marked with green hatching on the Tree Protection Plan.

3.5.4 **Services:** I presume that all services will connect to those within the existing building. Therefore, no trenching or excavation works will be needed within the RPAs of any retained trees.

3.6 **Programme of Works**

3.6.1 Works should be undertaken in such a way that minimises adverse effects to the retained trees. The following methodology shall be employed:

i) Remove T1, T18 and T21.
ii) Install tree protection barriers.
iii) Carry out renovation works – retaining existing hard-surfacing throughout this process.
iv) Install the new access road and car park surface ensuring that special construction methods are used within the calculated RPAs of T2, T15, T16, T17, T19 and T20.
v) Remove all surplus materials, plant and arisings from site.
vi) Implement planting of the landscape plan components.

3.7 **Tree protection and supervision**

3.7.1 **Overview**: Effective tree protection requires input from an arboricultural professional. Such a person shall be on site during the excavation process and at other relevant stages of the works. Provided that this advice is followed there should be few adverse effects on tree health.

3.7.2 **Effective arboricultural supervision and the discharge of planning conditions**: A retained arboricultural consultant may assist in the discharge of any arboricultural planning conditions imposed by the Local Planning Authority. It is considered unlikely that construction based supervisory personnel would have the required level of arboricultural knowledge to effectively ensure and demonstrate compliance with such conditions. The arboricultural supervisory input is usually by way of scheduled site visits, with appropriate follow up written confirmation of the issues discussed being circulated to all relevant parties. The records of each site visit and pertinent issues which have been addressed should be retained as preferably both electronic and written files and such files could then be effectively used as proof of compliance with conditions, thereby allowing these to be discharged at appropriate stages of development.

3.7.3 **Stages of arboricultural advice and supervision**: Integrated arboricultural involvement can be an effective tool in addressing all tree related issues once consent for the development is confirmed. The following stages of the development project should involve the arboricultural consultant.

i) **Initial planning preparation in relation to trees**:
The development that is implemented is often very different to that which was originally envisaged. Planning is frequently an evolving process which changes in response to issues and constraints that arise as the design process moves forward. An arboricultural consultant instructed early in the process can assist in the integration of tree issues into the overall site management. The consultant can advise on effective measures, sometimes in ways that may save expense and time and ensure that delays are minimized. Discussion between the arboricultural consultant and the development team should begin at an early stage in-order to effectively manage tree issues and avoid unnecessary delays.

ii) **Post survey site visit**: Prior to any works beginning, a meeting should be held preferably on site, between the site manager, arboricultural consultant and the Local Planning Authority tree officer or other planning department representative. Minutes of the meeting should be taken and written up before being filed as part of the development monitoring process. Tree protection measures should be fully discussed at this meeting so that their purpose and means of implementation are understood by all sides. At this meeting any clarifications or alterations to the planning consent details should be agreed and recorded. Final details of the tree protection measures should be agreed and the basis of any supervision measures between the arboricultural consultant and the developer will be derived from this.

iii) **Arboricultural supervision**: Soon after commencement of site activity the arboricultural consultant should visit in accordance with a pre-prepared schedule of supervision. It may be necessary to arrange ad-hoc visits to address contentious issues should these arise. The arboricultural consultant may be viewed as a link between the developer and the Local Planning Authority. It will be the arboricultural consultant's role to ensure that the protective measures as designed and submitted are in place and providing effective protection before work begins. Subsequently the arboricultural consultant's role will be to monitor compliance with any conditions imposed by the Local Planning Authority and providing advice on any tree related problems that may arise, formulating solutions or modifications as necessary.

3.7.4 **Site Management**: The details of this arboricultural method statement and any subsequent amendments must be known and understood by all site personnel. It is the responsibility of the developer to ensure that the details of the method statement are made known to all personnel who may cause harm to any retained trees. An effective method of providing the information to such persons would be to issue them with copies of the documents. This should be done as part of the site induction process and written into appropriate site management procedures. All recipients of the document should sign to confirm receipt of the document and that they understand the content and requirements.

4. Key to Tree Survey Data

4.1 **Tree No**: Tree numbers correlate with those shown on the Tree Survey Plan. Most trees are shown as individuals though some are identified as groups in which case the prefix is G rather than T.

4.2 **Species**: These are identified within the tree schedule by their common name – e.g., Lime rather than *Tilia x europea* - Scientific nomenclature is listed below.

- Cherry laurel: *Prunus laurocerasus* L.
- Common lime: *Tilia x europaea* L.
- Japanese laurel: *Aucuba japonica* Thunb.
- Lime: *Tilia x europaea* L.
- London plane: *Platanus x hispanica* Mill. ex Münchh.
- Norway maple: *Acer platanoides* L.
- Pear: *Pyrus communis* L.
- Rowan: *Sorbus aucuparia* L.

4.3 **Age Class**: An assessment of the relative life stages of the tree where Y = young (first one third of life expectancy), MA = middle aged (second one third of life expectancy), M = mature (final one third of life expectancy, OM = over mature (beyond life expectancy and declining naturally) and V = veteran (of great age for its species and possibly of high conservation value).

4.4 **Height (est) (m)**: The height of the tree is measured or estimated to the nearest metre.

4.5 **Crown base**: Height above ground level of the lowest section of true crown (not epicormic and sucker growth).

4.6 **Stems**: This column classifies trees as either single, or multi-stemmed. Any tree That has more than one stem arising below 1.5m above ground level is classified as multi- stemmed. Designations are either S = single or M = multi.

4.7 **Crown spread, (estimated in metres) NESW**: Generally estimated by pacing and given as the spread at the four cardinal compass points. If trees are located outside the site only the side which overhangs the working area is measured.

4.8 **Diameter @ 1.5m above ground level (mm)**: Measured at 1.5m above ground level for single stemmed trees, if this is not possible the measurement height is stated. If the trees are off site or inaccessible then an estimated measurement is provided. When trees are multi-stemmed the measurement is taken in line with the requirements of BS 5837.

4.9 **Conditions & Observations**: Basic condition assessments are made in line with the BS 5837: classifications. Whilst this is not a tree condition survey in the fullest sense the presence of any significant growth defects, hazardous conditions or visible signs of disease will be noted.

4.10 **Preliminary Management Recommendations**: These are intended to identify necessary remedial works for trees in their current context. They are not designed to facilitate development, nor are they intended to be a schedule of work needed prior to development. Certain recommendations may require further and more advanced survey and inspection work with use of tree decay detection devices and /or climbing inspections.

4.11 **Retention span**: These are assessed in line with the BS 5837 classification.

4.12 **Grade**: Classification according to BS 5837, 2012 specifically.

4.12.1 U-Trees that are in poor condition and with a useful life expectancy of less than 10 years. In their current context these trees would require removal within ten years in accordance with sound arboricultural management especially where there are implications relating to safety and disease management. U trees are marked in red on the survey plan.

4.12.2 A- Only the very best trees with minimal defects and capable of remaining a significant arboricultural asset for at least 40 years will qualify in this category. These trees are marked on the plan as light green.

4.12.3 B-This category addresses trees that are of lower value than A trees and may have significant though remedial defects. They must be capable of remaining as a useful site asset for a minimum of 20 years and are marked as blue on the tree survey plan.

4.12.4 C-These are trees of low value with no particular merit which should not normally be a significant constraint to development. They should, in most cases, be able to provide a contribution to site amenity for 10 years or more. Trees less than 150mm diameter are also described as C category. These are marked on the plan as grey.

4.12.5 All the categorised trees can be allocated sub categories e.g., sub category 1 refers to significant arboricultural value, sub category 2 to landscape values and sub category 3 is concerned with cultural or conservation values. Whilst it could be considered that 'C' trees have no value and should not be allocated sub categories site owners or future owners may wish to retain these trees and the sub categorisation could therefore provide useful information.

4.12.6 All sub categories carry equal weight so that no category is more important than another. Trees can be allocated more than one category if this is deemed appropriate.

5. Assumptions and Limiting Conditions

5.1 Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

5.2 Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible, however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.

5.3 The consultant/appraiser shall not be required to give testimony or attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

5.4 Loss or alteration of any part of this report invalidates the entire report.

5.5 Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to who, it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

5.6 Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant/appraiser particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initialled designation conferred upon the consultant/appraiser as stated in his qualification.

5.7 This report and values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

5.8 Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.

5.9 Unless expressed otherwise, (1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and (2) the inspection was by means of visual examination of accessible items.

6. Certification of Performance

I, Shane A. Lanigan, certify that:

6.1 I have personally inspected the trees and the property referred to in this report and have stated my findings accurately. The extent of the evaluation or appraisal is stated in the attached report and the Terms of Assignment.

6.2 I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved.

6.3 The analysis, opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.

6.4 My analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted arboricultural practices.

6.5 No one provided significant professional assistance to me, except as indicated within the report.

6.6 My compensation is not contingent upon the reporting of a predetermined conclusion that favours the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

6.7 I further certify that I am a Chartered Arboriculturist being a professional member of the Institute of Chartered Foresters and a Registered Consultant of that professional body. I am a Registered Consultant of the Arboricultural Association, and a Registered Consulting Arborist (#588) of the American Society of Consulting Arborists. I am also an ISA Board-Certified Master Arborist and hold the Royal Forestry Society Professional Diploma in Arboriculture. In matters of tree inspection, I hold the LANTRA Professional Tree Inspection Module with integrated assessment and update training. I have worked full time in the field of Arboriculture for a period of fifty-three years.

S.A. Lanigan – Chartered Arboriculturist
MICFor, Dip. Arb. (RFS), M.Arbor A, RCArborA – ISA - BCMA, CUEW,
ASCA Registered Consulting Arborist #588

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T1	London plane	13	740 mm 247.73 m^2 8.88 m	3.0 W	N = 4.0 E = 2.0 S = 3.0 W = 4.0	M	Good/Good	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Tree one is to be removed to enable widening of the access road. *Remove	20+	U B2
T2	London plane	13	560 mm 141.87 m^2 6.72 m	3.0 E	N = 4.0 E = 3.0 S = 3.0 W = 2.0	M	Good/Good	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level – shown by growth of cotoneaster shoots. *None	20+	C2
T3	London plane	13	520 mm 122.33 m^2 6.24 m	3.0 N	N = 3.0 E = 2.0 S = 3.0 W = 2.0	M	Good/Good	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level – shown by growth of cotoneaster shoots. *None	20+	C2

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T4	London plane	13	590 mm 157.48 m^2 7.08 m	3.0 W	N = 3.0 E = 2.0 S = 3.0 W = 3.0	M	Good/Fair	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level – shown by growth of cotoneaster shoots. *None	20+	C2
T5	London plane	13	580 mm 152.18 m^2 6.96 m	3.0 NW	N = 3.0 E = 2.0 S = 4.0 W = 2.0	M	Good/Good	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level – shown by growth of cotoneaster shoots. *None	20+	C2
T6	London plane	13	590 mm 157.48 m^2 7.08 m	3.0 S	N = 1.5 E = 2.0 S = 3.0 W = 2.0	M	Good/Fair	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level. *None	20+	C2

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T7	London plane	13	400 mm 72.38 m^2 4.80 m	4.0 S	N = 2.5 E = 3.0 S = 4.0 W = 3.0	M	Good/Fair	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level. *None	20+	C2
T8	London plane	13	580 mm 152.18 m^2 6.96 m	3.0 N	N = 3.0 E = 2.0 S = 2.5 W = 3.0	M	Good/Fair	Historically pollarded at around 6 m – and now regrown strongly with possibly five years or so growth, ivy to 6 m above ground level. Decay at historical pollard point 3 m above ground level. *None	20+	C2
T9	Lime (publicly owned)	7	550 mm 136.85 m^2 6.60 m	5.5 E	N = 1.5 E = 1.5 S = 1.5 W = 1.5	M	Good/Good	This tree has recently been re-pollarded, the main trunk is hollow at high level *None	20+	C1

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T10	London plane	13	450 mm 91.61 m^2 5.40 m	3.0 NW	N = 3.0 E = 3.0 S = 2.0 W = 3.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly but has significant decay at the original pollard point at 3 m above ground. *None	20+	C2
T11	London plane	13	450 mm 91.61 m^2 5.40 m	3.0 N	N = 2.0 E = 2.0 S = 3.0 W = 2.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly but has significant decay at the original pollard point at 3 m above ground. *None	20+	C2
T12	London plane	13	500 mm 113.10 m^2 6.00 m	3.0 Ne	N = 2.0 E = 3.0 S = 2.0 W = 3.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly but has significant decay at the original pollard point at 3 m above ground and significant ivy cover to 6 m (close to the secondary pollarding point). *None	20+	C2

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T13	London plane	13	480 mm 91.61 m^2 5.40 m	3.0 NE	N = 2.0 E = 2.0 S = 3.0 W = 3.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly but has significant decay at the original pollard point at 3 m and some ivy cover to 5 m. *None	20+	C2
T14	London plane	13	420 mm 79.80 m^2 5.04 m	3.5 W	N = 2.0 E = 2.0 S = 2.0 W = 3.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly. *None	20+	C2
T15	London plane	13	540 mm 131.92 m^2 6.48 m	3.0 W	N = 3.0 E = 3.0 S = 3.0 W = 4.0	M	Good/Fair	Regrown pollarded tree which has now regrown strongly with significant decay at the original pollard point. *None	20+	C2

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T16	London plane	13	620 mm 173.90 m^2 7.44 m	3.0 N	N = 3.0 E = 3.0 S = 2.0 W = 4.0	M	Good/Fair	Regrown pollarded tree with significant decay at original pollard point. *None	20+	C2
T17	London plane	13	670 mm 203.08 m^2 8.04 m	2.5 E	N = 5.0 E = 3.0 S = 3.0 W = 2.0	M	Good/Fair	Historically pollarded tree which has now regrown strongly. *None	20+	C2
T18	Pear	13	230 mm 23.93 m^2 2.76 m	2.3 SE	N = 1.0 E = 1.5 S = 1.0 W = 1.0	M	Poor/Fair	Unremarkable pear tree which is dying back. *None	<10	**U**

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T19	Norway maple (third-party tree)	9	200 mm 18.10 m^2 2.4 m	3.0 N	N = 3.0 E = 3.0 S = 2.0 W = 4.0	M	Good/Good	Unremarkable third-party maple tree. *None	20+	C1
T20	Rowan	7	180 mm (nearest) 14.66 m^2 2.16 m	1.7 N	N = 4.0 E = 2.0 S = 2.0 W = 3.0	M	Good/Good	Unremarkable ivy-covered tree. *None	20+	C1
T21	Japanese laurel	23	M/S	Ground level	N = 1.5 E = 1.0 S = 1.0 W = 1.0	M	Good/Good	Low value shrub *None	20+	U

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
T22	Lime (publicly owned)	8	720 mm (probably exaggerated due to trunk burrs and swellings) 234.52 m^2 8.64 m	5.0 N	N = 1.0 E = 0.0 S = 1.5 W = 1.0	M	Good/Good	Recently pollarded, publicly owned lime tree. *None	20+	C1
T23	Lime (publicly owned)	7	650 mm 191.13 m^2 7.80 m	5.0 N	N = 1.0 E = 0.0 S = 1.5 W = 1.0	M	Good/Good	Recently pollarded, publicly owned lime tree. *None	20+	C1
G1	Cherry laurel	2-2.5	M/S	5.0 N	N = 0.0 E = 0.0 S = 0.0 W = 2-5	M	Good/Good	Unremarkable though somewhat outgrown hedge of cherry laurel. *None	20+	C2

APPENDIX 1 - TREE SURVEY SCHEDULE

Tree Ref No.	Species	Height(m)	Stem Diameter (mm) Root Protection Area (m2) Radius of Root Protection Area	Crown base (lowest significant point above ground) (m)	Branch Spread (m)	Age Class	Physiological/ Structural Condition	Comments * Preliminary Management Recommendations	Estimated Remaining Useful Contribution (years)	Category Grading
G2	Cherry laurel	2-2.5	M/S	5.0 N	N = 0.0 E = 0.0 S = 2-4 W = 0.0	M	Good/Good	Unremarkable though somewhat outgrown hedge of cherry laurel. *None	20+	C2
G3	Cherry laurel	2-2.5	M/S	5.0 N	N = 0.0 E = 2-3 S = 0.0 W = 0.0	M	Good/Good	Unremarkable though somewhat outgrown hedge of cherry laurel. *None	20+	C2

Age Class: EM = Young (first third of life expectancy); M = Middle Aged (second third of life expectancy); OM = Over Mature (beyond life expectancy and declining naturally); V = Veteran (of great age for its species and possibly of conservation value)

Condition: P = Physiological; S = structural; Good = no significant physiological problems; Good = no significant structural problems; Fair = symptoms of ill health that can be remediated; Fair = significant defects that can be remediated; Poor = significant ill health; Poor = significant defects – no viable remedial action

Priority Category = U = URGENT WORKS - 1 = year - 2 = within two years - 3 = within three years - N/A = No Action

Zone A - Trees located close to and specifically within falling distance of adjacent properties, built structures and areas of high use – Inspection to be annual by a qualified arborist.

Zone B - Trees located within gardens and open areas though not adjacent to roads - Inspection to be biennially by a person with an appropriate and working knowledge of trees and tree structural defects.

APPENDIX 2 - PERSONAL DETAILS OF SHANE A LANIGAN

Qualifications: I hold the City and Guilds Certificate in Tree Surgery and am an International Society of Arboriculture Certified Arborist, also holding the International Society of Arboriculture Municipal Arborist Accreditation and being a Board- Certified Master Arborist of that professional body.

In addition, I hold the Royal Forestry Society's Professional Diploma in Arboriculture which is a degree level qualification rated as level 6 on the qualifications and curriculum framework. It is a qualification specific to the arboricultural profession. In matters of tree safety and risk assessment I have undertaken and completed the LANTRA Awards Professional Tree Inspection Course and integrated assessment.

I am a registered consultant of the American Society of Consulting Arborists (ASCA RCA#588), a Chartered Arboriculturist, being a Professional Member of the Institute of Chartered Foresters and a Registered Consultant of the Arboricultural Association.

Regarding legal issues, I can confirm that I am also a Cardiff University Law School Certified Expert Witness in both civil and criminal proceedings.

My professional memberships include:

- The American Society of Consulting Arborists
- The Arboricultural Association
- The Consulting Arborist Society
- The International Society of Arboriculture
- The Institute of Chartered Foresters
- The Royal Forestry Society

Career details: I am a second- generation arborist having worked from 1971 to 1979 for a private tree care company before forming my own arboricultural company in 1979.

Continuing professional development: I maintain and improve my professional knowledge by being an active member of the five professional bodies referred to above. In addition, I attend a high number of arboriculture related seminars and the annual conferences of the International Society of Arboriculture, the Arboricultural Association, and the Institute of Chartered Foresters (ICF). I was also privileged to serve on the credentialing council of the International Society of Arboriculture educational certification department for seven years. Having served two consecutive terms as an elected member. I 'rolled off' the council in late 2020.

Currently, I am the senior consultant within Abbots Arboricultural Advice Limited. This is my consulting practice which is a forward-looking operation. In-order to keep abreast of changes in arboriculture and consulting practice I attend many conferences and seminars which contribute to my CPD/CEU obligations.

S.A. Lanigan – Chartered Arboriculturist
MICFor, Dip.Arb.(RFS), M.Arbor A, RCArborA – ISA - BCMA, CUEW,
ASCA Registered Consulting Arborist #588

APPENDIX 3
Photographs: 1 – 9

PHOTOGRAPH NO. 1 – T1-T8 – London plane – T9 – Lime (arrowed) with G1 growing around the trees

PHOTOGRAPH NO. 2 – T1-T8 – London plane with T9 (lime) growing on public land

PHOTOGRAPH NO. 3 – Maxwell Road boundary showing plane trees T22 (lime) and G2 (cherry laurel)

PHOTOGRAPH NO. 4 – T15, T16 & T17 (right to left) with G3 -cherry laurel (foreground)

PHOTOGRAPH NO. 5 – T18 – Pear (arrowed)

PHOTOGRAPH NO. 6 – T19 – Norway maple (left side – T20 Rowan – ivy-covered tree (right side)

PHOTOGRAPH NO. 7 – T22 – Lime

PHOTOGRAPH NO. 8 – T23 – Lime

PHOTOGRAPH NO. 9 – T21 – Japanese laurel

APPENDIX 4

References:

BS 5837:2012 British Standards Limited (2012) *Trees in relation to design, demolition and construction – Recommendations* 4th ed. 2 Park Street, London W1A 2BS. British Standards Institution.

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Hillier J G (2014). *The Hillier Manual of Trees and Shrubs*. 14th ed. 80 Vincent Square, London SW1P 2PE;(Hillier Nurseries and The Royal Horticultural Society).

NHBC Standards (2020). *NHBC Standards Effective 1 January 2020*. NHBC House, Davy Avenue, Knowhill, Milton Keynes MK5 8FP: NHBC.

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APPENDIX 5

PROGRAMME OF ARBORICULTURAL INPUT:
NO. 2 MURRAY ROAD, NORTHWOOD,
MIDDX HA6 2YN

Arboricultural action	Programme of action	Extent of arboricultural input	Nature of supervision	Signed off (LPA use)
Pre- start meeting with arboriculturist, site agent, LPA tree/planning office	Review plans and any alterations that may have been made	Meeting on site Review plans and any alterations that have been made Check status of tree protective measures	Site meeting and letter/email	
Access facilitation/remedial tree works carried out	Before protective measures are installed	Meeting to assess and ensure competence of contractor, particularly if works are carried out prior to installation of protective fencing	Site meeting and letter/email	
Completion and agreement of the form and extent of tree protection measures, this must be agreed by the LPA	Before any heavy machines enter the site	Meeting to agree the final extent and configuration of the tree protection, provide photographic and documentary evidence of such protection	Site meeting and letter/email	
Demolition	After protective measures are installed	Meeting to discuss means of compliance with submitted arboricultural method statement	Site meeting and letter/email	
Services installation	At the discretion of the developer	Meeting to ensure that appropriate no-dig boring methods or careful hand digging techniques are employed to avoid damage to the roots of retained trees. The contractor must work to the methodologies described within the arboricultural method statement	Site meeting and letter/email	
Installation of new structures	These works must only begin after the tree protection measures have been installed and their form and integrity are to the satisfactory of the LPA tree/planning officer	Meeting to ensure that the contractor property understands his role in avoiding damage to retained trees on site. Further visits by the appointed arboricultural consultant	Site meeting and letter/email	

APPENDIX 5

PROGRAMME OF ARBORICULTURAL INPUT:
NO. 2 MURRAY ROAD, NORTHWOOD,
MIDDX HA6 2YN

Arboricultural action	Programme of action	Extent of arboricultural input	Nature of supervision	Signed off (LPA use)
Removal of tree protection measures	Only when all construction work, including surfacing of roads and erection of gates, fences and other structures is completed. Such a state should be agreed with the LPA	Meeting to establish the need for protective measures is no longer extant	Site meeting and letter/email	
Soft and hard landscaping	Should only begin when construction is completed and tree protection measure have been removed	Meeting to brief the landscape contractor who may be new to the site, further supervisory visits by the arboriculturist may be necessary	Site meeting and letter/email	

APPENDIX 6

Statutory Tree Protection

Tree Preservation Orders/Conservation Areas

Tree Preservation Orders are made under Section 198C of the Town & Country Planning Act and applied by the 2012 Tree Regulations. They effectively prohibit unauthorised removal and pruning of trees identified within the order. Conservation areas are designated areas defined by geographic limits within which any tree with a stem diameter of more than 75mm (measured at breast height or 1.5m above ground level) is effectively protected. Certain exceptions exist under both sets of legislation, though these are limited and ideally require interpretation by a suitably qualified arboriculturist.

Felling Licences

Felling licences may apply for felling significant volumes of timber on sites without full planning permission. The statutory legislation in this case is the Forestry Act 1967 which is administered by the Forestry Commission.

Faculties

Faculties may be required for significant tree works on sites that fall under the jurisdiction of the church authorities. The local Parochial Church Council can advise on the need and requirements for faculties.

Hedgerow Management and Removal Notices

A hedgerow removal notice will be required for the removal of almost any hedge growing in a rural area. Certain works are permitted without notification including (j) “for the proper management of the hedgerow.” The applicable statutory legislation may be cited as “The Hedgerow Regulations 1997” (Statutory Instrument 1997 No. 1160).

ABBOTS ARBORICULTURAL ADVICE

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01923 606551 / shane.lanigan@abbotsarboriculturaladvice.com

Site: 2 Murray Road, Northwood, Middx. HA6 2YN	1:250 @ A3
Drawing Title: Tree Constraints Plan (Appendix 7 SAL/MRNM/11913)	March 2023

Key:

- Category A
- Category B
- Category C
- Category U

Category — 13 — Crown Spread / Tree Number

Root Protection Area

NOTE: Tree/group numbers marked with an * have approximate locations.

ABBOTS ARBORICULTURAL ADVICE

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Site: 2 Murray Road, Northwood, Middx. HA6 2YN	1:250 @ A3
Drawing Title: Tree Protection Plan (Appendix 8 SAL/MRNM/11913)	March 2023

Key:

- Category A
- Category B
- Category C
- Category U

Category — Crown Spread — Tree Number — Root Protection Area (13)

- Tree Protection Barriers
- Special Construction Methods
- Storage/Working Area
- Tree Proposed for Removal

NOTE: Tree/group numbers marked with an * have approximate locations.

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 should be mounted on a block tray (Figure 3b).

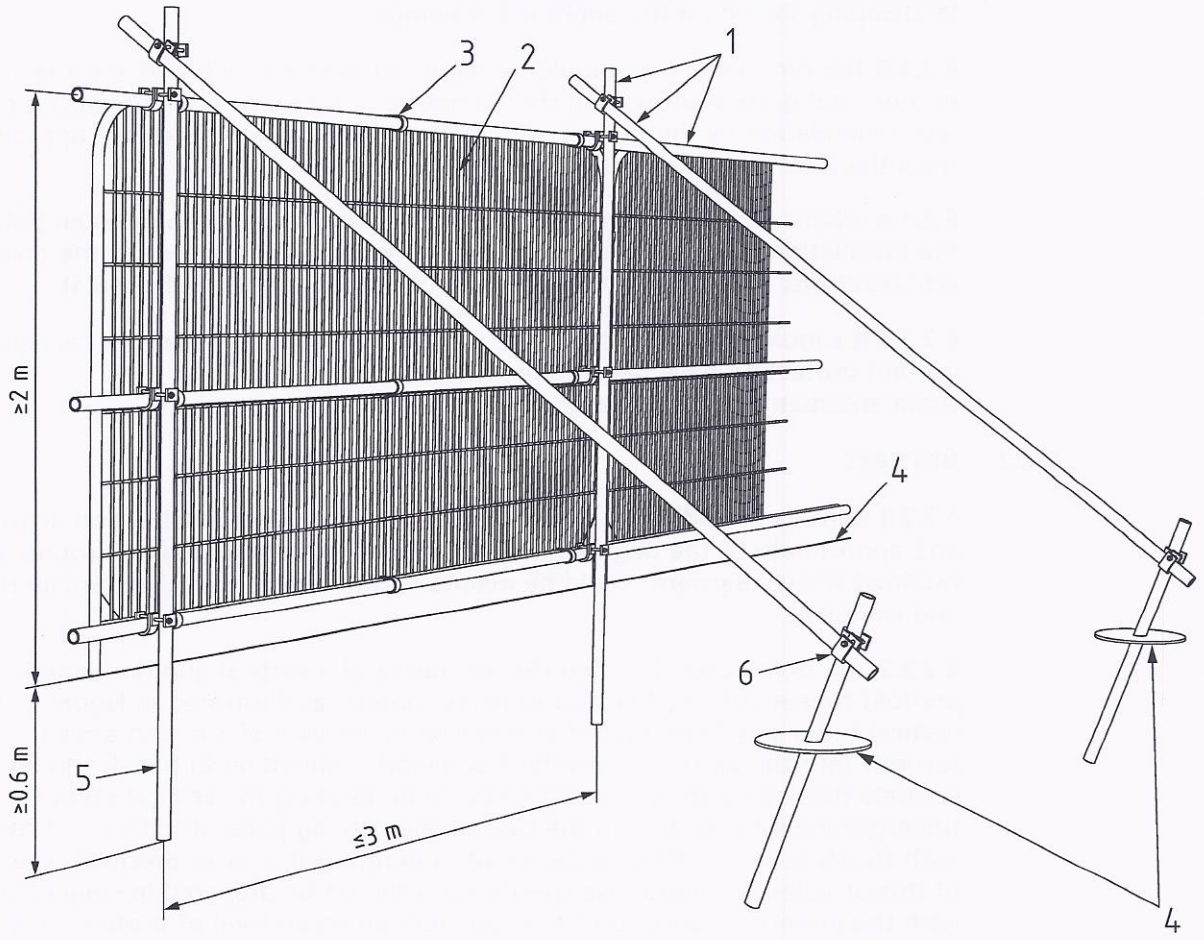
NOTE 1 Examples of configurations for steel mesh perimeter fencing systems are given in BS 1722-18.

NOTE 2 It might be feasible on some sites to use temporary site office buildings as components of the tree protection barriers, provided these can be installed and removed without damaging the retained trees or their rooting environment.

6.2.2.4 All-weather notices should be attached to the barrier with words such as:

"CONSTRUCTION EXCLUSION ZONE – NO ACCESS".

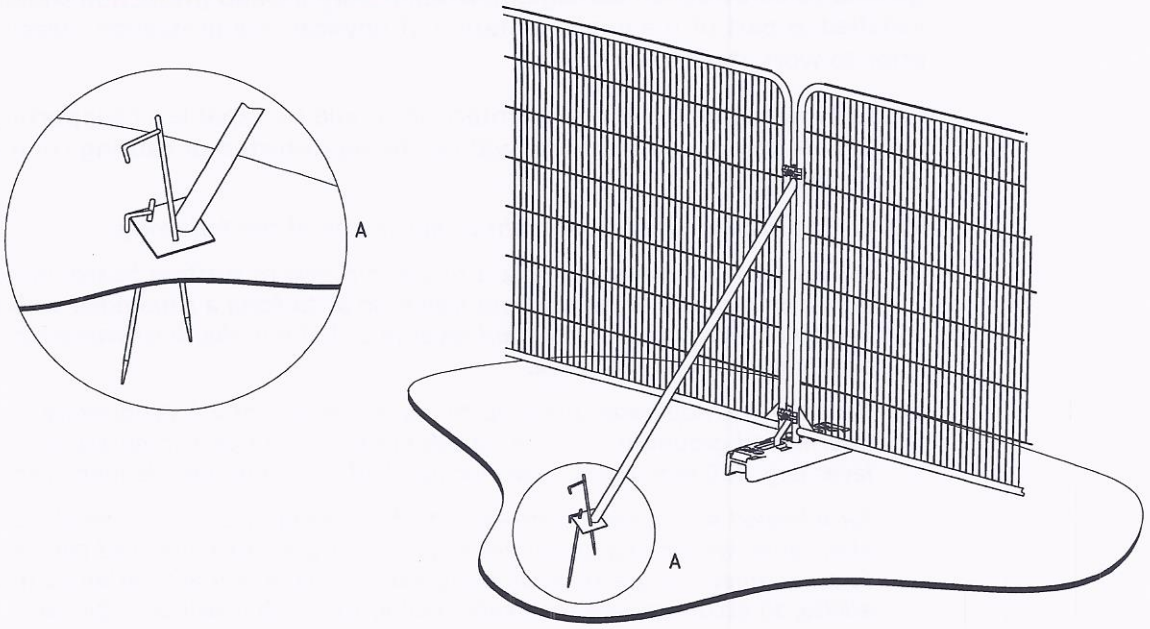
Figure 2 **Default specification for protective barrier**



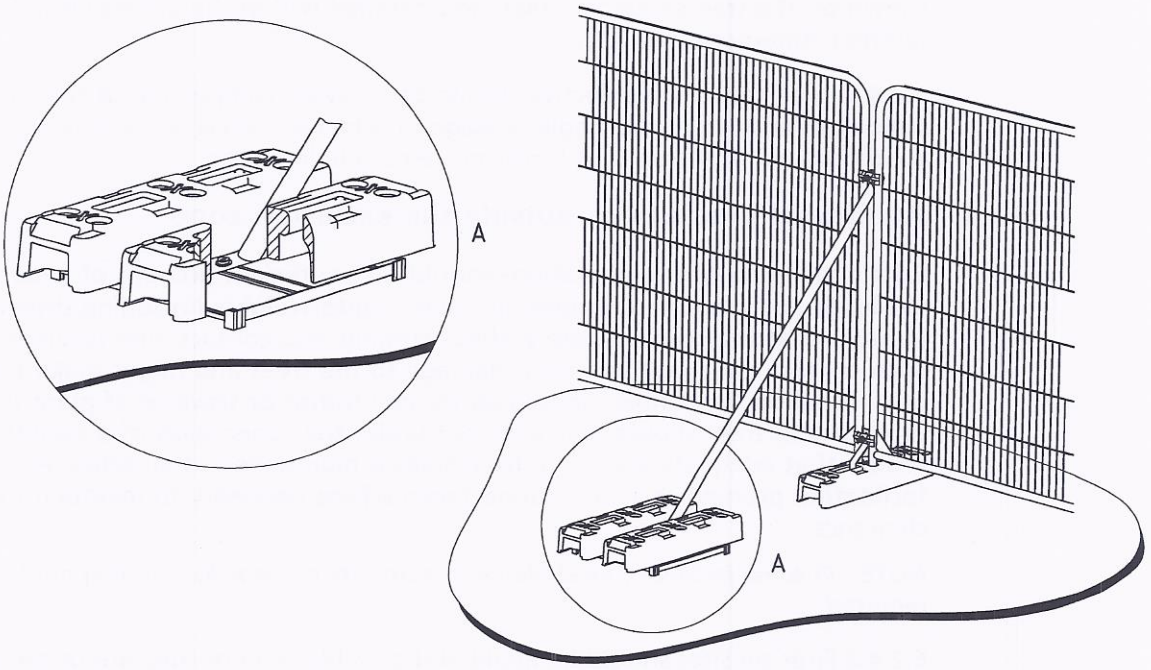
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

6.2.3 Ground protection during demolition and construction

6.2.3.1 Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

