SJA trees
ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA., RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), MArborA, TechCert (ArborA), RCArborA. (Operations)

ARBORICULTURAL METHOD STATEMENT

For Protection of Trees

at

12 Lime Walk

Maidenhead

February 2023

SJA ams 24042-01

CONTENTS

1. Statement of purpose 3
2. Planning and communication 4
3. Site clearance, pruning and security 6
4. Ground preparation and demolition 7
5. Protective fencing 8
6. Ground protection 10
7. Installation of underground services 11
8. Construction of permanent hard surfaces 12
9. Construction of foundations 14
10. Fencing, landscaping and reinstatement 14
11. Supervision and monitoring 15

APPENDICES

1. Tree survey schedule (SJA tss 24042-01)
2. Tree Protection Plan (SJA TPP 24042-041)

© Simon Jones Associates Ltd. 2024[1]

All rights in this document are reserved. No part of it may be amended or altered, reproduced or transmitted, in any form or by any means, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this site. It may not be sold, lent, hired out or divulged to any third party not directly involved with this site without the written consent of Simon Jones Associates Ltd. 'SJAtrees' is the trading name of Simon Jones Associates Ltd.

1. Statement of purpose

1.1. The purpose of this method statement is to detail what actions need to be taken to ensure the proposed demolition of part of the existing dwelling and the construction of two dwellings with an access driveway and associated hard surfacing at 12 Lime Walk does not cause any unacceptable damage to the trees to be retained within this site and in the adjacent properties.

1.2. This method statement has been drawn up to comply with Condition no. 6 of the planning permission granted by The Planning Inspectorate, which states: **"Prior to any equipment, machinery or materials being brought onto the site, details of the measures to protect the trees growing within and adjacent to the site during demolition and construction as part of the development hereby permitted shall be submitted to and approved in writing by the Local Planning Authority. The approved measures shall be implemented in full prior to any equipment, machinery or materials being brought onto the site, and thereafter maintained until completion of all construction work and all equipment, machinery and surplus materials have been permanently removed from the site. These measures shall include fencing and ground protection in accordance with British Standard 5837. Nothing shall be stored or placed in any area fenced in accordance with this condition and the ground levels within those areas shall not be altered, nor shall any excavation be made."**

1.3. This method statement has been drawn up to comply with the recommendations of British Standard BS 5837:2012, *Trees in relation to design, demolition and construction – Recommendations*.

1.4. Details of the trees can be found in the tree survey schedule at **Appendix 1**. Their locations are shown on the tree protection plan (SJA TPP 01) at **Appendix 2**. This plan is based on the approved site layout drawing, no. 01-7293.

1.5. The key words and phrases used in this statement are defined in ***Table 1*** below.

Arboricultural consultant	Arboricultural expert instructed by the developer to oversee the retention and protection of trees adjacent to the development site.
Arboricultural monitoring	Regular inspections of retained trees by the arboricultural consultant, to monitor their health and condition; and to inspect the effectiveness of the tree protection measures implemented.
Arboricultural supervision	Pre-arranged attendance on site of appointed arboricultural consultant for the duration of specific construction activities that could otherwise result in unacceptable damage to retained trees. Whilst on site the consultant will control, supervise and where appropriate assist in the undertaking of these activities.
Construction Exclusion Zone ('CEZ')	Area based on the root protection area (RPA), normally surrounded with protective fencing, from which access is prohibited during development works.
Ground boarding	Temporary ground covering, designed to prevent compaction of soil in which significant roots of retained trees are growing.
Protective fencing	Temporary fencing, erected for the duration of demolition and construction activities; designed to prevent access and disturbance to the trunks and root protection areas of trees.
Pruning	The removal of living or dead parts of a tree, especially branches, to reduce size, to maintain shape, health, safety, or to regulate growth.
Root Protection Area ('RPA')	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.
Tree Protection Plan ('TPP')	Drawing based upon the finalised proposals; showing trees for retention and illustrating the tree and landscape protection measures.

Table 1: Key words & phrases

1.6. This statement is designed to reflect the principles of the proposed layout as far as these relate to the protection of trees to be retained and should **not** be read as a definitive engineering or construction method statement for this development.[1]

2. Planning and communication

2.1. Unless otherwise agreed with the Local Planning Authority (LPA), the following actions are to be taken, in the order specified in the Sequence of Works at ***Table 2***.

2.2. The developer will appoint an arboricultural consultant to oversee all aspects of tree care and protection for the duration of demolition and construction works.

2.3. Prior to the commencement of works, the project manager will send copies of any demolition or construction method statements that might have implications for

[1] Reference should be made to the architect or structural engineer over any matters of construction detail, specification, engineering performance standards or regulatory requirements, relating to structures, surfaces or underground services to be constructed. As arboricultural consultants, Simon Jones Associates Ltd. can accept no liability for any matters relating to the structural integrity or engineering performance of structures, surfaces or underground services described, proposed or eventually constructed. The responsibility for satisfying any Health & Safety requirements relating to any operations described in this method statement remains with those commissioning or undertaking the operations concerned.

existing trees to the arboricultural consultant for his comments. The arboricultural consultant will liaise with the project manager to ensure that there are no conflicts between the demolition or construction method statements and this arboricultural method statement.

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

2.5. On the same occasion, the arboricultural consultant will make a brief re-inspection of the trees to be retained, to identify any risks of tree, stem or branch failure that could cause harm to contractors working on the site. Any such risks will be recorded and passed to the client and to the LPA, to enable appropriate remedial works to be undertaken in a timely manner.

2.6. The developer will immediately inform the arboricultural consultant if at any time during site clearance, demolition or construction the site manager or agent is replaced or transferred. The arboricultural consultant will convene a site meeting with the incoming/replacement site manager, to be held within five working days, to explain all outstanding tree protection measures detailed in this method statement.

2.7. A copy of this method statement shall be supplied to all site personnel who have control over works of any nature within the Root Protection Areas (RPAs) of trees to be retained, or within the footprints of their canopies. The contractor will provide adequate instruction on its implementation for all relevant staff. This instruction will be carried out by, or to the approval of, the arboricultural consultant.

Order	Works	Details at Section:	Arb. supervision required:
1	Pre-commencement site meeting	2	Yes
2	Site clearance and the partial removal of group G3	3	-
3	Pruning of trees nos. 3, 6 and groups G2, G5 & G6	3	
4	Erection of tree protection fencing and site hoarding	5	Yes
5	Demolition of part of the existing dwelling	4	Yes
6	Manual excavation for hard surfacing within RPAs of group nos. 5 & 6.	9	Yes
7	Installation of proposed above soil hard surfacing within RPA of copper beech no. 2	8	Yes
8	Clearance of machinery/materials from site, reinstatement and landscaping	10	-
9	Removal of tree protection fencing	10	-

Table 2: Sequence of works (relevant to tree protection)

3. Site clearance, pruning and security

3.1. No clearance of trees or other vegetation and no erection of site security fencing or hoarding shall be undertaken until after the pre-start meeting and after the erection of the tree protection fencing (see below).

3.2. If any vegetation clearance is required behind the line of the protection fencing this will be made clear at the pre-start meeting and arrangements will be made to undertake this prior to the fencing's erection, under the supervision of the arboricultural consultant, who will ensure it does not cause any soil compaction or damage to the roots of trees to be retained.

3.3. The one group to be partially removed (no. G3) shall be felled and disposed of.

3.4. Stumps of those trees that are within the RPAs of trees to be retained shall either be left in place or shall be ground out.

3.5. Trees to be retained shall be pruned as specified on the TPP.

3.6. All tree works are to be done in accordance with British Standard BS 3998:2010, *Tree work - Recommendations*. Climbing irons or spikes are not to be used whilst pruning trees; they may only be used for the sectional removal of trees.

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

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

3.8. The erection of site security fencing or hoarding will be undertaken in a way that causes no harm to trees to be retained and no compaction of the soil in which they are growing. This encompasses:

holes for uprights (assuming hoarding rather than Heras) to be at least 1.5m from any tree trunk and dug with one- or two-man post hole borers rather than with an excavator;

if uprights are to be concreted into the post holes, the holes shall first be lined with heavy-duty pvc, to prevent the leaching of wet concrete into the soil;

concrete will be mixed outside the RPAs;

no vehicles shall access the RPAs;

no trenches shall be dug where the ground slopes or is uneven; and

no fence panels or any other part of the fencing or hoarding shall be nailed, screwed or otherwise attached to any part of any of the trees to be retained.

4. Ground preparation and demolition

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

4.2. An existing section of building to be demolished abuts the RPA of copper beech no. 2 to be retained.

4.3. The base and foundations of the existing section of building to be demolished that abut the RPA of copper beech (no. 2) shall be either be left in place, or shall be excavated and removed with care, under the control and supervision of the arboricultural consultant.

4.4. All plant and vehicles engaged in demolition of the existing buildings should either operate from outside the RPA or should run on a temporary surface installed

prior to commencement of operations and designed to protect the underlying soil structure.

4.5. If any roots of less than 25mm diameter are encountered they shall be cut cleanly by the arboricultural consultant. If roots of 25mm diameter and above are found, they shall be covered with clean dry Hessian sacking to prevent desiccation. This will be removed only directly prior to backfilling, and this will be done by surrounding roots with a minimum depth of 50mm of topsoil and sharp sand (builders' sand will not be used as it has a high salt content which is toxic to tree roots).

4.6. Where underground structures that are or will become redundant are present within RPAs, these will be sealed off where possible so that the need for excavation is avoided.

5. Protective fencing

5.1. No site clearance, ground preparation, demolition or construction shall commence on site, and no demolition or construction vehicles or plant will enter the site until the RPAs of the trees to be retained have been safeguarded by the erection of protective fencing to the specification recommended in BS 5837: 2012, Section 6.2.2, as shown in Figure 2 of that document (see ***Figure 1*** below).

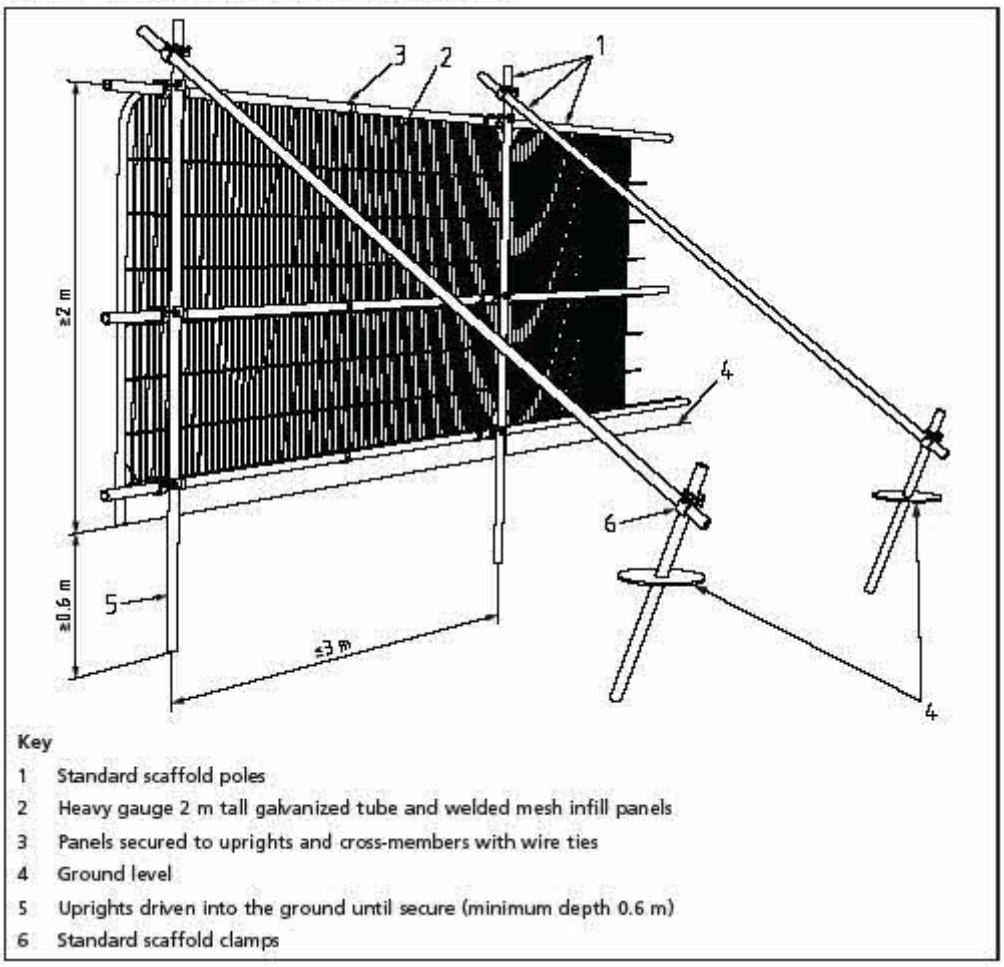
5.2. The protective fencing will be located in the positions shown by the **continuous bold blue lines** on the TPP.

5.3. The fencing shall be at least 2.1m in height, comprising a scaffolding or a timber post and rail framework supporting either a minimum of 20mm exterior grade ply or other robust man-made boards, or standard anti-climb 'Heras' welded mesh fence panels, fixed to each other with at least two clamps, and secured with anti-lift devices to concrete or plastic bases (footings) that are pinned at least 450mm into the ground with lengths of scaffold tube.

5.4. Scaffolding construction shall be to BS EN 12811-1:2003; uprights shall be at minimum 3.5m centres and every other one shall be supported on the side closest to the trees by struts braced to the ground at an angle of 45°. If used, 'Heras' panels shall be secured to two cross members between the uprights with heavy-duty cable ties.

Notices stating “Tree Protection Zone, Keep Out!” will be attached to every third panel with cable ties.

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 1 Protective fencing.

(Based on Figure 2, BS 5837: 2012)

5.5. No activity will take place within the Construction Exclusion Zones (“CEZs”) behind the fencing: no equipment or materials will be stored, and no vehicles, plant or personnel shall enter these areas. Ground levels will not be changed within them, and existing vegetation and topsoil will be left undisturbed.

5.6. Areas for the storage of materials shall be outside the CEZs. Oil, bitumen, diesel, and cement shall not be stored, mixed or discharged onto the ground within 10m of the trunks of any trees. Areas for the storage or mixing of such materials shall be agreed at the pre-commencement meeting.

5.7. No notice boards, or power or telephone cables, shall be attached to any of the trees. No fires shall be lit where their flames could extend to within 5m of any parts of trees.

5.8. If the protective fencing or ground boarding is accidentally damaged or knocked over, those sections will immediately be cordoned off with high visibility plastic mesh fencing. The damaged sections then will be repaired or replaced within 48 hours (2 working days). All instances of damage and re-instatement shall be recorded and immediately reported to the arboricultural consultant.

5.9. Once the protective fencing has been erected, the arboricultural consultant will visit the site and inspect it. He will record the position of the fencing and the condition of the retained trees. If it complies with this statement, the arboricultural consultant will 'sign off' the fencing to the contractor and copy this (in writing) to the developer. (See also 'Supervision and Monitoring' below.)

5.10. The protective fencing will not be moved or re-located without the prior approval of the arboricultural consultant. It will only be removed once all construction works are completed: the arboricultural consultant will be informed in advance of when it is intended to remove the fencing.

6. Ground protection

6.1. To avoid soil compaction and the resulting impairment of tree root function, the ground between the protective fencing adjacent to the tree (nos. 6 & 7) and the footprint of the adjacent proposed building shall be covered by appropriate ground protection, in accordance with the recommendations at Section 6.2.3 of BS 5837: 2012. The places where this is to be done are **hatched pink** on the TPP.

6.2. For wheeled or tracked traffic exceeding 2t, ground protection will be designed by a structural engineer, in conjunction with the arboricultural consultant, to take account of the type of soil and the likely loadings to which it will be subjected. This will also be laid on top of a compressible material above a geotextile membrane.

6.3. The ground protection will only be removed once all construction works are completed. The arboricultural consultant will be informed in advance of when this is intended to be done.

7. Installation of underground services

7.1. All underground service and drainage routes shall be located so that no excavation is required within RPAs.

7.2. If their location within RPAs is unavoidable, underground services shall be installed in one of the following two ways, in accordance with NJUG guidelines[2].

7.3. **Trenchless technique**. This involves thrust boring or directional drilling of service routes to avoid all excavation and disturbance of soil in which roots are likely to be growing. The pits for starting and receiving the boring machinery shall be located outside the RPAs of any retained trees. The bore shall be made at a minimum depth of 600mm below ground level. Lubrication of the 'mole' shall be with water, rather than with oil or other lubricants which could contaminate the soil.

7.4. **Manual excavation**. This involves hand digging of a continuous trench to a depth of at least 750mm, under arboricultural supervision; with the careful retention and protection of all roots of a diameter greater than 25mm, as detailed elsewhere in this method statement. If soil conditions and/or root distribution render it appropriate, the arboricultural consultant may require hand excavation to extend to a greater depth than this.

7.5. Such an excavation will be undertaken using a pick or a hand fork to loosen the soil, which will then be cleared from roots using a compressed air soil pick and removed using shovels or trowels. All roots encountered of less than 25mm diameter will be cut cleanly with secateurs or a sharp pruning saw.

7.6. The faces of all excavations that contain exposed roots will be covered with hessian sacking and be kept moist at all times; they will not be left exposed to frost, wind or direct sunlight.

7.7. Protection of retained roots shall be conducted in the following way. A 50:50 mix of sharp sand and composted organic matter shall be prepared and packed around the root within a wrapping of Hessian (builders' sand will not be used as it has a high salt content and may be toxic to trees). The layer of sharp sand and compost shall be

[2] National Joint Utilities Group. Volume 4, GUIDELINES FOR THE PLANNING, INSTALLATION AND MAINTENANCE OF UTILITY APPARATUS IN PROXIMITY TO TREES", Issue 2: 16th November 2007.

not less than 50mm in thickness around the full circumference of the root section. If concrete is to be poured or placed around these roots, they shall also be wrapped with an impermeable polythene membrane. Both the hessian wrapping and the polythene membrane shall be secured by degradable ties, in a manner that will not constrict future growth of the root.

7.8. Excavation beneath 750mm depth (or greater if the arboricultural consultant has deemed it appropriate) may be undertaken by an excavator working from outside the RPAs, provided this is supervised to prevent any retained roots being damaged.

8. Construction of permanent hard surfaces

8.1. To prevent unacceptable root damage the proposed driveway within the RPA of copper beech no. 2 shall be constructed to the specification given below, in accordance with the recommendations of Section 7.4 of British Standard BS 5837. An illustration of these principles can be found at ***Figure 2*** below.

8.2. Within RPAs there shall be no lowering of existing soil level and no digging will be undertaken: all parts of proposed hard surfaces shall be constructed above existing ground level. This is to ensure that roots are not severed, soil is not compacted, and oxygen can continue to reach roots beneath the engineered surface. No stripping of turf or topsoil shall be undertaken: herbaceous (non-woody) vegetation should be cut as close to ground level as possible and be raked off by hand; shrubs will be grubbed out using hand tools, and tree stumps will be ground out rather than dug or grubbed out.

8.3. Any hollows shall be filled with sharp sand; and to prevent compaction of the soil structure, a biaxial geotextile grid ('**geogrid**', such as 'Tensar') or a permeable **geotextile membrane** (such as 'Treetex' or 'Terram') of an appropriate specification for the particular characteristics of the soil and for anticipated loads shall be laid on the ground beneath the footprint of the hard surface, and be secured with pegs or pins driven through it into the ground.

8.4. Edge supports of an appropriate size and strength should be laid above ground level, on top of the geogrid, either on a concrete haunching, or flat on the geogrid itself, secured with pegs or pins driven into the ground. If concrete haunching is used, a strip

of heavy-duty polythene will be laid beneath it, on top of the geogrid, to prevent the leaching of wet cement into the soil. The outer side of the edge supports should be banked up with topsoil, graded down to existing ground level.

8.5. A perforated cellular confinement system ('**geoweb**') shall then be laid above this. The grade and type of this web shall be selected by a structural engineer to ensure that anticipated loads can be supported without causing any additional compaction of the soil structure beneath. A 200mm standard cell width should be used; cell depth should normally be a minimum of 150mm for driveways. Where more than one strip of geoweb needs to be employed, the cellular structure will be maintained by stapling adjacent sections together using 10mm galvanised staples.

8.6. The geoweb shall be filled with an angular aggregate with a particle size of between 15mm and 40mm, with no fines (to permit vertical gaseous diffusion). Care will be taken that trucks do not drive onto the area to deposit the aggregate; it should be tipped at the edge of the area and then pushed into position and compacted so that machinery moves only on the sub-base and not on the ground either side of it. A temporary wearing course may, if necessary, be laid above this for the duration of the construction works.

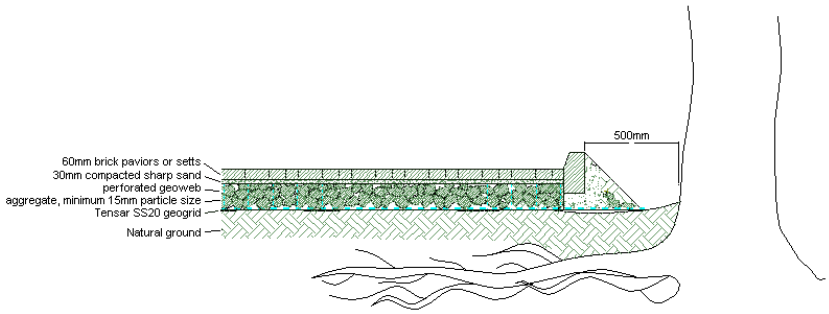


Figure 2 Illustration of a typical above-soil hard surface next to trees.

8.7. The wearing courses shall be of a permeable and gas-porous nature such as washed gravel, shingle, cobbles or dry-jointed paviours, bricks, or blocks on a sand foundation. Permeable tarmacadam may be acceptable; concrete and binding gravels (such as hoggin) should not be used except for footpaths.

8.8. Construction should be undertaken in dry weather; ideally this should be between May and October when the soil is at its driest and least prone to compaction.

9. Construction of foundations

9.1. The foundations of the hard surfacing to be located with the RPAs of group nos. 5 & 6 shall be dug by hand under direct arboricultural supervision.

9.2. If roots larger than 25mm diameter are encountered they shall be retained and protected. The arboricultural consultant shall cut cleanly any smaller roots. If roots larger than 25mm diameter are accidentally damaged, the arboricultural consultant will assess the damage and undertake any necessary remedial works. He will report to the client the extent of the damage and any long-term effect to the tree's stability or health.

9.3. Exposed roots will be covered with sand or hessian sacking and be kept moist at all times; they will not be left exposed to frost, wind or direct sunlight.

10. Fencing, landscaping and reinstatement

10.1. Care will be taken to ensure that fencing, landscaping and reinstatement do not cause any damage to the existing trees. Prior to the commencement of any landscaping works within RPAs the developer will convene a site meeting to be attended by the site manager or agent, the landscape contractor, the fencing contractor and the arboricultural consultant. The methods of tree protection outlined in this section of the arboricultural method statement shall be fully discussed, so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications to this statement shall be recorded and circulated to all parties in writing.

10.2. Within RPAs the following points shall be observed:

Ground levels will not be changed.

Only lightweight plant or vehicles shall enter the RPAs.

No fuels or chemicals shall be brought into or stored within these areas.

Digging (for fence posts etc.) shall be done by hand. Any roots of 25mm diameter and above that are encountered shall not be cut: if such sized roots are found the position of the proposed post will be re-located. Any smaller roots shall be cut cleanly. All roots exposed should be backfilled with sharp sand on the same day they are uncovered.

No parts of any fencing shall be nailed or otherwise attached to any parts of the retained trees.

Unwanted vegetation shall be removed manually or by using chemicals that cannot damage the roots of the trees.

No irrigation or drainage pipes shall be installed within RPAs.

11. Supervision and monitoring

11.1. Once the protective fencing and ground boarding has been erected, the arboricultural consultant will visit the site and inspect these tree protection measures. If the specification or location of these items does not comply with this method statement, the arboricultural consultant will inform the fencing contractor, and adjustments will be made. Once compliance is achieved, the arboricultural consultant will ‘sign off’ the tree protection measures to the contractor and copy this (in writing) to the client.

11.2. Throughout the construction process the arboricultural consultant will monitor the condition of the trees, and the integrity and effectiveness of the protective fencing. He will visit the site at appropriate intervals, as agreed with the LPA Tree Officer at the pre-commencement meeting, to ensure that the protection measures outlined in this document are adhered to; and will contact the site manager or agent on a weekly basis whilst ground works are being undertaken, and on a fortnightly basis thereafter, to ascertain what works are planned for the coming week and whether any of these require arboricultural input or supervision. Records of all monitoring and supervisory visits will be made and will be forwarded to the client and copied to the LPA.

The arboricultural consultant shall directly supervise all works that have to be undertaken within RPAs. These include:

location of protective fencing

location of ground boarding
demolition of existing buildings
construction of hard surfacing
(if necessary) installation of underground services

11.3. The project or site manager will give the arboricultural consultant at least 48 hours written notice of the date of intended construction of any proposed buildings or structures, underground service runs, or areas of hard surfacing that are within the RPAs of any of the trees, so that he/she can attend.

11.4. All drawings or revised drawings issued to the site agent or to sub-contractors, that show details of any works within or abutting RPAs or beneath the crowns of trees are to be referred in advance to the arboricultural consultant to enable him to advise on any changes to the impact on trees that these drawings may cause, and to be able to provide solutions to avoid or minimise any further tree damage. All such drawings will be approved in writing by the arboricultural consultant before works within or abutting RPAs are proceeded with.

11.5. The arboricultural consultant will issue variation orders to the client in the case of any agreed changes to this method statement, and non-compliance notices in any cases of substantial deviation from the statement. These will be recorded in a final completion statement suitable for submission to the LPA if required.

SJAtrees

February 2024

APPENDIX 1
Tree Survey Schedule

SJA trees
ARBORICULTURAL PLANNING CONSULTANTS

THE OLD POST OFFICE
DORKING ROAD
TADWORTH
SURREY KT20 5SA

Tel: (01737) 813058
E-mail: sja@sjatrees.co.uk

Directors: Simon R. M. Jones Dip. Arb. (RFS), FArborA., RCArborA. (Managing)
Frank P. S. Spooner BSc (Hons), MArborA, TechCert (ArborA) (Operations)

Preliminary Tree Survey Schedule

Charnwood, 12 Lime Walk, Maidenhead

SJA tss 24042-01

February 2024

Tree Survey Schedule: Explanatory Notes

Charnwood, 12 Lime Walk, Maidenhead

This schedule is based on a tree inspection undertaken by Tom Southgate of SJAtrees (the trading name of Simon Jones Associates Ltd.), on Tuesday the 6th February 2024. Weather conditions at the time were overcast, but dry. Deciduous trees were not in leaf.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given.

Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree no.
Given in sequential order, commencing at "1".

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

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

4. Trunk diameter.
Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

5. Radial crown spread.
The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

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

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

8. Age class.
Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.
Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.
Mature: Apical dominance lost, tree close to ultimate height.
Over-mature: Mature, but in decline, no crown retrenchment
Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, a crown showing retrenchment and a structure characteristic of the latter stages of life.
Ancient: Beyond typical age range and with a very large trunk diameter for species; with extensive decay or hollowing, a crown that has undergone retrenchment and a structure characteristic of the latter stages of life.

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

10. Structure.
Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.
Good: No significant morphological or structural defects, and an upright and reasonably symmetrical structure.
Moderate: No significant pathological defects, but a slightly impaired morphological structure; however, not to the extent that the tree is at immediate or early risk of collapse.
Indifferent: Significant morphological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.
Poor: Significant and irremediable morphological or pathological defects, such that there may be a risk of failure or collapse.
Hazardous: Significant and irremediable morphological or pathological defects, with a risk of imminent collapse.

11. Comments.
Where appropriate comments have been made relating to:
-Health and condition
-Safety, particularly close to areas of public access
-Structure and form
-Estimated life expectancy or potential
-Visibility and impact in the local landscape

12. Category.
Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012; adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to arboricultural biodiversity.

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
(1) Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).
(2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
(3) Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.
(1) Trees that are particularly good examples of their species, especially if rare or unusual.
(2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
(3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
(1) Trees that might be included in category 'A', but are downgraded because of impaired condition (e.g. presence of significant though remediable defects including unsympathetic past management and minor storm damage) such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category 'A' designation.
(2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.
(3) Trees with material conservation or other cultural value.

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
(1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
(2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.
(3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE

Charnwood, 12 Lime Walk, Maidenhead

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio - logy	Structure	Comments	Cate gory
1	Monterey cypress	18m	600mm est. 600mm est. 650mm est.	N 10m E 10m S 10m W 9.5m	2m	SW 3m	Mature	Average	Indifferent	Off-site tree; base obscured from view; three stemmed from base, unions not visible; tensile unions throughout crown, where visible.	B (1)
2	Copper beech	16m	615mm ivy	N 4m E 4.5m S 8m W 7m	2.2m	N 2m	Semi-mature	Average	Indifferent	Compacted ground to NE of trunk along route of construction traffic; ivy covered trunk and main scaffolds; tensile unions throughout crown, where visible; ivy cover impairs full view of unions; appears to have been previously reduced in height to 10m; pruning wounds in lower crown on E side, consistent with pruning to provide clearance from building; obscured from public view; essential feature of the garden landscape.	B (1)
3	Leyland cypress	6m	305mm	N 4.5m E 3m S 3m W 7m	1.5m	W 1.4m	Semi-mature	Average	Indifferent	Off-site tree; slightly leaning trunk; ivy covered stems; acute main bifurcation at 1.5m, displaying acute union without bark to bark contact; asymmetrical crown as suppressed by adjacent specimens; previously reduced in height to 4m.	C (2)
4	Portuguese laurel	5m	175mm 235mm	N 3.4m E 4m S 4m W 4.7m	1.1m	W 0m	Mature	Average	Indifferent	Off-site shrub; slightly leaning trunk; twin-stemmed from 1m; tensile main unions.	C (2)
5	Leyland cypress	5m	195mm 360mm	N 2m E 3m S 2m W 5.7m	0.3m	W 1.9m	Semi-mature	Average	Indifferent	Off-site tree; slightly leaning trunk to W; asymmetrical crown as suppressed by adjacent specimens; previously reduced in height to 4m.	C (2)
6	Hazel	10m	6 stems @ 120mm est.	N 6m E 5.3m S 6m W 6m	0m	E 1m	Mature	Average	Indifferent	Off-site tree; maintained as a coppice.	C (1)
7	Monterey cypress	14m	600mm est.	N 5.5m E 3.6m S 6m W 5m	1m	E 3.5m	Semi-mature	Below average	Indifferent	Off-site tree; base obscured from view; ivy covered trunk; slightly leaning trunk to SW; above average dead wood in E crown; slightly sparsely foliated E crown; asymmetrical crown.	C (1)
8	Norway maple	17m	500mm est. 545mm	N 7m E 6.5m S 7m W 6.5m	0.3m	S 2m	Semi-mature	Average	Indifferent	Trunk located on ownership boundary line; twin stemmed from base displaying an acute union without bark to bark contact; co-dominant stems from base; crossing and rubbing branches in crown; obscured from public view; significant component of group in which it stands.	B (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio -logy	Structure	Comments	Cate gory
9	Yew	14m	500mm 360mm	N 4m E 4.5m S 6.6m W 3.8m	1m	0.6m	Mature	Average	Indifferent	No significant defects observed at base; pruning wounds on lower trunk consistent with crown raising; acute main unions with no Significant bark to bark contact; main bifurcations at 1.2m and 2m above ground; obscured from public view; significant component of group in which it stands.	B (2)
10	False acacia	16m	245mm 205mm	N 3m E 3m S 4m W 3m	0m	6m	Semi-mature	Low	Poor	Off-site tree; base partially obscured from view; heavily leaning stems at 45°; canopy leaning in adjacent Lawson cypress #13; no foliage visible.	U
11	Lawson cypress	5m	220mm ivy	2.5m	0m	0m	Semi-mature	Average	Moderate	No significant defects observed at base; non-native species, out of character with surrounding area.	C (1)
12	Chamaecyparis Ellwood's Gold	5m	205mm	2.5m	0m	0m	Semi-mature	Average	Moderate	No significant defects observed at base; non-native species, out of character with surrounding area.	C (1)
13-15	Lawson cypress	17m	#T13 650mm #T14 400mm #T15 300mm ivy, all est.	2.5m	2m	2m	Mature	Average	Indifferent	Off-site trees; base obscured from view; acute main unions with no bark to bark contact, displaying significant ridge of reaction wood growth on one side; #15 heavily ivy covered and displaying sparse foliage in upper-crown.	C (2)
16	Copper beech	17m	510mm	N 6.5m E 6.5m S 7m SW 7.7m W 7.2m	3m	SW 2.5m	Mature	Average	Moderate	Off-site tree; no significant defects observed at base; tensile main unions; stems have fused at 6m to form natural bracing; form consistent with historic pollard.	B (1)
17	Hazel	9m	5 stems @ 90mm est.	N 3.5 E 4.3 S 3.7 W 3.3	0m	S 0.9m	Semi-mature	Average	Indifferent	Off-site tree; maintained as a coppice; foliage resting on on-site shed.	C (2)
G1	Various	7m	Max 220mm est.	5m	0m	0m	Semi-mature	Average	Indifferent	Belt of mature shrubs and small young trees; species include hazel, cotoneaster, Leyland cypress and Portuguese laurel; Leyland cypress dominant; approx. 10 individuals.	C (2)
G2	Cherry laurel	11m	Max 4 stems @ 390mm ivy	8m	0m	0m	Mature	Average	Indifferent	Off-site group of mature to semi-mature shrubs; non-native species, out of character with surrounding area; approx. five individuals.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clear-ance	Age class	Physio - logy	Structure	Comments	Cate gory
G3	Various	6m	Max 150mm est.	4m	0m	0m	Semi-mature	Average	Indifferent	Belt of onsite scrub following property boundary; species include forsythia, cotoneaster, box, holly, brambles and cherry laurel; northern end dominated by overhanging off-site mature cherry laurel, no single species dominant throughout; approx. 20 individuals.	C (2)
G4	Various	8m	Max 100mmest.	4m	0m	0m	Semi-mature	Average	Indifferent	Belt of shrubs with occasional tree saplings; species include snow berry, cherry laurel, Turkey oak, holly, Portuguese laurel, Mexican orange blossom, berberis, holm oak and exotic shrubs; no single dominant species; approx. 15 individuals.	C (2)
G5	Yew	2.5m	Max 100mm est.	1m	0m	0m	Young	Average	Indifferent	Regularly trimmed row of young trees adjacent to driveway; of low landscape value due to small size; providing screening from adjacent property; approx. 30 individuals.	C (2)
G6	Various	6m	Max 160mm est.	4m	0m	0m	Semi-mature	Average	Indifferent	Off-site group adjacent to driveway comprised of Leyland cypress hedge and cherry laurel; predominantly comprised of Leyland cypress; approx. 15 individuals.	C (2)
G7	Various	8m	Max 180mm est. Avg 100mm est.	5m	0m	0m	Semi-mature	Average	Indifferent	Off-site group of scrub adjacent to W boundary of property; species visible include, cherry laurel, berberis; ivy; bramble, holly and firethorn; no single dominant species.	C (2)

Root Protection Areas (RPAs)

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

Tree No.	***Species***	***RPA***	***RPA Radius***
1	Monterey cypress	516.9m²	12.8m
2	Copper beech	171.1m²	7.4m
3	Leyland cypress	42.1m²	3.7m
4	Portuguese laurel	38.8m²	3.5m
5	Leyland cypress	75.8m²	4.9m
6	Hazel	39.1m²	3.5m
7	Monterey cypress	162.9m²	7.2m
8	Norway maple	247.5m²	8.9m
9	Yew	171.7m²	7.4m
10	False acacia	46.2m²	3.8m
11	Lawson cypress	21.9m²	3m
12	Chamaecyparis Ellwood's Gold	19m²	2m
13-15	Lawson cypress	191.1m² 72.4m² 40.7m²	7.8m 4.8m 3.6m
16	Copper beech	117.7m²	6.1m
17	Hazel	18.1m²	2.4m
G1	Various	21.9m²	2.6m
G2	Cherry laurel	68.8m²	4.7m
G3	Various	10.2m²	1.8m
G4	Various	4.5m²	1.2m
G5	Yew	4.5m²	1.2m
G6	Various	11.6m²	1.9m
G7	Various	14.7m²	2.16m

APPENDIX 2
Tree Protection Plan

Arboricultural Impacts: Summary

(For details, see below)

Impact	No. of Trees
Trees to be removed	0
Groups of trees to be partially removed	1
TPO trees to be removed	0
Trees and groups of trees or shrubs to be pruned	5
Trees where supervised demolition needed within RPAs	1
Trees where manual excavation needed within RPAs	2
Trees where above soil surfacing needed within RPAs	1
Trees with proposed underground services within RPAs	0

Trees/Groups to be Removed

No	Species	Category
G3	Various (partial removal)	C (1)

Trees to be pruned

No.	Species	Works (Outline only)
3	Leyland cypress	Crown lift W canopy extents back to boundary to a height of 2m above ground, to increase space available for proposed planting
6	Hazel	Crown reduce eastern extents by up to 2.5m, leaving no less than 2.5m from coppice centre
G2	Cherry laurel	Prune eastern canopy extents back to boundary to allow space for proposed planting
G5	Yew	Cut back area of southern extents as indicated on plan by up to 1m to provide clearance for proposed area of hard surfacing
G6	Various	Crown reduce north extents of cherry laurel back by up to 1.5m, towards but not beyond site boundary

Pruning is to be undertaken in accordance with the British Standard Recommendations for Tree work, BS3998: 2010.
Climbing irons or spikes are not to be used whilst pruning trees.

Groups that require manual excavation within RPAs

No.	Species	Type of structure
G5	Yew	Proposed hard surfacing
G6	Various	Proposed access driveway

Trees that require above soil surfacing within RPAs

No.	Species	Type of structure
2	Copper beech	Proposed access driveway

Manual Excavation

Within the root protection areas of groups G5 & G6, the first 750mm depth of any excavation, whether for hard surfacing, or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened with a pick or fork, and then will be cleared from roots with a compressed air soil pick. All roots will be cut cleanly with a hand saw or secateurs. The edge of the excavation closest to the trees will be covered with hessian sacking to prevent drying out.

Above Soil Surfacing

Proposed hard surfacing within the root protection area (RPA) of copper beech no. 2 to be constructed in accordance with section 7.4 of BS 5837: 2012, Trees in relation to design, demolition and construction - Recommendations. Other than the careful removal, using hand tools, of any turf layer, surfaces will be installed above existing soil level, or no deeper than the base of any existing surfacing it is replacing, so that the soil is not disturbed and no roots are severed; and an appropriate ground covering, possibly using a geogrid, a geoweb, or a combination of the two will be placed beneath the sub-base to minimise compaction of the soil in which tree roots are growing. Edge supports will also be installed above existing soil level.

Ground Protection

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

Trees that require supervised demolition within RPAs

No.	Species	Type of structure / surface
2	Copper beech	Dwelling extension

N

SJA trees Off-site tree

1 Monterey cypress

Off-site unsurveyed trees

Hazel 17

Lawson cypress 15

Lawson cypress 14

Lawson cypress 13

False acacia [10]

G4 Various

Pool

Norway maple 8

9 Yew

Lawson cypress 11

Lawson cypress 12

Chamaecyparis Ellwood's Gold

SJA trees Root Protection Area

SJA trees Group of existing outhouses to be retained

SJA trees Demolition of existing floor and foundations to be undertaken under on-site supervision of arboricultural consultant; see inset panel

G5 Yew

No. 12

G3 Various

G7 Various

16 Copper beech

Lime Walk

SJA trees Indicative site boundary

Plot 1

G6 Various

2 Copper beech

5 G3 Various

SJA trees Group to be partially removed

7 Monterey cypress

Plot 2

SJA trees Proposed driveway to be installed above existing soil level; see inset panel

SJA trees Excavation for proposed hard surfacing to be undertaken manually, under arboricultural supervision; see inset panel

SJA trees Temporary ground protection suitable for wheeled or tracked construction traffic; see inset panel

G1 Various

SJA trees Protective fencing as per BS5837; see inset panel

6 Hazel

5 Leyland cypress

4 Portuguese laurel

SJA trees Indicative edge of canopy following pruning

G1 Various

SJA trees Trees to be pruned to specification in inset panel

G2 Cherry Laurel

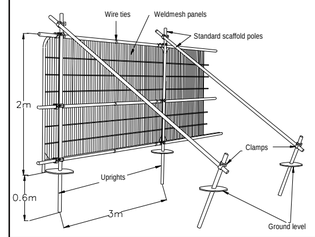
3 Leyland cypress

SJA trees Proposed planting

0 2m 4m 6m 8m 10m
METRES
1 : 250 @A2

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding; or a 2m high scaffolding framework, with uprights at maximum 3m spacings, every other one braced to the ground with 45 degree struts; supporting standard anti-climb 'Heras' welded mesh fence panels secured with anti-lift devices to concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm; individual panels fixed to each other with at least 2 clamps and to scaffolding with heavy-duty cable ties. "TREE PROTECTION ZONE - KEEP OUT" or similar notices to be attached to every fifth panel.



TREE PROTECTION FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 2.

Arboricultural Supervision

The arboricultural consultant will directly supervise all construction works that have to be undertaken within root protection areas. These include:
1. Location of protective fencing and ground protection.
2. Demolition of existing building foundations.
3. Construction of proposed hard surfacing.
4. All excavations within RPAs, whether for proposed foundations, hard surfacing, or underground services.

Rev.	Date	Revision
a	16/04/2023	Revision of protective fencing to protect wider areas of soft ground to preserve the soil structure for planting

SJA trees ARBORICULTURAL PLANNING CONSULTANTS

Project:	12 Lime Walk, Maidenhead
Client:	Mr Booker & Ms Juj C/o Consilio planning
Drawing:	TREE PROTECTION PLAN
Drawing No:	SJA TPP 24042-41a
Based On:	01-7293

Drawn By: TES		Date: April 2024	Scale: 1:250 @ A2
Checked by: FPS/NHK		Tel:(01737) 813058	sja@sjatrees.co.uk
Tree nos.:	● 1	Category 'U' trees:	● [10]
Category 'B' RPA:		Category 'C' RPA:	
Protective fencing:		Above soil surfacing:	
Indicative pruning line:		Supervised demolition:	
Ground protection:			
		Canopies of trees to be retained:	
		Trees to be removed:	G3
		Manual excavation:	
		Pruning required:	

For further information refer to the SJAtrees Tree Survey Schedule
Do not scale from this drawing: please check all dimensions on site, and notify us of any discrepancies. SJAtrees (the trading name of Simon Jones Associates Ltd) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based.
© Simon Jones Associates Ltd 2024
This drawing is copyright and may not be used or changed without the written consent of SJAtrees.
This drawing is based on the proposed layout plan shown and referred to above. SJAtrees authorises its reproduction, with or without amendment, by the Local Planning Authority (LPA), and its publication on the LPA website, to assist in consideration of this application only.
This drawing is designed to reflect only the principles of layout and /or design insofar as these relate to the protection of trees to be retained, and should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.